

ALGORITHMIC IMPACT ASSESSMENT

Artificial Intelligence Systems and Automatic Decision-Making Systems

Proposal for the public sector



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Moje Państwo Foundation is an organisation working for the development of democracy, open and transparent public authority and civic engagement. We believe that the state should be efficient and useful for people. We create tools that make it easier to use its resources and data. We nurture a culture of technology use by the state.

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1. Introduction

The purpose of the document is to highlight how Artificial Intelligence (AI) and Automated Decision Making (ADM) systems can be implemented in the public sector. The document outlines the concept of an Algorithmic Impact Assessment (AIA) tool. It also reports on the motivations for using such tools in the management process of AI/ADM systems. It includes a proposal for the Algorithmic Impact Assessment of AI/ADM systems, addressed to public authorities, both at the central and local government level. The tool is a starting point for further discussion on the better, safer and more effective implementation of AI/ADM systems in the state.



Al and ADM technology in the public sector in practice. Today and tomorrow.

More and more public institutions are opting to use artificial intelligence or automated decision-making systems when carrying out their tasks. This is a trend that can improve state operations and lead to more efficient and cost-effective management in public institutions. The European Union's goal is to become a strategic leader in the use of artificial intelligence in the public sector. This intention is set out in the 2021 review of the Coordinated Plan on Artificial Intelligence¹, in which the European Commission proposes to 'make the public sector a pioneer in the use of artificial intelligence'. The direction to increase the share of technology in the management of processes in the state is clearly visible. However, it requires a number of changes be made in the public sector, which should be properly prepared - organisationally, financially, as well as in terms of officials having the right qualifications. Developing AI/ADM technologies in a way that is secure, trustworthy and ensures respect for fundamental human rights and freedoms will only be possible if the right ecosystem is created within the public administration.

The vision of modern and innovative public structures, while attractive, is not without its drawbacks. The use of AI/ADM systems is associated with concerns about dilution of accountability for decisions made, and increased room for abuse. The unclear way in which these systems operate² and are controlled, and the non-obvious risk of harmful effects of the algorithms on society, which may only become apparent in the long term – these are just some of the further issues of concern in the use of AI by the state. All of these issues are not problems, but real risks that need to be properly addressed and managed

at an early stage of planning the introduction of a system within a specific environment. In the public sector, automated decision-making systems should be subject to a management model that addresses the implications of such a system, particularly in the context of citizens' rights. Such a model should include, from the outset, an examination of whether the use of a particular system is necessary in the context of the issue being addressed and proportionate from a human rights perspective.

A long list of selected cases of the use of AI by the public sector in Europe, established by the European Commission, Joint Research Centre (JRC)3, shows that the trend of using this technology is present at both the national and local levels. Public institutions are using AI to handle citizens' cases (use of chatbots), and to detect discrepancies in jurisprudence, as well as for the more controversial, from a human rights perspective, purposes of detecting wanted persons and identifying suspicious behaviour at airports4. The use of artificial intelligence algorithms by the public sector has applications ranging from the analysis of water quality monitoring data to automated decision-making in electronic tax office declaration systems (this example is part of the reality for many of us every year)5.

Many of the systems implemented in the public sector effectively support the work of the administration, but there are also cases of controversial or even illegal implementations. In the list created by the EC JRC, there are systems that were abandoned some time after their implementation. An example is a predictive system called the Early Help Profiling System (EHPS) used in 2018 in the county of Hackney (London), which used data from various sources to identify children and families who might need additional help from municipal social workers. The system was intended to enable early intervention with these families, avoiding the

https://digital-strategy.ec.europa.eu/en/library/coordinated-plan-artificial-intelligence-2021-review [accessed: 5.12.2022]

^{2.} https://mojepanstwo.pl/aktualnosci/773 [accessed: 5.12.2022]

^{3.} European Commission, Joint Research Centre (JRC) (2021): Selected AI cases in the public sector. European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu /89h/7342ea15-fd4f-4184-9603-98bd87d8239a [accessed: 5.12.2022]

^{4.} Ibidem.

^{5.} For more information on ADM in Europe, see AlgorithmWatch's "Automating Society Report 2020" https://automatingsociety.algorithmwatch.org/[accessed: 20.01.2023]



occurrence of a crisis with more costly interventions later. The nature of the data collection and risk assessment was opaque as the data was processed by a private entity, which raised concerns among citizens. The data subjects were not informed about this. In addition, which indicators were supposed to determine risk were kept secret, as a private company was responsible for the development of the system and argued that the information is commercially sensitive. The municipality opted out of using the system^{6,7}. Controversy also arose around the Dutch system, "SyRi - Detect welfare fraud", to detect welfare fraud more effectively, which was implemented at the national level. The system did not make any decisions itself, but made recommendations to officials for further investigations. Various organisations pointed out that the use of the system causes too many violations of privacy and is discriminatory towards indigent citizens and people belonging to ethnic minorities. They also criticised the lack of transparency in the operation of the system and the inability of those affected by the system's suggestion to see their own data. Following a court case, the Dutch court decided in early 2020 that the use of SyRi was incompatible with Article 8 ECHR8, and its use was therefore withdrawn9.

Identifying the risks of AI/ADM systems in the public sector should be done at the earliest possible stage, not after implementation – with direct consequences for the citizens affected by the system's operations. It is in the interest of society for the public sector to use tools that make the use of AI/ADM systems more transparent and accountable, and for risks to be identifiable and addressable before the systems are put into operation. A buffer needs to be developed to help public administrations eliminate possible negative impacts of AI/ADM systems and to verify whether a system should be used to solve a problem at all.

Algorithmic impact assessment as part of an AI/ADM systems management model – selected examples of tools

The strength in approaching any technology seems to be diversity. Moving in this direction - AI/ADM systems used in the public sector should not only be transparent or only accurate, but should take other aspects into account. There are many more factors to manage: ethical, social, organisational, legal, technological, and sometimes environmental. Such systems should be accompanied by an appropriate process that balances the way it works throughout the life cycle of the system, reduces the risks associated with its operation and ensures that the technology used by the state is not dangerous to humans.

The answer to these challenges is to find a model for the management of AI and ADM systems that takes into account the impact of the system's operation on the environment and allows for appropriate responses to the effects of the system's introduction. An important element of this model is the algorithmic impact assessment.

The Algorithmic Impact Assessment (AIA) is a tool for assessing the risk of implementing a specific AI/ADM system. The assessment is intended to help better understand the risks associated with automated decision-making and to facilitate the management of identified risks. The Algorithmic Impact Assessment helps to structure the process of developing, implementing and maintaining a system – with a particular focus on the context in which the system is to operate. There is no single established method for performing such an assessment. The use of AIA-type tools is a relatively new trend, but the need to reflect on the performance of



^{6.} Ibidem. ID:146.

https://www.hackneycitizen.co.uk/2019/10/30/town-hall-drops-pilotprogramme-profiling-families-without-their-knowledge/ [accessed: 5.12.2022]

https://www.echr.coe.int/documents/convention_pol.pdf [accessed: 20.01.2023]

^{9.} Ibidem. ID: 78.



decision-making systems is noticeable. Currently, we can see the use of AIA-based solutions in both the public sector and business.

European Union

The current draft of the Artificial Intelligence Act (Al Act)10 under consideration at the EU level implies the use of tools somewhat similar to AIA, i.e. 'conformity assessments'. The original version of the Act presented by the EC in April 2021 included an obligation to perform a conformity assessment against high-risk systems. Conformity assessment is intended to be the process of verifying compliance with the requirements for AI systems, as set out in the proposed regulation. These requirements are related to the establishment of a quality management system, data management, technical documentation, record keeping, transparency and provision of information to users, human supervision, accuracy, robustness and cyber security. The obligation to carry out a conformity assessment is imposed only on system providers (understood as entities that develop a system and market or use it for a fee or free of charge). The proposed regulation provides two options for conformity assessment (Article 43). The first is to have the assessment performed by the providers themselves. The second option involves conformity assessment with the involvement of a notified entity. For most of the high-risk systems identified in Annex III, conformity assessment by providers themselves (conformity assessment based on internal control) is foreseen. The public sector would only be addressed by such an obligation if it were the provider of a high-risk system. For example, if it decided to develop and commission an artificial intelligence system designed to make decisions on the allocation of social benefits to individuals. The public body would not need to carry out a compliance assessment if it procured the system

'externally' from an AI system manufacturer. The manufacturer would then perform the assessment and the public body would simply have to rely on it. However, this design of conformity assessment entails paying little attention¹¹ to what happens during the use phase of high-risk AI systems. Certain anomalies, or unwanted effects associated with the operation of an AI system may only emerge at the stage of its use in a specific area. Providers will only be able to assess a fragment of the context in which a high-risk system may operate during a compliance assessment. The way and purpose for which an AI system is used is crucial to the impact the system may have on the environment, including fundamental rights. Therefore, it would be appropriate to address additional obligations for users (implementers) of high-risk AI systems under the AIA in terms of respecting fundamental rights.12

The way AI systems are used by public authorities will have an impact on the situation of many citizens who will be affected by the deployed solution. Therefore, the public sector should carry out an AIA before using an AI system in decision-making processes towards citizens and publish the results of the assessment carried out.

This issue was noted during the European Parliament's work on the AI Act. The tabled amendments proposed the introduction of an obligation to use the assessment of the impact on fundamental rights by users of high-risk systems, taking into account specific conditions for the public sector (e.g. AM 2079, AM 2081)¹³. Work on the regulation is in progress, but the obligation for users of high-risk AI systems – including the public sector – to apply AIAs has a real chance of becoming part of the regulation. It should be noted that AIAs should not only be used by public institutions, but also by the private sector.¹⁴

https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735a372-11eb-9585-01aa75ed71a1.0012.02/DOC_1&format=PDF [accessed: 12.12.2022]

^{11.} The draft Artificial Intelligence Act presented in April 2021 by the EC includes in Article 29 certain obligations for users of high-risk artificial intelligence systems. [accessed: 12.12.2022]

^{12.} https://edri.org/our-work/civil-society-calls-on-the-eu-to-put-fundamental-rights-first-in-the-ai-act/ [accessed: 12.12.2022]

https://artificialintelligenceact.eu/wp-content/uploads/ 2022/06/AIA-IMCO-LIBE-Report-All-Amendments-14-June.pdf [accessed: 12.12.2022]

https://edri.org/wp-content/uploads/2022/05/Obligations-onusers-AIA-Amendments-17022022.pdf [dostep: 20.01.2023 r.]



Council of Europe

The Council of Europe (CoE) is working on the first binding international legal instrument in the field of artificial intelligence. The Ad Hoc Committee on Artificial Intelligence (CAHAI)¹⁵, established by the CoE Ministers Committee, agreed at the end of 2021 on the possible elements of a legal framework on artificial intelligence, based on the Council of Europe standards on human rights, democracy and the rule of law¹⁶. The final recommendations of CAHAI form the basis for negotiations in the Committee on Artificial Intelligence (CAI)¹⁷.

As part of the recommendations developed, CAHAI recommended that the instrument should aim to ensure full consistency with the respect for human rights, the functioning of democracy and respect for the rule of law in the development, design and use of artificial intelligence systems, regardless of whether these activities are undertaken by private or public entities (Article 11). The recommendations propose a model for assessing the impact of artificial intelligence systems on the enjoyment of human rights, the functioning of democracy and respect for the rule of law (HUDERIA) (Chapter XII).

CAHAI recommended that, as a minimum, the following main steps should be included in HUDERIA, subject to initial assessment and consideration of stakeholder engagement where appropriate

- Risk Identification: Identification of significant threats to human rights, democracy and the rule of law;
- Impact assessment: assessing the impact, taking into account the likelihood and severity of the effects on these rights and principles;
- Management assessment: assessing the roles and responsibilities of the responsible actors, rights holders and stakeholders in implementing and managing mitigation mechanisms;
- Mitigation and assessment: Identification of appropriate mitigation measures and ensuring ongoing assessment. (Article 50)

The recommendations also emphasise that stakeholder participation in the impact assessment should be ensured (Article 53).

https://www.coe.int/en/web/artificial-intelligence/cahai [accessed: 23.01.2023]

https://rm.coe.int/cahai-2021-09rev-elements/1680a6d90d [accessed: 23.01.2023]

https://www.coe.int/en/web/artificial-intelligence/cai# [accessed: 23.01.2023]



Canada

A practical example of algorithmic impact assessment in the public sector is the AIA used in Canada. Canada had already started work in 2016 on developing a regulatory concept for the responsible use of AI systems in the state¹⁸. The Automated Decision-Making Directive has been in force in Canada since 2019. The act requires covered public entities to¹⁹:

- conduct an AIA before producing any automated decision-making system;
- apply the relevant requirements of the directive as set out in the AIA;
- update the AIA if the functionality of the system or the scope of the automated decision system changes.
- publish the final results of the algorithmic impact assessments in an accessible format via websites²⁰.

The Canadian regulation defines the AIA as a framework to help institutions better understand and mitigate the risks associated with automated decision systems and to provide appropriate governance, oversight and reporting/auditing requirements that best fit the type of application being designed.

The Netherlands

In the public sector in Europe, we also have use cases for AIA-type solutions. In the Netherlands, the Ministry of the Interior and Kingdom Relations has developed a Fundamental Rights and Algorithmic Impact Assessment (FRAIA)^{21,22}. The assessment has been prepared for use by public authorities. The tool is intended to help map the human rights risks associated with the use of algorithms and to take measures to counter these risks. The use of impact assessment is intended to prevent the use of algorithms whose consequences of action are not yet clear. It is also supposed to reduce the risk of ineffective systems, as well as the risk of civil rights violations²³.

Poland

At the end of December 2020, Poland adopted the 'Policy for the development of artificial intelligence in Poland from 2020'²⁴. The policy, or rather strategy, describes the actions Poland should implement and the goals it should achieve in the short term (until 2023), medium term (until 2027) and long term (after 2027). The goals are intended to serve the development of Polish society, the Polish economy and Polish science in the field of artificial intelligence.

The Polish AI strategy also refers to a risk assessment tool in the context of artificial intelligence systems. Firstly, the document envisages a pilot implementation in Poland of model risk assessments for AI

https://www.canada.ca/en/government/system/digital-government/ digital-government-innovations/responsible-use-ai.html [accessed: 19.12.2022]

https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32592#appA (see Article 9 of the Directive) [accessed: 19.12.2022]

^{20.} Ibidem.

^{21.} https://www.government.nl/documents/reports/2021/07/31/impact-assessment-fundamental-rights-and-algorithms [accessed: 19.12.2022]

https://www.uu.nl/en/news/dutch-house-of-representatives-endorses-mandatory-use-of-human-rights-and-algorithms-impact [accessed: 20.01.2023]

^{23.} https://www.government.nl/documents/reports/2021/07/31/impact-assessment-fundamental-rights-and-algorithms [accessed: 19.12.2022]

https://www.gov.pl/web/govtech/polityka-rozwoju-ai-w-polsceprzyjeta-przez-rade-ministrow--co-dalej [accessed: 19.12.2022]



systems and model explanations addressed to the users of these systems, in order to inspire work on similar standards at the EU level²⁵. Secondly, one of the short-term goals of the Polish AI strategy is to analyse the ethical implications of AI implementation and the impact of AI systems on the sphere of human rights. The tools to bring it about include supporting, as part of the work on AI regulation:

- the principles of personal data processing under GDPR (in particular, the principle of data minimisation),
- robust risk assessment for systems using AI and countering errors in their design (e.g. algorithmic bias),
- transparency, accountability and explainability of systems using AI,

particularly those that perform tasks in the public sphere or affect the sphere of human rights and freedoms.

4. Algorithmic impact assessment proposal for the public sector

Algorithmic impact assessment is slowly becoming a tool used in the implementation of AI/ADM systems in public administration and it is likely that carrying it out will soon become a binding legal requirement. The direction is the same – it is about better and safer technology used by the state. At the same time, there is no single established methodology for conducting an algorithmic impact assessment. It is a new approach that requires a number of decisions on how to implement it, depending on the specific needs the system is intended to address.

Algorithmic impact assessment is one component of good public sector management of AI/ADM systems. Many other components remain, such as, for example, assessing the appropriateness of the use of the AI/ADM system, education and competency development of officials²⁶, the use of appropriate procurement modes²⁷, and audits of AI/ADM systems.

In this document, we propose a model for algorithmic impact assessment, addressed to the public sector, both at the government and local government level. The presented tool is inspired by the Dutch FRAIA²⁸ solution and the Canadian model forassessing the impact of algorithms²⁹. The tool is an initial proposal that may need to be adapted (developed/reformulated) depending on the needs of a given implementation.

The model is divided into two parts. The first aims to establish the characteristics of the AI/ADM system by means of answering the questions on the form. The second part aims to assign a level of impact to the system and apply the recommendations provided for the group of systems.

The implementation of such an assessment is not always an easy task. Sometimes, it is impossible to predict the short-term or long-term impact of AI or ADM systems. In many cases, however, the assessment identifies the risks associated with the operation of the system in a given environment.

Who should use the proposed solution? In the ideal model, the algorithmic impact assessment could be performed by an independent public entity, but currently, in the absence of such specialised public entities, the AIA can be performed by public institutions that are interested in implementing a given AI/ADM system³⁰. Each system should have its own

^{30.} https://mojepanstwo.pl/pliki/ai-adm-management-public-sector.pdf [accessed: 19.12.2022]



^{25.} Ibidem.

^{26.} https://mojepanstwo.pl/pliki/zarzadzanie-ai-adm-sektor-publiczny. pdf [accessed: 19.12.2022]

https://mojepanstwo-public.s3.eu-central-1.amazonaws.com/ publications/BkQLXRhU41fRlpBdxlZZUe3l6gJvQjlD8SFjCpb6.pdf [accessed: 19.12.2022]

^{28.} https://www.government.nl/documents/reports/2021/07/31/impact-assessment-fundamental-rights-and-algorithms

https://www.canada.ca/en/government/system/digital-government/ digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html



'owner', and the structure of such 'ownership' should be clearly defined in the administrative structure. In the Spanish Public Sector Legal System Act as early as 2016, the intention of establishing a dedicated public institution that would be responsible for the supervision, control and audit of ADM systems in the public administration appeared³¹. Unfortunately, there are problems with the implementation of these provisions in practice³².

The practice of using algorithmic impact assessments allows for greater transparency, because it introduces the obligation for officials to think about what interactions the use of the system in a specific environment might lead to. It also leads to the production of specific documents relating to how decisions are made in the state. In most cases, these documents have the nature of public information and generally are subject to disclosure under the right of access to public information. Citizens will therefore be able to access information about the system, but also information about how the state has ensured that the system is safe for citizens. The recommended solution for documents produced with the use of AIA is to proactively publish them in a publicly accessible online database containing basic information on the use of AI/ADM systems by the institution.

Registers reporting on the use of AI/ADM systems allow interested citizens to learn that a public institution is using an AI-based solution in any way in the performance of its tasks. On the other hand, such a registry can be one element of the management of AI/ADM systems for officials of a public entity.

Artificial intelligence registries are already in place in some European cities: an example is the Finnish Artificial Intelligence Registry, which lists the AI systems used by the City of Helsinki. Through the registry, anyone can take a quick overview of the city's AI systems or examine their more detailed information³³. A similar register of AI/ADM systems is maintained by the city of Amsterdam in the Netherlands³⁴. We recommend publishing AIA-related documentation, especially as it may soon be a legal requirement under the AI Act which you will need to prepare for.

A report on public AI registries³⁵, created in collaboration between Helsinki and Amsterdam, recommended that public organisations ensure transparency through AI registries on aspects of their algorithmic systems such as purpose and impact, accountability, datasets, data processing, non-discrimination, human oversight, risks and mitigation measures, and explainability. We agree that creating this kind of information in collaboration with AI technology providers and other partners and publishing this information should become standard procedure in all public projects using AI/ADM systems.



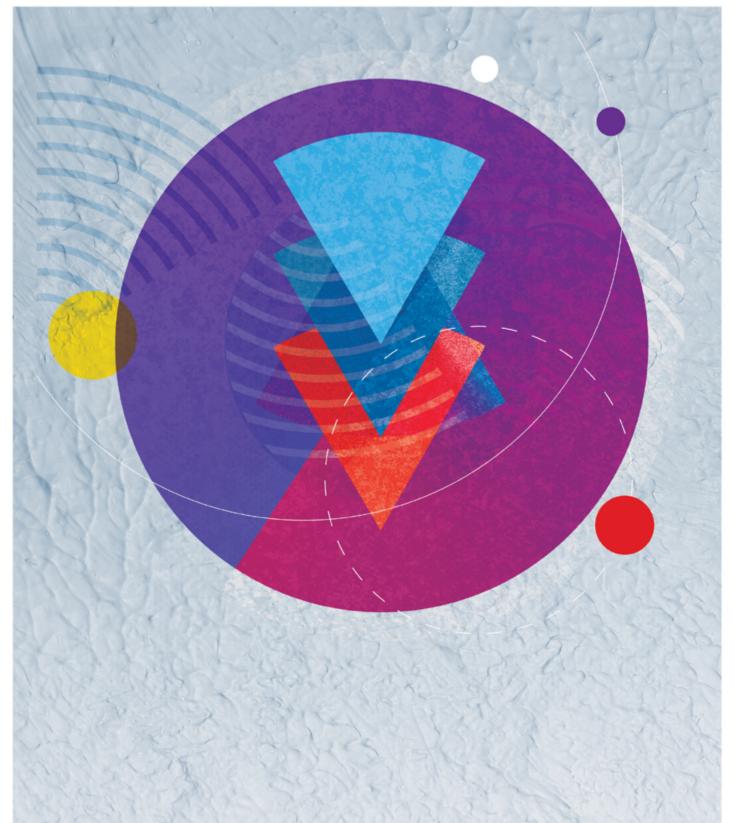
^{31.} https://www.boe.es/buscar/act.php?id=BOE-A-2015-10566 (art. 41) [accessed: 19.12.2022]

https://privacyweek.it/event/assessing-the-ai-that-assesses-us-the-work-of-civil-society-and-research-in-setting-auditing-standards-for-the-public-sector/ [accessed: 19.12.2022]

^{33.} https://ai.hel.fi/en/ai-register/ [accessed: 21.12.2022]

^{34.} https://algoritmeregister.amsterdam.nl/en/ai-register/ [accessed: 21.12.2022]

^{35.} https://ai.hel.fi/en/get-to-know-ai-register/ [accessed: 21.12.2022]



ALGORITHMIC IMPACT ASSESSMENT

Artificial Intelligence Systems and Automatic Decision-Making Systems

Form & Decision-making diagram

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| Tool name: | Contact for the supervisor of the tool: |
|---|---|
| Leading institution and co-operating institutions: | |
| | Prepared on: |
| Person responsible for the tool: | Implementation project number: |
| ALGORITHMIC IMP | PACT ASSESSMENT |
| 1. WHAT IS THE LEGAL BASIS FOR AUTOMA | TION? |
| On what legal basis is the algorithm for au (hereafter also the "system") implemented | _ |
| | |
| | |
| | _ |
| | |
| 2. WHAT PROBLEM IS BEING SOLVED? | |
| A. What area is affected by the automation? | |
| • health | granting permits and licenses |
| economic interestssocial support | judiciary, police, prosecutor's officecivil rights |
| • migration | environmental protection |
| • other? What? | |
| | |
| | |
| | |
| | |





| В. | To what specific process does the automation relate? | |
|----|---|--|
| | | |
| C. | Why does your team want to use an algorithm to assist in decision-making? | |
| | eliminating delays in the current system increasing the quality of decisions reduction of costs shortening of time limits increasing the availability of services for the citizen | |
| | other? What? | |
| | | |
| | | |
| | | |
| D. | Have attempts been made to implement process changes by methods other than automation? If so, why did they fail? | |
| | | |
| | | |
| | | |
| E. | What public values support the use of automation? | |
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| | | |





| F. | What public values are likely to be compromised by the use of automation? |
|----|---|
| | |
| | |
| 3. | DESCRIPTION OF THE RECOMMENDED SOLUTION |
| | Briefly describe the mechanism of the automated process. |
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| 4. | HOW AND WHEN WILL THE EFFECTS OF THE TOOL BE EVALUATED AND WHAT METRICS WILL BE USED? | | | |
|----|---|--|--|--|
| | | | | |
| | | | | |
| 5. | DO SIMILAR PROCESS AUTOMATION SOLUTIONS EXIST IN OTHER ENTITIES OF THE ADMINISTRATION OR IN OTHER COUNTRIES, IN PARTICULAR OECD/EU MEMBER STATES? | | | |
| | List similar solutions that you are aware of. | | | |
| A. | If similar solutions exist, have similar impact assessments been prepared for them? If they have been published – indicate the source. | | | |
| | | | | |
| В. | If there are similar solutions, have there been audits/evaluation reports prepared for them? If they have been published – indicate the source. | | | |
| | | | | |
| | | | | |



| 6. | MAIN ELEMENTS OF THE TOOL | |
|----|--|--|
| A. | What are the main functions of the tool that take place automatically? | |
| | image and object recognition text and speech analysis risk assessment content generation process optimisation and work automation | |
| | other. What? | |
| | | |
| | | |
| | | |
| В. | Will the automation process be difficult to explain? | |
| | | |
| | | |
| | | |
| | | |
| | | |
| C. | Are the effects of decisions made by the system reversible? | |
| | | |
| | | |
| | | |
| | | |



| D. | For what period of time are decisions made? | |
|---|---|--------------------|
| | REAS OF IMPACT OF THE AUTOMATED DECISION-MAKING ALGORITHM | back to diagram |
| A. | Whether, and if so how, the decisions will affect: | |
| | human rights and civil liberties citizens' economic interests the ecosystem and the environment | |
| | | |
| B. Have the potential risks of undesirable outcomes from the operation of the scheme been considered and have preventive measures been taken? If risks and preventive measures are described in another document, attach it. | | |
| | | |





| | Risks of undesirable impact of the system on the areas identified in point 7A |
|----|--|
| • | Source of risk |
| • | Possible consequences of the risk, including identification of the groups of people affected |
| • | Risk assessment (low/moderate/high) |
| • | Preventive measures taken |
| • | Planned action following the occurrence of a risk |
| | |
| im | the objectives to be achieved by the system sufficiently portant to justify taking the risks identified the table above (point 7C)? |
| | here an unacceptable risk due to the impact of the system on the areas indicated point 7A is there an unacceptable risk warranting abandonment of the system? |
| | The system: |
| | |



| 8. | ACCOUNTABILITY AND RESPONSIBILITY FOR DECISIONS TAKEN | |
|----|---|------------------|
| A. | Is the system's decision-making process documented? Including, is there d of the data sources, their representativeness, the potential bias of the algo the level of accuracy and reliability of the algorithm? | |
| | If so, please attach it as a link or document. | |
| | | |
| В. | Who is responsible for the development, implementation and maintenance | e of the system? |
| | | |
| C. | Who is responsible for the decision made as part of the process? | |
| | | |
| D. | Does the process allow justification to be provided for the decision made? | YN |
| E. | Is the system fully automated or is it supervised by a human? | YN |
| F. | In the case of human supervision of the system: does the person supervising the system have the authority to challenge the system's decision? | YN |
| G. | Is a mechanism provided for obtaining feedback from users during the operation of the system? | YN |







| H. Is a mechanism provided for a citizen to challenge a suggested decision and/or appeal against a decision? | YN |
|---|-------|
| I. What methods have been used to communicate with the users/persons affeby the operation of the system, in case of irregularities? | ected |
| J. Will the source code of the system be publicly available? | YN |
| K. Will information about the system other than the source code be publicly available, e.g. system objectives, operating rules? | YN |
| I. Are system audits foreseen and how? | |
| M. Will the audit results be made available to the public? | YN |
| N. Is there documentation on the quality management of the data used? | YN |
| Is there documentation on the security, including cyber security, of the system? | YN |



| 9. | PERSONAL DATA | |
|----|--|--|
| A. | Does the system assume the use of personal data? | |
| | | |
| | | |
| В. | Does the system assume the use of special categories of personal data as defined by the GDPR? | |
| | | |
| | | |
| C. | Who controls the correct use of the data? | |
| | | |
| | | |
| D. | From what sources will the system use personal data? | |
| | | |
| | | |
| E. | Will the system make direct use of data taken from devices belonging to citizens or economic operators? If so, which ones and from what sources? | |
| | | |
| | | |



| 10. | ENTITIES AFFECTED BY THE PROJECT | | | | | |
|-----|---|--------------------------|--------------------------|--------|--|--|
| | GROUP | SIZE | DATA SOURCE | IMPACT | | |
| | | | | | | |
| | | | | | | |
| 11. | HAS THE TOOL BEEN CONSULTED WITH OTHER PUBLIC INSTITUTIONS AND EXTERNAL STAKEHOLDERS, INCLUDING NGOS AND PERSONS AFFECTED BY THE SYSTEM? IF SO, WITH WHOM AND TO WHAT EXTENT? | | | | | |
| | How were these stakeholders selected and what were the conclusions of the consultations? | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 12. | WHO WILL IMPLEMEN | IT THE TOOL? | | | | |
| A | | n | | | | |
| В | An external entityIf yes, under which | ch procedure will the to | ool be procured? | | | |
| | (e.g. open tender, single source procurement)? | | | | | |
| | | | | | | |
| | Will intellectual property rights be transferred to the public entity? | | | | | |
| | | | | | | |
| С | The tool is built based | d on existing products. | If yes, list these produ | cts. | | |
| | | | | | | |



| 13. | HOW AND WHEN WILL THE EFFECTS OF THE TOOL BE EVALUATED AND WHAT METRICS WILL BE USED? | |
|-----|---|--|
| 14. | APPENDIXES (relevant background documents, studies, analyses, etc.) | |

Will the system
have an impact
on the areas identified

Initial impact assessment: answers to questions in the **AIA**

1 2 3

7A

in the AIA in point





LEVEL 1

Systems with no impact or negligible impact on the areas listed in the **AIA** in point

7A



Systems with moderate impact on the areas listed in the AIA in point

7A

LEVEL 3

Systems with a significant impact on the areas listed in the **AIA** in

7A



Designation in the register of automated decisionmaking systems

For example: an algorithm for allocating citizens' requests to officials, based on the simple logic of the time of requests and the number of cases allocated.

Systems that have a negligible impact on the four areas listed in the Algorithmic Impact Assessment have a low level of complexity and high explainability of operation.

Designation in the register of automated decisionmaking systems

For example: an algorithm that automatically issues fines based on images acquired from traffic enforcement cameras.

Systems with moderate impact – are distinguished by their greater impact on the citizen and by their significant reach (e.g. thousands of traffic enforcement cameras).

The systems' decisions are reversible and there is an appeal path, but failure to detect an error in the algorithm in a timely manner can cause harm to citizens or the state.

Designation in the register of automated decisionmaking systems

For example: an algorithm that recognises medical images.

This group of algorithms is characterised by little ability to reverse the negative effects of decisions in the areas listed in the Algorithmic Impact Assessment.

Systems are often characterised by a wide range of impacts (in terms of the number of people affected by the system) or complexity (e.g. use of advanced statistical tools

or artificial intelligence).



MONITORING CREATION AND TRAINING **OF USERS** TESTING PII OT **PROJECT HUMAN IN** THE PROCESS INFORMATION AVAILABLE TO THE PUBLIC, **EXPRESSED IN** A LANGUAGE UNDER-STANDABLE TO THE CITIZEN. AUDIT

The need for continuous monitoring of system performance and results. Documentation of the system functionality and design (if possible)

Documentation of the functionality and design (if possible) of the system

User training

Training verification

The need to test and document a system before putting it into use.

Need to carry out and document the results of the pilot project with the participation of people outside the intra-institutional users of the system (officials). Depending on the system, the pilot project should include the participation of citizens (e.g. in the case of an e-service), experts (e.g. doctors - in the case of a medical algorithm) or other users (e.g. police officers or pharmacists - in the case of systems supporting specific industries).

Decisions do not require direct involvement of the user (e.g. an official).

The process should take into account the specific moments in which a person makes a decision: the final decision is taken by the user

Explanation of the meaning of the most common decisions and answers to questions (e.g. FAQs) and information on the possibility of appeal.

Information about the operation of the system and the possibility of appeal.

Explanation of the meaning of an individual decision at the citizen's request.

Information on the operation of the system and publicly available documentation of the system.

Explanation of the meaning and basis of any decision denying services, limiting rights and information on the possibility of appeal.

Audit of the tool by at least one of the following:

- · a suitably qualified expert from a local or central authority other than the implementing authority, a researcher or an expert working in an NGO with relevant experience;
- an independent organisation or a company with relevant experience;
- a certified auditor
- an official body set up to audit the algorithms.

Together with the obligation to publish the results of the audit.

Audit of the tool by at least two different persons/institutions listed on the left. Together with the obligation to publish the results of the audit.

VALIDATION OF THE SYSTEM FOR OPERATION e.g. Deputy Head of Department

e.g. Under-Secretary of State; Deputy Mayor, Deputy Mayor of a Municipality



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