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THE RIGHT TO GOOD ADMINISTRATION AND FOUNDATION MODELS: *:* A EUROPEAN GOVERNANCE PERSPECTIVE AND BEST PRACTICES

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As foundation models (FMs) – widely, yet inaccurately, also referred to as Generative AI (GenAI) or General Purpose AI (GPAI) – are increasingly used in public administrations, concerns arise regarding their alignment with fundamental rights and legal principles. This paper examines how the Right to Good Administration (Article 41 of the EU Charter of Fundamental Rights) can guide the adoption of foundation models in the public sector, treating it as a broader analytical benchmark for the administrative action, as it is often reflected in domestic constitutional and administrative traditions of EU Member States.

Given the black-box nature of FMs, the study focuses solely on their internal use by civil servants, excluding deployments that produce decisions directly impacting on the legal sphere of individuals. Citizen-facing applications for service delivery are likewise left outside the scope of the analysis.

By linking the principles of transparency, fairness, accountability, but also privacy and cybersecurity, to the risks posed by foundation models – including opacity, bias, security vulnerabilities, and unreliable outputs – the paper assesses how public authorities can integrate these systems while safeguarding the Right to Good Administration. It combines doctrinal analysis of the EU regulatory framework, particularly the AI Act, with a comparative qualitative study of national guidelines on the internal use of FMs in Denmark, Finland, Poland, and Sweden. The paper identifies key governance requirements and offers recommendations to support rights-aligned and trustworthy internal uses of foundation models in the public sector.

Keywords: Public Administrations – Generative AI – AI Act – Right to Good Administration – Guidelines

I. INTRODUCTORY REMARKS

Foundation models (FMs) – widely, yet inaccurately, known also as General-Purpose AI or Generative AI – are rapidly finding their way into European public administrations. While these tools promise to increase efficiency and support for civil servants, they also bring serious legal concerns, especially in the field of administrative law. This paper looks at how public authorities could adopt foundation models in ways that are compliant with the Right to Good Administration as per by Article 41 of the EU Charter of Fundamental Rights (CFREU)**.** In particular, the research reflects on how this right should guide the way FMs are used and governed in the public sector. To fulfil the research scope, the article considers already existing governance efforts. More precisely, by combining

comparative legal review and thematic qualitative analysis, it takes a closer look at national guidelines from Denmark, Finland, Poland, and Sweden. The goal is to highlight best practices and offer practical guidance to help policymakers in crafting guidelines for the internal use of FMs by public officials.

I.1 *From AI to Foundation Models in the Public Sector: A Review of Academic and Institutional Perspectives*

In recent years, the disruptive impact of Artificial Intelligence (hereinafter, AI) has been recognised across multiple sectors, including public administrations.[1] In the public sector, its applications have been – and still are – analysed both from external and internal perspectives.[2] Scholarly discourse has predominantly focused on the external use of AI in the Public Sector, posing a particular attention on Government-to-Citizens (G2C) interactions, such as service delivery[3] or its (more complex) use in in decision-making proceedings.[4]

It is within this context that legal scholarship started acknowledging the difference between deterministic and non-deterministic algorithms, with the latter posing significant challenges due to their lack of explainability.[5] Despite ongoing efforts to enhance their interpretability through Explainable AI,[6] the inherent opacity of these systems – also known as the 'black-box' problem – remains a concern. As a result, scholars commenced to advocate for the need of a human-in-the-loop approach to ensure accountable decision-making.[7]

While AI – according to some – has the potential to enhance rights and freedoms, it also introduces novel legal challenges.[8] This particular concern has sparked calls for a 'good AI society'[9] and for a constitutionally-oriented use of AI,[10] especially within the public sector. In this regard, the Right to Good Administration (GA), as provided for by Article 41 of

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[1] J. Berryhill, K.K. Heang, *et al.*, *Hello, World: Artificial intelligence and its use in the public sector*, OECD Working Papers on Public Governance, No. 36, OECD Publishing (2019); T. Kerikmäe, E. Pärn-Lee, *Legal dilemmas of Estonian artificial intelligence strategy: in between of e-society and global race*, AI & Society, 36 (2021); B. Marchetti, *La garanzia dello human in the loop alla prova della decisione amministrativa algoritmica*, BioLaw, 2 (2021); I. Mergel, H. Dickinson, *et al.*, *Implementing AI in the public sector*, Public Management Review, 1 (XIV, 2023); F. Decarolis, B. Marchetti and L. Torchia (eds.), *The EU Digital Regulation and its Impact on Member States*, Springer (1st ed. 2025).

[2] T.Q. Sun, R. Medaglia, *Mapping the challenges of Artificial Intelligence in the public sector: Evidence from public healthcare*, Government Information Quarterly, 36 (II, 2019); C. van Noordt, G. Misuraca, *Artificial intelligence for the public sector: results of landscaping the use of AI in government across the European Union*, Government Information Quarterly, 39 (III, 2022).

[3] L. Floridi, *Artificial Intelligence as a Public Service: Learning from Amsterdam and Helsinki*, Philosophy & Technology, 33 (2020); Z. Engin, P. Treleaven, *Algorithmic government: Automating public services and supporting civil servants in using data science technologies*, The Computer Journal, 62 (III, 2019).

[4] B. Marchetti (2021). *Supra*, note n. 1.

[5] G. Avanzini, *Decisioni amministrative e algoritmi informatici. Predeterminazione, analisi predittiva e nuove forme di intelligibilità*, Editoriale Scientifica (2019); G. Lo Sapio, *La black box: l'esplicabilità delle scelte algoritmiche quale garanzia di buona amministrazione*. Federalismi.it, 16 (2021).

[6] P. Linardatos, V. Papastefanopoulos, *et al.*, *Explainable AI: A Review of Machine Learning Interpretability Methods*, Entropy, 23 (I, 2021).

[7] B. Marchetti (2021). *Supra*, note n. 1.

[8] O. Pollicino, G. De Gregorio, *Constitutional Law in the Algorithmic Society*, in H-W Micklitz *et al.*, *Constitutional challenges in the algorithmic society,* Cambridge University Press (2022); B.W. Wirtz, J.C. Weyererm *et al.*, *Governance of artificial intelligence: A risk and guideline-based integrative framework*, Government Information Quarterly, 39 (IV, 2022).

[9] C. Cath, S. Wachter, *et al.*, *Artificial Intelligence and the 'Good Society': the US, EU, and UK approach,* Science and engineering ethics, 24 (2018).

[10] C. Casonato, *Costituzione e intelligenza artificiale: un'agenda per il prossimo futuro*, BioLaw, 2 (2019).

the CFREU (hereinafter, also referred to as Charter of Nice), has gained relevance as a guiding legal principle.[11]

In a situation that was already complex as it stood, with the launch of ChatGPT by OpenAI in November 2022, the emergence of foundation models (FMs) complicated even further the challenges faced by society as a whole.[12] These technologies are versatile and capable of generating outputs in various forms,[13] often blurring the line between human- and machine-generated content.[14] At the same time, they are inherently opaque and fallible.[15]

All these premises generated a regulatory response at the supranational level, with the adoption of Regulation (EU) 2024/1689 (hereinafter, AI Act) that includes a specific Chapter (the firth) fully dedicated to GPAI models.[16] While much discourse on its prospective uses has been focusing primarily on the private sector, FMs have been gaining momentum in the public sector as well.[17] For instance, several administrations – including the European Commission –[18] have implemented or are working on the development of internal GenAI-based tools.[19] This might be justified by the positive economic impact in terms of saving that these models are expected to come with.[20] Furthermore, initial

[11] I. Wróbel, *Artificial intelligence systems and the right to good administration*, Review of European and Comparative Law, 49 (II, 2022). See, also: M. Fink, and G. Gentile, *Article 41: the right to good administration*, in A. Giannopoulou (ed.), *Digital rights are charter rights*, Amsterdam: Digital Freedom Fund, 34-37 (1st ed. 2023).

[12] The G7 Leaders' Statement on the Hiroshima AI Process opens by stressing the 'innovative opportunities and transformative potential' of foundation models and generative AI, while calling to 'manage risks […] keeping humankind at the center.' See: G7 Leaders, *G7 Leaders' Statement on the Hiroshima AI Process*, Hiroshima (2023), available at https://www.mofa.go.jp/ecm/ec/page5e_000076.html. See also: European Commission, Communication on boosting startups and innovation in trustworthy artificial intelligence, COM(2024) 28 final (2024).

[13] N. Crafts, *Artificial intelligence as a general-purpose technology: an historical perspective*, Oxford Review of Economic Policy, 37 (III, 2021).

[14] T.J. Sejnowski, *Large Language Models and the Reverse Turing Test,* Neural Computation, 35 (III, 2023).

[15] For this reason, some describe them as forms of 'agency without intelligence.' See: L. Floridi, *AI as Agency Without Intelligence: on ChatGPT, Large Language Models, and Other Generative Models.* Philosophy & Technology, 36 (XV, 2023).

[16] As per art. 2 of the AI Act, the Regulation applies both to public and private providers and deployers of AI operating within as well as outside the EU whose AI systems enter the EU market or affect individuals within it. See: Regulation (EU) 2024/1689, OJ L. 2024/1689 (2024).

[17] OpenAI launched *ChatGPT Gov* in January 2025 – a GPT version tailored for U.S. government use. By 2024, it was reportedly used by over 90,000 users across 3,500+ public agencies. See: OpenAI, *Introducing ChatGPT Gov*, available at https://openai.com/global-affairs/introducing-chatgpt-gov/ (last visited Jul 15, 2025).

[18] In October 2025, the European Commission launched GPT@EC, a GenAI tool developed by the Directorate General DIGIT, based on the earlier GPT@JRC model. See: European Commission, *Commission launches a new general-purpose AI tool - GPT@EC,* available at https://commission.europa.eu/news-and-media/news/commission-launches-new-general-purpose-ai-tool-gptec-2024-10-22_en (last visited Jul 13, 2025).

[19] In June 2024, the Finnish Ministry of Transport and Communications piloted a Finnish-language GenAI tool to support legislative drafting, concluding that while promising, national models still lag in performance, requiring further investment, and recommending interim use of commercial models. See: Liikenne- ja viestintäministeri, *Liikenne- ja viestintäministeriö kokeilee luovaa tekoälyä lainvalmistelutyön tukena*, available at https://lvm.fi/-/liikenne-ja-viestintaministerio-kokeilee-luovaa-tekoalya-lainvalmistelutyon-tukena#:~:text=Liikenne%2D%20ja%20viestint%C3%A4ministeri%C3%B6ss%C3%A4%20kokeillaan%2C%20miten,hy%C3%B6dynt%C3%A4v%C3%A4n%20pilotin%20tuottaa%20Futurice%20Oy. (last visited Jul 7, 2025).

[20] In 2023, Boston Consulting Group estimated that by 2033, GenAI could yield an annual global return of $1.75 trillion in the public sector. See: M. Carrasco, C. Habib *et. al.*, *Generative AI for the Public Sector: From Opportunities to Value*, Boston Consulting Group, available at https://web-

evidence indicates that this technology could boost productivity in civil servants while lowering their cognitive load.[21]
Grey literature started acknowledging the increasing experimental use of FMs by civil servants. A study published by the EU Public Sector Tech Watch in April 2025 mapped 61 existing use cases of this technology in the public sector among 20 different EU Member States.[22] This confirms a growing institutional interest, which is also reflected in two recent EU initiatives: on one hand, the AI Pact, launched by the European Commission to help stakeholders prepare for the enforcement and implementation of the AI Act;[23] on the other hand, a dedicated EU call for funding to support up to four pilot projects promoting the use of European[24] GenAI-based tools in public administrations.[25]
Alongside the expected benefits of FMs, their introduction in the public sector also come with major legal and operational challenges, which public administrations increasingly recognise.[26] To ensure their responsible use, a variety of governance instruments have been developed at both national and supranational levels.[27] Existing scholarship has primarily focused on regulatory frameworks established by EU institutions and select U.S. States[28]; however, comparatively little attention has been given to the governance measures implemented at the national level within EU Member States. To address this gap, the present study conducts a focused analysis of a selected set of national guidelines, which were identified and examined in accordance with the methodology outlined in the following section.

I.2 *Research Scope and Methodological Approach*

As mentioned, this paper addresses the gap in literature by focusing on the internal adoption and governance of FMs by public entities, through the lens of the Right to Good Administration under Article 41 of the Charter of Nice. On the matter, it could be (rightly) noted that the Charter formally binds national authorities only when they implement EU law (see, Article 51 CFREU). However, for the purpose of this study, it shall be clarified

assets.bcg.com/df/1e/9cde767044e5bc1d85f3e788f702/generative-ai-for-the-public-sector-from-opportunities-to-value.pdf (last visited May 4, 2025).

[21] In 2024, the Swedish municipality of Uddevalla piloted Microsoft Copilot M365 to support staff. Survey results showed 73% reported more enjoyable work, 67% improved quality, 57% less mental fatigue, and 32% reduced stress. T. Andersson, *Uddevalla kommun har under 2024 utvärderat Copilot M365*, MyAI, available at https://my.ai.se/usecases/623 (last visited July 8, 2025).

[22] The mapped use cases mainly referred to public services, and occasionally to strategic sectors such as security, economy and construction. Of these, over 60 percent are still in the planning, development or testing phase, while 17 cases are already in use. See: A. Brizuela, M. Combetto *et al.*, *Analysis of the generative AI landscape in the European public sector*, European Commission – Directorate-General for Digital Services (2025).

[23] The AI Pact includes webinars for all sectors and encourages AI providers and deployers to voluntarily disclose practices for compliance with transparency and high-risk obligations. For more, see: EU Commission, *AI Pact,* available at https://digital-strategy.ec.europa.eu/en/policies/ai-pact (last visited June 24, 2025).

[24] This prerequisite is in line with Article 12(6) of Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240, OJ L 166, 11.5.2021, pp. 1-34.

[25] See: EU Commission, *Commission Implementing Decision of 28.3.2025 on the financing of the Digital Europe Programme and the adoption of the multiannual work programme 2025-2027*, C(2025) 1839 final (2025).

[26] On the matter, see: A. Brizuela, M. Combetto *et al.* (2025). *Supra*, nota n. 22.

[27] *Id.*

[28] S. Weerts, *Generative AI in public administration in light of the regulatory awakening in the US and EU,* Cambridge Forum on AI: Law and Governance, 1, 1-19 (2025).

that the Right to GA represents a broader analytical benchmark for administrative action, as its corollaries are often reflected in domestic constitutional and administrative traditions of EU Member States[29]. That said, the present article investigates the following research question (RQ): How should the Right to GA influence the adoption and governance of FMs in the public sector? To refine this inquiry, a sub-question (SQ1) is also explored: How do EU Member States integrate the principles of the Right to GA in their national guidelines on the internal use of FMs in the public sector?

The paper adopts a rights-based,[30] comparative legal methodology combined with qualitative thematic analysis, with Article 41 CFREU serving both as an analytical and governance framework. In fact, from it the author identified several corollaries – namely, publicity and transparency; the right to be given reasons; efficiency, effectiveness and cost-effectiveness; impartiality, objectivity, fairness and non-discrimination; data protection and cybersecurity. These principles were then used to carry out the thematic analysis of the national governance initiatives falling under the scope of the present research.

The study limits its geographical scope to EU Member States, which fall directly under the application of the AI Act, as including non-EU jurisdictions would have introduced a level of legal heterogeneity inconsistent with the comparative aims of the research. Additionally, the analysis focuses exclusively on the internal use of FMs within public administrations, adopting a Government-to-Government (G2G) approach rather than a Government-to-Citizens (G2C) one. This choice is not merely methodological but substantive. Due to their opacity and non-deterministic nature, foundation models make it difficult for authorities to comply with core procedural guarantees of the Right to Good Administration, particularly the duty to give reasons and to enable individuals to understand and contest administrative decisions. Their use in decision-making processes that directly affect individuals therefore appears difficult to reconcile with these requirements. The study accordingly limits its scope to internal uses. This position is consistent with national[31] and supranational case law, including the CJEU ruling in *Case C-203/22,* which emphasises the right of individuals to understand and challenge automated decisions – something particularly challenging with non-deterministic systems like FMs.[32]

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[29] For details, see: par. III.I.

[30] This approach is rooted in constitutional scholarship. See: O. Pollicino, G. De Gregorio (2022). *Supra*, note n. 8; I. Wróbel (2022). *Supra*, note n. 11; C. Casonato (2019). *Supra*, note n. 10.

[31] The Swiss *Conseil des États* underlined, in November 2023, that model-based systems are less complex than GenAI since they adhere to set standards and generate findings that are transparent, consistent, and verifiable. Transparency is strengthened and the right to motivation is respected as a result of the ability to examine and explain administrative decisions. See: Conseil des États, *Réponse du Conseil d'Etat au Grand Conseil à l'interpellation David Raedler et consorts au nom Les vert.e.s vaudois.e.s - Quand l'administration s'automatise : quel est le niveau d'utilisation de systèmes algorithmiques dans l'administration vaudoise?*, available at https://www.vd.ch/actualites/decisions-du-conseil-detat/seance-du-conseil-detat/decision/id/b0f4c1a4-eb1c-4e16-9b9a-a7fb36186760 (last visited April 28, 2025). In similar terms, the Italian *Consiglio di Stato* explained that the application of an algorithm in administrative proceedings that result in a final decision is only permissible if the criteria are known, the decision is imputable to the deciding authority, the algorithm does not discriminate, and the reasoning is clear enough for the decision to be understood and challenged. See: Consiglio di Stato, Section VI, *Decision n. 8472/2019* and *Decision n. 5117/2023*. One shall note that the principles expressed by the Italian Council of State have now been incorporated into Article 30 of Legislative Decree No. 36/2023 (Public Procurement Code), which requires, in the case of the use of automated procedures in the lifecycle of public contracts, to respect the principles of 'intelligibility and comprehensibility', 'non-exclusiveness of algorithmic decisions', and 'algorithmic non-discrimination'. See: *Decreto Legislativo 31 marzo 2023, n. 36 – Codice dei contratti pubblici in attuazione dell'articolo 1 della legge 21 giugno 2022, n. 78, recante delega al Governo in materia di contratti pubblici,* GU n. 77, 31.3.2023 - Suppl. Ordinario n. 12.

[32] The ruling of the CJEU in Case C-203/22, even though it formally focuses on Article 15(1)(h) of the GDPR, offers an interpretative tool that is also relevant for the administrative context and the right to motivation under Article 41 of the EU Charter of Fundamental Rights. In the ruling, the Court clarifies that

Citizen-facing applications for service delivery are likewise left outside the scope of the analysis. While such uses may raise fewer concerns than automated decision-making – particularly where they involve informational support rather than legally binding outputs – their inclusion would require examining a distinct set of regulatory and operational considerations (such as accessibility standards or user experience design) that extend beyond the core focus of this study.

Among the multiple governance instruments currently used by public administrations to regulate FMs – such as policies, rules and regulations, protocols, and guidelines – this paper focuses exclusively on the latter. This choice is justified by two main aspects: first, the widespread use of guidelines across EU Member States compared to other governance tools;[33] second, their flexibility and practical orientation, especially for civil servants. From the available national instruments, only State-level guidelines explicitly addressed to civil servants and focused specifically on FMs (not AI broadly considered) were selected.[34] This choice was made to ensure homogeneity and comparability. Given these filters, the countries included in the present analysis are Denmark, Finland, Poland, and Sweden. Each set of guidelines was then analysed using the thematic categories derived from the Right to GA, in order to assess their alignment with Article 41, CFREU.

This approach, inevitably, has some limitations: it considers a selected number of guidelines available as of April 2025. Moreover, using the Right to GA as the primary analytical framework may overlook other relevant legal principles and/or ethical considerations (e.g. public procurement rules and/or copyright, etc.).

That clarified, the analysis aims to identify best practices and governance patterns through existing guideline that could guide future policymakers and support European public administrations in the responsible integration (and regulation) of FMs.

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the 'meaningful information' that data controllers must provide in the case of automated decisions cannot be limited to the disclosure of the algorithm or a technical description of the decision-making process, but must consist of a concise, comprehensible, and concrete explanation of the criteria actually used. This serves to implement the right of the data subject to challenge the decision. Transposing these principles to the context of public administrations, it can be argued that – in the presence of opaque models such as foundation models, often closed-source – it is not realistically possible to provide effective, verifiable, and intelligible reasoning in cases where such systems directly impact the legal position of citizens. Consequently, the analysis conducted in this study focuses on the internal (G2G) use of foundation models, in which there is not a direct and immediate effects on the legal sphere of individuals. See: European Court of Justice, *CK v Dun & Bradstreet Austria GmbH and Magistrat der Stadt Wien*, *Case C-203/22* (2025).

[33] Of the 33 FM governance initiatives mapped by Public Sector Tech Watch (PSTW), 20 were classified as guidelines. See: A. Brizuela, M. Combetto *et al.*. *Supra*, note n. 22. However, this study partially diverges from that classification. Specifically, the document listed as a guideline by PSTW and published by the Estonian Ministry of Justice is, upon closer examination, an article with purely informational intent. The author refers to it as an '*artikli*' (article), indicating it does not serve a regulatory purpose. For this reason, the Estonian initiative was excluded from the present analysis. See: H. Trasberg, *Generatiivne tehisintellekt juristide ja ametnike töös*, available at https://www.justdigi.ee/sites/default/files/documents/2024-04/1.%20Trasberg.%20AI%20juristide%20ja%20ametnike%20töös.pdf (last visited June 24, 2025).

[34] This study again partially diverges from the classification made by PSTW, *id.* While the Danish guidelines are listed in their report as directed to both the public and private sectors, the original document explicitly targets only public authorities ('*til offentlige myndigheder*'). Digitaliseringsstyrelsen, *Guide til offentlige myndigheder om ansvarlig anvendelse af generativ kunstig intelligens*, available at https://digst.dk/media/g5tajoxm/110324-guide-til-offentlige-myndigheder-om-ansvarlig-anvendelse-af-generativ-kunstig-intelligens.pdf (last visited June 28, 2025). Moreover, this analysis includes the Finnish guidelines adopted by the Ministry of Finance in March 2025, which were not part of PSTW's dataset. See: Valtiovarainministeriö, *Ohjeistus generatiivisen tekoälyn hyödyntämisestä työn tukena ja apuvälineenä julkisessa hallinnossa*, available at https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/166199/VM_2025_9.pdf?sequence=1&isAllowed=y last visited April 28, 2025).

II. UNDERSTANDING FOUNDATION MODELS: CONCEPTUAL, LEGAL AND TECHNICAL FRAMING

Before delving into the core analysis of the present article, it is necessary to briefly outline what are foundation models, how they are regulated under the AI Act, and clarify their technical peculiarities.

II.1 *Definition and Regulatory Classification of Foundation Models*

FMs constitute a subset of artificial intelligence. Pursuant to Article 3(1) of the AI Act, an AI system is 'a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that […] infers, from the input it receives, how to generate outputs […].'[35] Scholarly literature has proposed a classification of these systems divided into three macro-categories:[36] first, expert systems that rely on symbolic knowledge (also known as model-based);[37] second, machine learning and deep learning systems; third, foundation models, which are built upon deep learning architectures.[38] For a visual representation, see *Figure 1*.

Although the EU Regulation does not explicitly refer to 'foundation models', it introduces the concept of General-Purpose AI (GPAI), defined under Article 3(63) as a model 'trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market […].'[39] This definition is partially aligned with the notion of 'foundation models' – coined by the Human-Centered Artificial Intelligence (HAI) Institute at Stanford University in 2021 – which describes any model trained on broad data (generally, through self-supervised learning at scale) and that is capable of adaptation across a wide range of downstream tasks (for example, through fine-tuning).[40]

The main examples of FMs currently existing are large language models (LLMs) – like ChatGPT,[41] Claude,[42] Gemini,[43] DeepSeek[44], or Grok.[45] These models are trained through self-supervised learning on vast datasets[46] and can generate a wide range of outputs in

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[35] See: Article 3, par. 1, n. 1, *AI Act*. The same definition was given also by the Organisation for Economic Co-operation and Development. On the matter, see: OECD, *Recommendation of the Council on Artificial Intelligence*, OECD/LEGAL/0449 (2024).

[36] For an in-depth analysis of each different category, see: A. Santosuosso, G. Sartor, *Decidere con l'IA. Intelligenze artificiali e naturali nel diritto*, Il Mulino (2024).

[37] See also: B. Marchetti (2021). *Supra*, note n. 1.

[38] A. Santosuosso, G. Sartor (2024). *Supra*, note n. 32.

[39] GPAI providers are subject to transparency and documentation obligations under Article 53 of the AI Act. When a model poses systemic risk – as defined in Article 3(65) and under the conditions set out in Article 51 – additional obligations under Article 55 apply. Since these requirements target providers rather than deployers, and due to the limited relevance of the GPAI regime to the internal governance of FMs by public administrations, a detailed legal analysis falls outside the scope of this section. For further discussion, see: S. Wachter, *Limitations and Loopholes in the EU AI Act and AI Liability Directives: What This Means for the European Union, the United States, and Beyond*, Yale Journal of Law & Technology, 26 (2025).

[40] R. Bommasani, D.A. Hudston *et al.*, *On the Opportunities and Risks of Foundation Model* in ArXiv (2021).

[41] OpenAI, *ChatGPT*, available at https://chatgpt.com (last visited May 20, 2025).

[42] Anthropic, *Claude*, available at https://claude.ai (last visited May 20, 2025).

[43] Google, *Google Gemini*, available at https://gemini.google.com/?hl=it (last visited May 20, 2025).

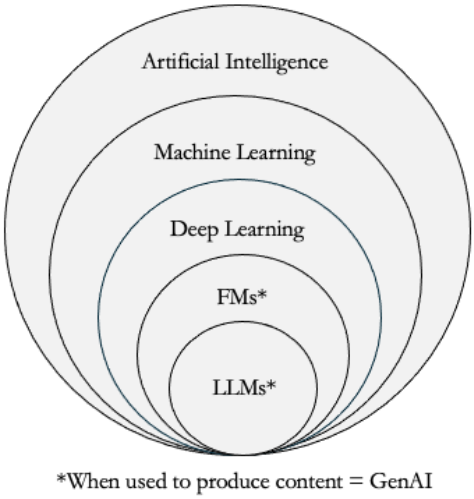
[44] DeepSeekAI, *DeepSeek*, available at https://www.deepseek.com (last visited May 20, 2025).

[45] xAI, *Grok*, available at https://grok.com (last visited May 20, 2025).

[46] In practice, given a textual input, the model learns to predict the most likely output – such as the next word in a sentence – based on patterns found in the training dataset. This process, known as self-supervision

response to natural language prompts.[47] Their development involves a training process including several phases: data collection, data pre-processing, training, fine-tuning and deployment.[48] When FMs are used to generate content – including, but not limited to, text, images and code –, they are referred to as Generative AI (GenAI).[49]

Figure 1 – Visual representation of different subsets of AI



Source: author's own elaboration

Due to their overlapping characteristics, terms such as 'FMs', 'GPAI', 'LLMs', and 'GenAI' are frequently used interchangeably in both public and academic discourse. On the matter, however, some clarifications are needed. As highlighted by the HAI Institute – and as argued in this paper – while alternative labels to describe FMs such as 'GPAI' or 'multi-purpose models' capture the versatility of these models, they fail to convey their 'unfinished character and the need for adaptation.'[50] Additionally, talking about GPAI may exclude smaller-scale models trained on domain-specific datasets,[51] which could be even more suitable for public sector applications, especially when fine-tuned on specific legal corpora or past administrative documents.

Given these considerations, this paper adopts the term 'foundation models' as the most inclusive descriptor. This terminological choice is further supported by the 'Guidelines on the scope of the obligations for general-purpose AI models established by Regulation',

at scale, allows models to be trained on massive amounts of text without the need for manual annotation. On the matter, see: A. Santosuosso, G. Sartor (2024). *Supra*, note n. 32, p. 34.

[47] *Id.*, pp. 47-74.

[48] The five-step training framework for LLMs is drawn from: Stanford University IT, *AI Demystified: Introduction to Large Language Models*, available at https://uit.stanford.edu/service/techtraining/ai-demystified/llm (last visited June 2, 2025). For a three-phase framework, see: Y. Liu, H. He, *et al.*, *Understanding LLMs: A Comprehensive Overview from Training to Inference*, in ArXiv (2025).

[49] H. Toner, *What Are Generative AI, Large Language Models, and Foundation Models?*, Center for Security and Emerging Technology, available at *https://cset.georgetown.edu/article/what-are-generative-ai-large-language-models-and-foundation-models/* (last visited Apr. 3, 2025). Additionally, Recital 99 of the AI Act explicitly identifies 'large generative AI models' as a primary example of GPAI models.

[50] R. Bommasani, D.A. Hudston *et al.* (2021). *Supra*, note n. 36.

[51] Small language models in healthcare, for instance, are gaining popularity. For more, see: M. Magnini, G. Aguzzi et al., *Open-source small language models for personal medical assistant chatbo*ts, Intelligence-Based Medicine, 11 (2025); H. Kim, H. Hwang *et al.*, *Small language models learn enhanced reasoning skills from medical textbooks*, Digital Medicine, 8 (2025).

published by the European Commission in July 2025[52]. Paragraph 17 of the Guidelines, in fact, introduce a dual criterion to classify a model as GPAI[53]: first, the use of training compute exceeding 10^{23} floating point operations (FLOPs)[54]; second, the capability of the model to generate content in the form of language, text-to-image, or text-to-video. However, paragraph 20 clarifies that models meeting this quantitative threshold still may not qualify as GPAI if they do not demonstrate a significant generality or the ability to perform a broad range of distinct tasks.[55]

The interpretative approach set forth by the European Commission – while useful for regulatory purposes – does not fully encompass the technical characteristics of foundation models. Limiting the analysis to GPAI, as defined in the AI Act and interpreted by the Commission, would result in an overly narrow analytical scope. Many models that fall outside the formal GPAI designation exhibit crucial features of FMs – such as scale, adaptability, and opacity – which pose critical concerns for public administrations.

II.2 *Technical Limitations of Foundation Models*

Outlined the legal framework surrounding the topic of the present article, it appears crucial to dive into the technical peculiarities of these models. While FMs promise to increase efficiency in the public sector[56] and – according to some –[57] reduce mental fatigue on civil servants[58], there are several aspects directly linked to the technical functionalities of these technologies that should not be overlooked.

First and foremost, one shall not be misled by the assertiveness and fluency of FMs.[59] Despite this, in fact, they do not *understand* the content they generate. Rather, they create outputs that are the most statistically probable based on their training data.[60] For this reason, even when prompted to explain their responses, the justification provided is typically an *ex-post* rationalisation, not an accurate reflection of the computational process behind it.[61] This phenomenon – often referred to as the 'black-box' problem –[62] characterises not only FMs but machine learning and deep learning systems more broadly.[63]

Another specific limitation of FMs are hallucinations, meaning the generation of factually incorrect or fabricated content[64]. In parallel, the reliance on web-scale datasets makes these

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[52] European Commission, *Guidelines on the scope of obligations for providers of general-purpose AI models under the AI Act*, available at https://digital-strategy.ec.europa.eu/en/library/guidelines-scope-obligations-providers-general-purpose-ai-models-under-ai-act (last visited May 5, 2025).

[53] Here GPAI refers generically to general-purpose AI models as defined in Article 3(63) of the AI Act, without distinguishing between models with or without systemic risk.

[54] For reference, the threshold for classification as GPAI with systemic risk is set at 10^{25} floating point operations (FLOPs) for training compute.

[55] Conversely, a model may still be considered a GPAI model even if it falls short of the compute threshold, provided it clearly demonstrates such general capabilities. *Id.*

[56] M. Carrasco, C. Habib (2023). *Supra*, note n. 20.

[57] Others, on the other hand, warn about potential negative impact of FMs on cerebral functions. See: N. Kosmyna, E. Hauptmann *et al.*, *Your Brain on ChatGPT: Accumulation of Cognitive Debt when Using an AI Assistant for Essay Writing Task* in ArXiv (2025).

[58] T. Andersson (2024). *Supra*, note n. 21.

[59] See: Nature, *Why scientists trust AI too much – and what to do about it*, Editorial – Nature, available at https://www.nature.com/articles/d41586-024-00639-y (last visited May 15, 2025).

[60] A. Santosuosso and G. Sartor (2024). *Supra*, note n. 32, pp. 34 and 53-54.

[61] *Id.* p. 71.

[62] B. Marchetti, (2021). *Supra*, note n. 1 pp. 34 and 53-54.

[63] A. Santosuosso and G. Sartor (2024). *Supra*, note n. 32, pp. 30-58.

[64] Z. Ji, N. Lee, *et al., Survey of hallucination in natural language generation*, ACM Computing Surveys, 55, pp. 1-38 (XII, 2023).

systems prone to reproducing and reinforcing harmful stereotypes and biases.[65]
FMs are also problematic from a privacy standpoint, and this for several reasons.[66] Of these, two are the most relevant for public administrations: first, models might have been trained on personal and/or sensitive data accessed unauthorisedly [67] . Public administrations wanting to fully respect the Right to GA, comply with the GDPR, the AI Act,[68] and enforce a serious data governance framework should ideally consider the training datasets when choosing which FM tool to integrate into their work[69]; second, during the deployment phase, public officials could inadvertently enter unauthorised data through inputs therefore potentially exposing personal and/or classified data.[70]
From a cybersecurity point of view, FMs come with the risk of training datasets being manipulated by malicious actors if strong cybersecurity systems are not enforced. Furthermore, the risks related to the deployment of these technologies include possible unauthorised access to the model by malicious users, who could extract sensitive data. Therefore, this would require the implementation of robust authentication systems and periodic reviews of the deployment configurations, to identify vulnerabilities.[71]
Finally, public administrations should be conscious of the critical environmental impact of Generative AI. [72] Their development and deployment entail high electricity

[65] On the matter, see: R. Geirhos, P. Rubisch, *et al., ImageNET-trained CNNs are biased towards texture; increasing shape bias improves accuracy and robustness*, in ArXiv (2022); M. GLICKMAN and T. SHAROT, *How human–AI feedback loops alter human perceptual, emotional and social judgements*, in Nature Human Behaviour, 9, pp. 345-359 (II, 2025).
[66] For an extensive analysis of these risks, see: C. Novelli, F. Casolari *et al., Generative AI in EU Law: Liability, Privacy, Intellectual Property, and Cybersecurity*, Computer Law & Security Review, 55 (2024), and I. Barberá, *AI Privacy Risks & Mitigations Large Language Models (LLMs), AI Privacy Risks & Mitigations – Large Language Models (LLMs)*, EDPS, available at: https://www.edpb.europa.eu/system/files/2025-04/ai-privacy-risks-and-mitigations-in-llms.pdf (last visited May 6, 2025).
[67] C. Novelli, F. Casolari *et al.*, *id.*
[68] See: Article 10, AI Act.
[69] This is not possible, for instance, when a model is not 'open'. One shall mind, however, that this 'openness' should not be limited to the FM weights but should at least give access to the training datasets. For more on the different concepts of 'openness' of FMs, see: E. Gibney, *Not all 'open source' AI models are actually open: here's a ranking*, Nature, available at: https://www.nature.com/articles/d41586-024-02012-5 (last visited June 8, 2025).
[70] I. Barberá. *Supra*, note n. 66.
[71] These are present, with different degrees, in all FMs. For more, see: *id.*
[72] For an overview of the environmental costs and potentials of artificial intelligence, see: B. Marchetti, *I costi ambientali dell'IA*, BioLaw, 1, pp. 525-527 (2025); N. Rangone, *Intelligenza artificiale, tutela dell'ambiente e regolazione europea*, BioLaw, 1, pp. 529-548 (2025). More specifically, for an analysis of the debate on the environmental costs of artificial intelligence in the United States, see: M. Merler, *I costi ambientali dell'intelligenza artificiale: il dibattito negli Stati Uniti*, BioLaw, 1, p. 591-614 (2025). Furthermore, for an investigation of the possible application of the Do No Significant Harm (DNSH) principle to limit the negative environmental impacts of artificial intelligence, see: L. De Gaetano, *Il principio Do Not Significant Harm (DNSH) e i costi ambientali dell'intelligenza artificiale*, BioLaw, 1, pp. 571-590 (2025).

consumption,[73] intensive water usage,[74] and substantial CO_2 emissions[75].
Having clarified, even if just briefly, the technical peculiarities of FMs serves as the basis to understand the reason – presented in the following sections – why public administrations shall always uphold the Right to GA when introducing these models within their organisations.

III. THE RIGHT TO GOOD ADMINISTRATION AS AN ANALYTICAL TOOL AND GOVERNANCE FRAMEWORK

As outlined in par. II, FMs present a series of technical peculiarities and associated potentials as well as risks that cannot be overlooked. Given their increasing adoption within the public sector, these aspects require some careful considerations. The present section, therefore, aims to assess whether the current governance framework, existing in some EU Member States in the form of guidelines, can be considered adequate in regulating the use of FMs in the public sector. To do so, the named guidelines will be read in the light of the Right to Good Administration.[76]
Article 41 of the Charter of Nice was chosen as an analytical tool and governance framework for two main reasons. Firstly, the principles it enshrines constitute foundational elements of administrative law not only at the supranational level but also within the constitutional and administrative traditions of EU Member States[77]. Secondly, this methodological approach fully aligns with the right-based approach of the AI Act.[78]
As clarified in the methodology section, Article 41 of the EU Charter is hereby used to analyse national guidelines issued by EU Member States up to April 2025. Other regulatory instruments – like policies, rules and regulations, and protocols – were purposely excluded,

[73] Each query submitted to ChatGPT is estimated to consume approximately ten times more electricity than a standard Google search. See: Electric Power Research Institute, *Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption*, available at https://www.epri.com/research/products/3002028905 (last visited Jun. 3, 2025).
[74] Shaolei Ren, a researcher at the University of California – Riverside, estimates that submitting a series of queries (ranging from 5 to 50) to ChatGPT results in the model consuming up to 500 milliliters of water. See: Associated Press, *Artificial intelligence technology behind ChatGPT was built in Iowa – with a lot of water*, available at: https://apnews.com/article/chatgpt-gpt4-iowa-ai-water-consumption-microsoft-f551fde98083d17a7e8d904f8be822c4 (last visited Mar. 7, 2025).
[75] A 2023 study on the LLM BLOOM, which has 176 billion parameters, estimated that its training phase emitted approximately 24.7 tons of CO_2 considering only dynamic energy consumption. When accounting for the entire lifecycle, including equipment production and operational energy use, total emissions rose to 50.5 tons of CO_2. For comparison, training OpenAI's GPT-3 generated over twenty times more emissions than BLOOM, approximately 500 tons of CO_2. See: A.S. Luccioni, S. Viguier *et al.*, *Estimating the Carbon Footprint of BLOOM, a 176B Parameter Language Model in Journal of Machine Learning Research*, Journal of Machine Learning Research 24, pp. 1-15 (2023).
[76] While Article 41 of the EU Charter explicitly refers only to EU institutions, case law and legal doctrine have gradually extended its scope to Member States when implementing EU law. See: M., Kristjánsdóttir, *Good Administration as a Fundamental Right*, Veftímaritið Stjórnmál og stjórnsýsla, 9 (2013).
[77] OECD, *European Principles for Public Administration*, SIGMA Papers No. 27 (1999), available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/1999/01/european-principles-for-public-administration_g17a1de4/5kml60zwdr7h-en.pdf (last visited Mar. 3, 2025).
[78] This right-based approach is reflected in Article 1(1), AI Act. Moreover, it is also consistent with relevant Italian case law. More precisely, the already cited *Sentenza n. 2270/2019* of *Consiglio di Stato* recognised, alongside the pitfalls of automation, its alignment with efficiency and cost-effectiveness of the administrative action, and, therefore, its linkage with the so-called '*principio di buon andamento*' – a principle that now, through EU integration, has been elevated to a right (the Right to GA). See: Consiglio di Stato (2019). *Supra*, note n. 27; S. Cassese, *Il diritto alla buona amministrazione – Report on the "Day on the Right to Good Administration" for the 25th anniversary of the law on the "Síndic de Greuges" of Catalonia, Barcelona,* Istituto di Ricerche sulla Pubblica Amministrazione – IRPA (2009).

because less diffused. Only guidelines adopted at the State-level and specifically addressed to civil servants and focused exclusively on Generative AI were selected, to ensure consistency and comparability. Therefore, once again it is stressed that these are the reasons why the final sample includes guidelines from Denmark, Finland, Poland, and Sweden.

As a final clarification, it shall be pointed out that while this article focuses on FMs, the analysed guidelines refer more generally to 'Generative AI'.[79] This terminological gap does not affect consistency, as current GenAI tools used or considered by public administrations are predominantly FM-based (e.g. large language models for text generation or summarisation and data analysis). For the purposes of this study, such references are treated as practical examples of FM use. This approach ensures coherence while reflecting current terminology in public documents.

III.1 *The Corollaries of the Right to Good Administration*

To assess the extent to which the considered guidelines align with the Right to GA, several sets of corollaries derived from Article 41 were identified.[80] These core principles were divided, in total, into four categories. Each of this category was paired with the corresponding technical risk and/or opportunity associated with the use of FMs in the public sector. For a visual representation, see *Table 1*.

The first set of corollaries includes publicity and transparency –[81] intended as the accessibility of administrative records and the intelligibility of administrative choices[82] – as well as the right to be given reasons, which functions as the procedural safeguard ensuring the practical application of the other two principles.[83] All these three corollaries are severely challenged by the opacity of FMs and public administrations shall be aware of

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[79] For a broad overview, see: A. Brizuela, M. Combetto *et al.* (2025). *Supra*, note n. 22.

[80] These principles inform the administrative action in the so-called 'European Administrative Space'. See: *supra*, note n. 77. Out of the four Member States falling under the scope of the present research, the Right to GA is recognised at the constitutional level under Articles 51(1), 61(1), 63, and 77(1)of the Polish Constitution and §§ 17 and 21 of the Finnish Constitution. See: FRA, *EU Charter of Fundamental Rights*. *Article 41 – Right to Good Administration,* available at: https://fra.europa.eu/en/eu-charter/article/41-right-good-administration#national-constitutional-law (last visited Mar. 5, 2025). In Finland, there is a reference to the Right to GA also in Chapter 2 of the Administrative Procedure Act is titled '*Grunderna för god förvaltning*' meaning 'Foundations of good administration', which includes – among the others – the principles of equality, objectivity, proportionality, and the protection of legitimate expectations. See: Oikeusministeriö, *Förvaltningslag*, SDK 434/2003 (2003). On the other hand, in Denmark and Sweden, the Right to GA is not present in the Constitution. However, the principles informing this right are recalled in the Danish Administrative Procedure Act. See: Justis- og beredskapsdepartementet, *Lov om behandlingsmåten i forvaltningssaker – Forvaltningsloven*, LOV-1967-02-10 (1970). Similarly, the Swedish Administrative Law Act lists the principles informing this right are there listed and recalled. See: Justitiedepartementet, *Förvaltningslag*, 2017:900 (2019).

[81] Regarding the principles of publicity and transparency, it is worth noting that, in modern states, '*access to administrative acts and documents forms the foundation of administrative democracy, where transparency counters secrecy driven by personal or group interests*' (author's translation). See: M.A. Sandulli, *Accesso alle notizie e ai documenti amministrativi,* in Enciclopedia del Diritto, Giuffrè (4th ed. 2000).

[82] Most legal systems worldwide recognise the right to access administrative documents and impose transparency obligations, aimed at both enabling oversight of public action and protecting the rights of citizens. The so-called 'transparency model', introduced in the U.S. with the 1966 Freedom of Information Act, has gradually spread globally. For a comparative analysis of the principles underpinning the Right to GA, see: G. Napolitano, *Introduzione al diritto amministrativo comparato*, Il Mulino (1st ed. 2020).

[83] On the relationship between transparency and procedural instruments, see: E. Casetta, *Manuale di Diritto Amministrativo*, Giuffrè, (27th ed. 2024).

this. Since accessing to FM source code is typically restricted[84] or, when available, not easily interpretable,[85] this research considered the principles of publicity and transparency to be fulfilled when the guidelines mention the need for civil servants to disclose the use of FMs.[86] As anticipated, when it comes to the right to be given reasons, the challenges get even more complex. As stated by both supranational and national case law, individuals must be able to understand and challenge automated decisions.[87] This requires explainability, which current FMs cannot guarantee. For this reason, as previously noted, the research limited its scope to G2G uses of FMs, where decisions do not directly affect the juridical sphere of citizens. It shall be pointed out, moreover, that several guidelines refer to the use of GenAI for data analysis. While this use presents challenges, it cannot be categorically excluded without foregoing operational benefits. On the matter, the author believes that rejecting FM-based tools entirely would disregard their value, particularly in enhancing data analysis capabilities.[88] That said, the right to be given reasons was deemed respected in cases where guidelines clearly stated that FMs cannot be used for decision-making (G2C), only humans must remain responsible for a final decision and emphasised the accountability of civil servants in reviewing and interpreting FM outputs.
The second set of corollaries relates to efficiency, effectiveness, and cost-effectiveness, understood as the need for administrative action to achieve optimal results through the best possible use of available resources.[89] For the purposes of this research, the notion of 'resources' was intended not only as human and financial resources, but also as natural ones. Accordingly, the concepts of efficiency and cost-effectiveness are interpreted broadly, including also environmental sustainability. This set of corollaries was considered fulfilled when guidelines referred to the potential of FM-based tools to improve performance and reduce time and costs, and/or to the environmental impact of FMs and corresponding mitigation strategies. In addition, the corollaries were deemed met when the guidelines included a definition of FMs (and its peculiarities) as well as specific examples of potential use cases. Such examples, in the view of the author, reduce uncertainty for public officials by clarifying the appropriate scope of FM applications.
Impartiality, objectivity, fairness and non-discrimination are part of the third set of principles isolated from Article 41 of the EU Charter – all of which are substantial to ensure equality and protect individuals from arbitrary or discriminatory treatment[90].

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[84] This is true in the case of proprietary or only open-weight FMs. See: E. Gibney (2025). *Supra*, note n. 63.
[85] See: paragraph II.II.
[86] This is in line with Article 50, par. 4, AI Act.
[87] *Supra*, note n. 27.
[88] It should be noted that, under Article 6(3) of the AI Act, AI systems used solely in preparatory phases, without making the final decision, are not classified as 'high-risk'. However, this exclusion appears not entirely justified. When such systems are used within domains listed in Article 6 and Annex III of the Regulation, they can significantly influence outcomes, even if they do not directly determine them. In these contexts, preparatory tools like FMs used to carry out data analysis may meaningfully shape the decision-making process, thereby affecting the legal or factual situation of individuals. Accordingly, they should be treated as high-risk.
[89] On the relationship between these principles, some scholars say that *'[...] il risultato è nozione riassuntiva del concetto di efficienza (oltre che di quello di efficacia ed economicità)*' to the point that the administrative action shall translate '[...] *concretamente nel migliore utilizzo possibile dei mezzi e delle risorse disponibili da parte dell'amministrazione'*. See: D. Vese, *L'efficienza dell'organizzazione amministrativa come massimizzazione dei diritti fondamentali,* P.A. Persona e Amministrazione, 1 (2019).
[90] According to some authors, the principle of impartiality is the application of the principle of legal equality. See: S. Lariccia, *Il principio di imparzialità delle pubbliche amministrazioni*, in U. Allegretti, L. Ammannati, *et al*., *Studi in onore di Giorgio Berti*, Jovene, Napoli, 2005. Note that the issues of bias and hallucinations also have a direct impact on the administrative activity. If GenAI would be used to support the adoption of administrative decisions, the use of discriminatory models could lead to their annulment for abuse of power.

However, the intrinsic bias and risk of hallucinations associated with FMs challenge these corollaries. For this reason, they were considered fulfilled when guidelines explicitly addressed such risks and raised awareness among civil servants on the matter.
Lastly, the fourth set of corollaries – though not traditionally linked to the Right to GA – emerges from an evolutionary interpretation of Article 41 read in conjunction with Article 8 of the Charter (titled 'Protection of Personal Data'), the GDPR, and the NIS2 Directive. In this context, data protection and cybersecurity form a 'necessary and powerful duo',[91] as robust cybersecurity is essential to safeguard personal data. Ensuring data protection, however, also requires civil servants to be aware of what information is appropriate to include in prompts when interacting with FMs.[92]

Table 1 – Visual representation of the corollaries derived from the Right to GA

Mentioned aspects	Corollaries met
Saying when GenAI is used	Publicity and transparency
Final decision taken by humans	Motivation
Optimised resource use* and improved performance	Efficiency, effectiveness and cost-effectiveness
Definitions and potential use cases included	Efficiency and effectiveness: reduced risk of uncertainty
Bias and hallucinations	Impartiality, objectivity, fairness, non-discrimination
Privacy and cybersecurity measures	Data protection and cybersecurity

*including environmental resources

Source: author's own elaboration

The four sets of corollaries outlined above provide the analytical framework for the qualitative thematic analysis conducted on the selected national guidelines. The results of this analysis will be presented in the next section.

IV. A Taxonomy of National Guidelines on FMs – Denmark, Finland, Poland, Sweden: Key Findings

The present section presents the results of the thematic qualitative analysis carried out on the four selected guidelines. The Danish ones were adopted in March 2024[93] by *Digitaliseringsstyrelsen*, the Danish Agency for Digital Government.[94] In September of the

See: B.M. Armiento, *Pubbliche amministrazioni e intelligenza artificiale. Strumenti, principi e garanzie*, Editoriale Scientifica, Napoli (1st ed. 2024).

[91] W. Wiewiórowski, Cybersecurity and Data Protection: a necessary and powerful duo, European Data Protection Supervisor, available at https://www.edps.europa.eu/press-publications/press-news/blog/cybersecurity-and-data-protection-necessary-and-powerful-duo_en (last visited May 9, 2025).

[92] This notwithstanding the fact that subscription FMs claim not to retain data for training because public administrations should be the most careful.

[93] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.

[94] It was established in 2011, and starting from mid-December 2022 the Agency became part of the Ministry of Digital Government. For more, see: Digitaliseringsstyrelsen, *About the Agency for Digital Government*, available at: https://en.digst.dk/about-us/ (last visited May 3, 2025).

same year, Polish ones[95] were published by the *Ministerstwo Cyfryzacji*, the Polish Ministry of Digital Affairs.[96] More recent are the Swedish and Finnish ones. The former were adopted in January 2025 [97] by *Myndigheten för digital förvaltning* (Digg) and *Integritetsskyddsmyndigheten* (IMY) –[98] the Swedish Digital Governance Agency and the Privacy Protection Agency respectively.[99] The latter were published in March 2025 by *Valtiovarainministeriö*, the Finnish Ministry of Finance.[100]

IV.1 *Disclosure Requirements*

All guidelines require, to varying degrees, that civil servants disclose when content has been generated using FMs. Denmark gives public managers the choice to either pre-approve GenAI tools or mandate disclosure in outputs.[101] Finland requires open disclosure, though it is unclear whether this targets managers, the public, or both.[102] Poland explicitly mandates identification of the tool used, the date of generation, and whether human review occurred,[103] whereas Sweden is less specific, merely referring to 'communication' as part of building trust and ethical use, without outlining concrete obligations.[104]

IV.2 *Human Oversight*

The need for human decision-making is highlighted across all the guidelines, though with some peculiarities. For instance, Danish guidelines place the responsibility for the proper use of FM tools primarily on managers of each public entity, thereby partially shifting accountability away from civil servants. While they refer to the right not to face fully

[95] Ministerstwo Cyfryzacji, *Generatywna sztuczna inteligencja w służbie pracowników administracji publicznej - pierwsze kroki,* available at: https://www.gov.pl/web/ai/generatywna-sztuczna-inteligencja-w-sluzbie-pracownikow-administracji-publicznej---pierwsze-kroki (last visited May 3, 2025).

[96] See: Gov.pl, *Ministerstwo Cyfryzacji*, available at: https://www.gov.pl/web/cyfryzacja (last visited May 3, 2025).

[97] The exact date is not listed on the official webpage of the guidelines but is reported in the following press release: Regeringskansliet*, Regeringen har tagit emot nationella riktlinjer för generativ AI*, available at: https://www.regeringen.se/pressmeddelanden/2025/01/regeringen-har-tagit-emot-nationella-riktlinjer-for-generativ-ai/ (last visited May 3, 2025).

[98] The adoption of the Swedish Guidelines was specifically prompted by a directive from the Ministry of Finance to the Digital Governance Agency and the Privacy Protection Authority. See: Regeringskansliet, *Uppdrag till Myndigheten för digital förvaltning och Integritetsskyddsmyndigheten att ta fram riktlinjer för användningen av generativ artificiell intelligens inom den offentliga förvaltningen*, available at: https://www.regeringen.se/regeringsuppdrag/2024/08/uppdrag-till-myndigheten-for-digital-forvaltning-och-integritetsskyddsmyndigheten-att-ta-fram-riktlinjer-for-anvandningen-av-generativ-artificiell-intelligens-inom-den-offentliga-forvaltningen/ (last visited May 3, 2025). The initiative followed the acknowledgement by the said Ministry of an increasing diffusion of GenAI tools in Swedish public administrations. See: Regeringskansliet, *Ökad användning av generativ AI inom offentlig sektor*, aailable at: https://www.regeringen.se/pressmeddelanden/2024/07/okad-anvandning-av-generativ-ai-inom-offentlig-sektor/ (last visited May 3, 2025).

[99] Digg and IMY, *Riktlinjer för generativ AI inom offentlig förvaltning*, available at: https://www.digg.se/ai-for-offentlig-forvaltning/riktlinjer-for-generativ-ai (last visited May 3, 2025).

[100] Valtiovarainministeriö, *Ohjeistus generatiivisen tekoälyn hyödyntämisestä työn tukena ja apuvälineenä julkisessa hallinnossa,* available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/166199/VM_2025_9.pdf?sequence=1&isAllowed=y (last visited May 3, 2025).

[101] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.

[102] Valtiovarainministeriö (2025). *Supra*, note n. 93.

[103] Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.

[104] Digg and IMY (2025). *Supra*, note n. 92.

automated decisions, they then open for an exception 'if the assessment criteria are unambiguous or if there is a basis in national or EU law.'[105] This caveat is particularly problematic: as clarified, FMs cannot guarantee meaningful explanation of their output, thus this provision in the Danish guidelines is believed to possibly undermine the right to motivation.

Finland clearly states that officials remain fully responsible for decisions involving FMs and warns that the closer such tools are used to take decisions affecting individual rights, the stricter the limitations must be[106]. While this specification is surely right, further clarification would be needed on what constitutes such thresholds and which uses are prohibited.

Poland implicitly excludes decision-making from FM use by focusing only on summarisation and content creation, but fails to provide an explicit prohibition, leaving a problematic interpretive gap from which potential misinterpretation could derive.[107]

Finally, the Swedish guidelines explicitly call for a human-in-the-loop approach and provide, as an example, the possibility of having employees reviewing content generated by FMs. However, like the Danish ones, they are open to the possibility of using such tools if permitted by specific laws. This would be possible – they specify – only if such decision-making meets the requirements of proportionality, objectivity, and legality, ensuring that those decisions are predictable and free from irrelevant considerations.[108] This position is somewhat contradictory, as the opacity of FMs makes it unlikely that decisions could ever be truly 'predictable' in a way that fully upholds the right of a motivated administrative decision.

IV.3 *Efficiency broadly considered*

All the analysed guidelines see the potential of FMs in relation to efficiency, effectiveness, and cost-effectiveness.

The Danish guidelines include a 'fact box' explaining how GenAI tools work, along with a visual chart distinguishing AI model – both enhancing conceptual clarity. They acknowledge the potential of FMs as a 'good chance' for improvement but merely list example use cases (e.g., automating repetitive tasks, data analysis, content generation)[109] without further detail.

Similarly, the Finnish guidelines acknowledge the potential productivity gains from using FMs and provide public employees with a clear 'AI vocabulary' through a dedicated terminology table, and they outline several use cases (mainly internal, such as content generation, data analysis, and summarisation). One external use is also mentioned: chatbots for citizen support. While it falls out of the scope of present research, it is worth saying that such use could be considered low risk as it does not affect the juridical sphere of citizens directly. Notably, the Finnish tool also includes a unique example not found in other policies: using FMs for shift planning within departments.[110]

The Polish guidelines offer a brief but accessible definition of GenAI, suitable for non-experts.[111] While they do not explicitly outline efficiency benefits coming from FMs, they

[105] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.
[106] Valtiovarainministeriö (2025). *Supra*, note n. 93.
[107] Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.
[108] Digg and IMY (2025). *Supra*, note n. 92.
[109] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.
[110] Valtiovarainministeriö (2025). *Supra*, note n. 93.
[111] It refers to GenAI as a tool that can be used to produce content. It also warns that the output is based on training dataset as well as prompts. See: Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.

provide detailed use cases, each accompanied by a warning on related risks –[112] an approach that could be extremely effective to reduce uncertainty in civil servants on what and what is not allowed.
Lastly, Swedish guidelines offer a clear definition of GenAI but the governance tool appears overall lengthy, fragmented, and it lacks detailed use cases of FMs. The Swedish approach, however, stands out for addressing the environmental impact of AI, urging administrations to assess sustainability and energy use on a case-by-case basis.[113] Similarly, while Finnish guidelines do not refer explicitly to the environment, they also make a reference to the fact that GenAI is not always the answer, yet in some cases other models would be more adequate.[114]

IV.4 *Impartiality and Fairness*

On impartiality, objectivity, fairness and non-discrimination, the Danish guidelines warn of hallucinations and bias risks, especially when using closed-source or publicly available models with limited transparency on training data. To address this, civil servants are advised to perform 'quality control' on all outputs.[115]
The Finnish ones highlight the risk of hallucinations, stressing the need to always verify FM outputs. They also address bias, noting its correction is crucial yet challenging with GenAI due to its opacity, which makes discriminatory outcomes harder for users to detect. To de-bias output, however, Finland does not dive into any practical tools to help civil servants deal with it.[116]
The Polish guidelines similarly highlight bias risks in FM training datasets and instruct officials to always verify outputs.[117] Hallucinations are also addressed: civil servants are encouraged to cross-check outputs with reliable sources or consult domain experts.[118]
Sweden, on the other hand, links hallucinations and bias to GDPR principles of correctness and accuracy, instead of relating these to the Right to GA.[119] It also provides no tools for identifying or mitigating such risks.

IV.5 *Privacy and Cybersecurity*

Lastly, on privacy and cybersecurity, Danish guidelines highlight the risk of data leakage when interacting with publicly accessible FMs. Civil servants are instructed to avoid inputting personal or confidential information and to use separate passwords for GenAI platforms. To strengthen safeguards, managers are encouraged to provide an approved list of GenAI tools, clarify permissible data inputs, and offer examples of acceptable and unacceptable prompts.[120]

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[112] Specifically, this includes using GenAI as a source of inspiration (e.g., finding a project title), for summarising information, or conducting preliminary research on unfamiliar topics. *Id.*
[113] Digg and IMY (2025). *Supra*, note n. 92.
[114] Valtiovarainministeriö (2025). *Supra*, note n. 93.
[115] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.
[116] Valtiovarainministeriö (2025). *Supra*, note n. 93.
[117] The Polish guidelines refer to this issue as one of '*bezstronność*' (impartiality), supporting the present study's alignment of concerns about bias and hallucinations with the corollaries of impartiality, fairness, and non-discrimination. See: Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.
[118] *Id.*
[119] Digg and IMY (2025). *Supra*, note n. 92. Finland, by contrast, recalls specifically the principles of the right to GA, calling civil servants to always refer to them, also when using GenAI. Valtiovarainministeriö (2025). *Supra*, note n. 93.
[120] Digitaliseringsstyrelsen (2024). *Supra*, note n. 30.

Similarly, Finnish ones warn not to input in the FM tool confidential, non-public or personal data unless the tool has been approved by the organisation.[121]
The Polish guidelines prohibit entering classified, sensitive, or personal data into GenAI tools, warning that providers may store or reuse input content. However, their cybersecurity advice is vague – civil servants are simply told not to 'post content [they] wouldn't normally post on social media'. No concrete safeguards are outlined, and the only reference is to an external link on 'cyber hygiene'. As such, this fourth set of governance corollaries is only partially addressed in the Polish case.[122]
Sweden provides the most comprehensive guidance: it places liability on public bodies for any data leaked to private providers and mandates prior risk assessments, ongoing risk management, incident reporting, and technical safeguards such as encryption and access control.[123]

IV.6 *Additional Observations*

Though not initially part of the thematic analysis, it is worth mentioning that all guidelines stress the importance of a compliance with intellectual property rights. This emerging focus suggests a broader trend toward embedding FM-related use within a rights-based framework of administrative legality[124].

V. Final Reflections and Policy Considerations

The comparative review and qualitative thematic analysis undertaken in this study reveal an emerging institutional awareness of both the opportunities and risks associated with the integration of foundation models in public administration. Importantly, the findings indicate that ensuring alignment of these technologies with the corollaries of the Right to Good Administration necessitates structured and forward-looking governance strategies that translate legal principles into operational practice. In light of the best practices identified in the previous sections, the following policy considerations and recommendations are proposed.
To enhance efficiency and institutional effectiveness, guidelines should include clear and accessible definitions of foundation models (and related concepts). The Danish visual classification of AI types represents a notable best practice in this regard. In addition, civil servants would also need practical, context-specific guidance delineating permitted uses, prohibited applications. On the matter, grey areas would then require managerial oversight. Providing detailed illustrative use cases appears to be crucial to reduce uncertainty and support adequate and effective use of FMs by civil servants.
With respect to automated decision-making, the Danish and Swedish approaches recalled above – both of which allow exceptions when national or EU law permits – risk being overly permissive, as they fail to align with the opacity of current foundation models. As of today, therefore, a precautionary principle should apply: FMs could assist with content creation, summarisation or trend analysis, but should not be deployed for decisions directly affecting the rights or legal interests of individuals. In any case, human oversight shall be guaranteed, even when FMs are employed solely for internal administrative

[121] Valtiovarainministeriö (2025). *Supra*, note n. 93.
[122] Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.
[123] Digg and IMY (2025). *Supra*, note n. 92.
[124] Digg and IMY (2025). *id*; Digitaliseringsstyrelsen (2024). *Supra*, note n. 30; Valtiovarainministeriö (2025). *Supra*, note n. 93; Ministerstwo Cyfryzacji (2024). *Supra*, note n. 88.

support. This solution is believed to safeguard the right to motivated administrative decisions.

Consistently with the corollaries of transparency and publicity, guidelines should also include disclosure obligations. This would require civil servants to clearly indicate how and when content or analysis has been generated using FMs – both internally (to their supervisors) and externally (to the public). This solution would strengthen accountability and public trust in administrative processes, while reducing potential ambiguities in FM use. Additionally, disclosure enables traceability: when errors occur, administrators can determine whether they originated from FM outputs and, based on documented patterns, decide to restrict or exclude specific uses that prove unreliable or legally problematic.

Given the risks of bias and hallucinations inherent in FMs, governance measures should explicitly address these challenges. Civil servants must be required to verify outputs critically, and public authorities should prioritise the use of open-source or auditable models where possible.

When it comes to privacy and cybersecurity, robust data governance and cybersecurity protocols constitute essential safeguards. These include pre-deployment risk assessments, encryption, access control, and incident reporting mechanisms. Civil servants must be instructed to avoid inputting unauthorised or confidential data into FMs unless expressly permitted. On the matter, the lifecycle approach adopted in the Swedish guidelines offers a strong model to follow.

Importantly, sustainability considerations must also be carried out by public administrations. Civil servants should be aware of the ecological footprint of FMs deployment, including energy consumption, water usage and carbon emissions. The Swedish and Finnish guidelines offer promising examples by urging limitations and proportionality in FM use. Rather than a 'FMs-by-default' model, therefore, a principle of FMs-minimisation shall be favoured – meaning using these tools *only* when necessary, appropriate, and proportionate, not simply whenever possible.

Lastly, iterative review and continuous updating of guidelines will be critical. Public authorities should systematically integrate lessons learned, re-evaluate compliance with the corollaries of Article 41, and adapt governance measures in response to the evolving technical and legal landscapes.

The analysis confirms that existing guidelines constitute a crucial tool – at least in theoretical terms – for compliance with the corollaries of the Right to Good Administration. Their practical effectiveness, however, will ultimately depend on the extent to which they are actively integrated into the daily practices of civil servants. Assessing this dimension, including the role of formal training and capacity-building measures, opens a path for future investigation.