# Algorithmic Transparency Recording Standard

December 2022

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# Metadata and Title Information

| **reference number** | **attribute**  (an asterisk indicates a multi-value field) | **name** | **tier** | **category** | **type** | **notes for completion** | **required** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Metadata | | | | | | | |
| 0.1 | id | ID |  | Metadata | integer | The attribute 'id’ provides the unique id for the algorithmic transparency report. The id will be issued during the process of publication. | true |
| 0.2 | standard\_version | Standard version |  | Metadata | float | The attribute ‘standard\_version’ indicates the version of the standard that is being used. | true |
| 0.3 | date\_completion | Date of completion |  | Metadata | Date | The attribute ‘date\_completion’ is the date that the algorithmic transparency report was first published in DD/MM/YY format. | true |
| 0.4 | date\_update\* | Date updated |  | Metadata | Date | The attribute ‘date\_update’ is the date or dates on which the algorithmic transparency report has been updated. Input this information in DD/MM/YYYY format and separate multiple update dates by a comma. For example: 10/05/2021, 03/02/2022 | false |
| 0.5 | date\_archive | Date archive |  | Metadata | Date | The attribute ‘date\_archive’ is the date that the algorithmic transparency report was archived in DD/MM/YY format. | false |
| Title information | | | | | | | |
| 0.6 | title | Title |  | Title Information | UTF-8 string | The attribute ‘title' is the title or name used to identify the algorithmic tool and which will be used as a title for the algorithmic transparency report. | true |
| 0.7 | organisation\_name | Organisation name |  | Title Information | UTF-8 string | The attribute ‘organisation\_name’ is the full name of the organisation, department or public sector body that completed the algorithmic transparency report and carries responsibility for use of the algorithmic tool. This name will be used in the title of the algorithmic transparency report. | true |
| 0.8 | phase | Phase |  | Title Information | UTF-8 string | The attribute 'phase' indicates in which of the following stages or phases the tool is currently in:  Please choose:   * Idea * Design * Development * Beta/Pilot * Production * Retired | true |
| 0.9 | one\_sentence\_description | One sentence description |  | Title Information | UTF-8 string | The attribute ‘one\_sentence\_description’ is a one sentence description of the tool which will function as a subheading underneath the name of the tool. | true |

# Core data

| **reference number** | **attribute**  (an asterisk indicates a multi-value field) | **name** | **tier** | **category** | **type** | **notes for completion** | **required** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tier 1 | | | | | | | |
| 1.1 | name | Name | Tier 1 |  | UTF-8 string | The attribute 'name' is the colloquial name used to identify the algorithmic tool. | true |
| 1.2 | description | Description | Tier 1 |  | UTF-8 string | The attribute 'description' is a description to give a basic overview of the purpose of the algorithmic tool. It should include:  - how the algorithmic tool is used  - why the algorithmic tool is being used | true |
| 1.3 | website | Website URL | Tier 1 |  | URL | The attribute 'website' is the URL reference to a page with further information about the algorithmic tool and its use. This facilitates users searching more in-depth information about the practical use or technical details.This could, for instance, be a local government page, a link to a GitHub repository or a departmental landing page with additional information. | false |
| 1.4 | contact\_email | Contact email | Tier 1 |  | UTF-8 string | The attribute 'contact\_email' is the email address of the organisation, or team for this entry. For continuity and security purposes, we would advise using or creating a team email address instead of using an individual email address. | true |
| Tier 2 | | | | | | | |
| Section 1: Owner and Responsibility | | | | | | | |
| 2.1.1 | organisation | Organisation/ department | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'organisation' is the full name of the organisation, department or public sector body that carries responsibility for use of the algorithmic tool. For example, 'Department for Transport'. | true |
| 2.1.2 | team | Team | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'team' is the full name of the team that carries responsibility for use of the algorithmic tool. | true |
| 2.1.3 | senior\_responsible\_owner | Senior responsible owner | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'senior\_responsible\_owner' is the role title of the senior responsible owner for the algorithmic tool. | true |
| 2.1.4 | external\_supplier\_involvement | External supplier involvement | Tier 2 | Owner and Responsibility | Boolean | Have external suppliers been involved in the development and operation of the tool?  Please choose:   * Yes * No   If yes: complete answers in the rest of section 1. If no: skip to section 2. | true |
| 2.1.4.1 | external\_supplier\* | Supplier or developer of the algorithmic tool | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'supplier' gives the name of any external organisation that has been contracted to develop the whole or parts of or the algorithmic tool. | false |
| 2.1.4.2 | companies\_house\_number\* | Companies House Number | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'companies\_house\_number' gives, if available, the Companies House number of the external organisation that has been contracted to develop either the whole, or a part of the algorithmic tool. You can find a company's Companies House number by [searching the Companies House register](https://find-and-update.company-information.service.gov.uk/) or [using the Companies House API](https://developer.company-information.service.gov.uk/).  If multiple organisations have been contracted, the Companies House Number for all of the companies should be provided, specifying which number represents which organisation. | false |
| 2.1.4.3 | external\_supplier\_role\* | External supplier role | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'external\_supplier\_role' gives a short description of the role the external supplier had in the development of the algorithmic tool.  If multiple organisations have been contracted or there are multiple companies involved in the delivery of the tool, these relationships should be described clearly and concisely. | false |
| 2.1.4.4 | procurement\_procedure\_type | Procurement procedure type\* | Tier 2 | Owner and responsibility | UTF-8 string | The attribute ‘procurment\_procedure\_type’ details the procurement procedure through which the contract has been set up.  For example, ‘open’, ‘restricted’, or ‘competitive procedure with negotiation’, or ‘call-off from a dynamic purchasing system’, and ‘call-off from a framework’ where a contracting authority has awarded to a supplier under a pre-established framework agreement. | false |
| 2.1.4.5 | data\_access\_terms\* | Terms of access to data for external supplier\* | Tier 2 | Owner and responsibility | UTF-8 string | The attribute 'data\_access\_terms' details the terms of access to (government) data granted to the external supplier. | false |
| Section 2: Description and Rationale | | | | | | | |
| 2.2.1 | detailed\_description | Detailed description | Tier 2 | Detailed Description and Rationale | UTF-8 string | The attribute ‘detailed\_description’ gives a detailed description of how the algorithmic tool works.  Compared to the high-level description in Tier 1, the detailed description should provide an explanation at a more granular and technical level, including the main rules and criteria used by the algorithm/algorithms.  This field is optional and is very likely to include information required in other fields below. It is open to the organisation to decide whether they want to include a summary detailed description in addition to the information below. | false |
| 2.2.2 | scope | Scope | Tier 2 | Detailed Description and Rationale | UTF-8 string | The attribute 'scope' describes the purpose of the tool in terms of what it has been designed for and what it has not been designed for.  This can include a list of potential purposes that the tool was not designed for: this can help to avoid misconceptions about the scope and purpose of the tool. | true |
| 2.2.3 | benefit | Benefit | Tier 2 | Detailed Description and Rationale | UTF-8 string | The attribute 'benefit' describes the key benefits that the algorithmic tool is expected to deliver, and an expanded justification of why the tool is being used. | true |
| 2.2.4 | previous\_process | Previous process | Tier 2 | Detailed Description and Rationale | UTF-8 string | The attribute ‘previous\_process’ gives a description of the decision making process that took place prior to the deployment of the tool, where applicable. | false |
| 2.2.5 | alternatives\_considered | Alternatives considered | Tier 2 | Detailed Description and Rationale | UTF-8 string | The attribute 'alternatives\_considered' details, where applicable, a list of other algorithmic and non-algorithmic alternatives considered.  It should explain why a certain algorithmic approach was chosen over other approaches, and why the chosen tool is the best available option given any known risks and shortcomings and trade-offs. | false |
| Section 3: Decision-making Process | | | | | | | |
| 2.3.1 | process\_integration | Process integration | Tier 2 | Decision-making Process | UTF-8 string | The attribute 'process\_integration' explains how the algorithmic tool is integrated into the decision-making process and what influence the algorithmic tool has on the decision-making process. It gives a more detailed and extensive description of the wider decision-making process into which the algorithmic tool is embedded. | true |
| 2.3.2 | provided\_information | Provided information | Tier 2 | Decision-making Process | UTF-8 string | The attribute 'provided information’ details how much and what information the algorithmic tool provides to the decision maker. For example, this can include the prediction output and the form in which it is presented to the decision maker.  This field should also detail any internal procedures that are in place to document the relationship between the output and the decision. Such procedures should, where applicable, include information on the extent to which decisions have been influenced by the tool. | true |
| 2.3.3 | human\_decisions\_and\_review | Human decisions and review | Tier 2 | Decision-making Process | UTF-8 string | The attribute 'human\_decisions\_and\_review' describes the decisions that people take in the overall process. It should also detail human review options. For example, specific details on when and how a person reviews or checks the automated decision. | true |
| 2.3.4 | required\_training | Required training | Tier 2 | Decision-making Process | UTF-8 string | The attribute 'required\_training' details the required training those deploying or using the algorithmic tool must undertake, if applicable. This can include training for operations, users, maintenance, compliance, or oversight personnel.  For example, the person responsible for the management of the tool had to complete data science training. | true |
| 2.3.5 | appeals\_and\_review | Appeals and review | Tier 2 | Decision-making Process | UTF-8 string | The attribute 'appeals\_and\_review' details the mechanisms that are in place for review or appeal of the decision available to the general public, where applicable. | false |
| Section 4: Technical Specification and Data | | | | | | | |
| 2.4.1 | method | Method | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'method' indicates which types of methods or models the algorithm is using. For example, linear regression, expert system, different kinds of machine learning algorithms, and so on.  This can also include a short description of the method(s) used and/or a link to resources providing further resources on the method(s). | true |
| 2.4.2 | frequency\_and\_scale\_of\_usage | Frequency and scale of usage | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'frequency\_and\_scale\_of\_usage' gives information on how regularly the algorithmic tool is being used and the scale of use.  For example, the number of decisions made per month, the number of citizens interacting with the tool, and so on. | true |
| 2.4.3 | phase | Phase | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'phase' indicates in which of the following stages or phases the tool is currently in:  Please choose   * Idea * Design * Development * Beta/Pilot * Production * Retired   This field includes date and time stamps of creation and any updates. | true |
| 2.4.4 | maintenance | Maintenance | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'maintenance' gives details on the maintenance schedule and frequency of any reviews. This includes information such as how often and in what way the tool is being reviewed post-deployment, and how it is being maintained if further development is needed.  This can concern maintenance both by the supplier as well as by the operator/user of the tool. | true |
| 2.4.5 | model\_performance | Model performance | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute ‘model\_performance’ gives details on the model or tool’s performance. Useful metrics to consider are: accuracy metrics (such as precision, recall, F1 scores), metrics related to privacy, and metrics related to computational efficiency.  It also gives details on any identified biases in the data and model. If applicable, it describes how bias and accuracy have been balanced in the model. | true |
| 2.4.6 | system\_architecture | System architecture | Tier 2 | Technical Specification and Data | URL | The attribute 'system\_architecture' is the URL reference to documentation about the system architecture. For example, a link to a GitHub repository image or additional documentation about the system architecture. | false |
| 2.4.7 | source\_data\_name\* | Source data name | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'source\_data\_name' gives, if applicable, the name of the datasets used. | false |
| 2.4.8 | source\_data\_description\* | Source data  description | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'source\_data\_description' gives an overview of the data used to train, test, configure and operate the algorithmic tool, specifying which data was used for which purpose. This should encompass data used by both the public sector team and the supplier, where applicable.  It should include a description of the types of variables or features used to train, test or run the model - for example 'age' or 'address'. In certain cases, it might not be feasible for a team to disclose all the variables in a dataset. In this case, teams should disclose - at a minimum: whether the data contains personal and special category information; variables of interest, such as protected characteristics and potential proxies; and variables with high predictive power or that have a significant bearing on the model. | true |
| 2.4.9 | source\_data\_url\* | Source data URL | Tier 2 | Technical Specification and Data | URL | The attribute 'source\_data\_url' provides a URL to the openly accessible dataset wherever possible. | false |
| 2.4.10 | data\_collection\* | Data collection | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'data\_collection' gives information on the data collection process.  This can include details on the original purpose of data collection and the context in which it was initially collected. If the data was initially collected for different purposes and is now being repurposed, there should be consideration of to what extent the data transferable and suitable for the new context. | true |
| 2.4.11 | data\_cleaning | Data cleaning | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute ‘data\_cleaning’ gives information on data cleaning, including a description of any pre-processing or cleaning of the data conducted by either the supplier or public sector customer. | false |
| 2.4.12 | data\_completeness\_and\_representativeness | Data completeness and representativeness | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute ‘data\_completeness\_and\_representativeness’ provides information on the completeness of the data, including missing data and on how representative the data is. | true |
| 2.4.13 | data\_sharing\_agreements\* | Data sharing agreements | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'data\_sharing\_agreements' provides further information on data sharing agreements in place. | true |
| 2.4.14 | data\_access\_and\_storage\* | Data access and storage | Tier 2 | Technical Specification and Data | UTF-8 string | The attribute 'data\_access\_and\_storage' details: who has, or will have, access to this data; how long it is stored; under what circumstances; and who is responsible for its storage.  Where personal and/or sensitive data is being stored and accessed, a description of the mechanisms used to protect the security and privacy of the data should be described, including technical (e.g. de-identification techniques, Privacy Enhancing Technologies) and operational (e.g. role-based access controls) methods. | true |
| Section 5: Risks, Mitigations and Impact Assessments | | | | | | | |
| 2.5.1 | impact\_assessments\* | Impact assessment | Tier 2 | Risks, mitigations and impact assessments | UTF-8 string | The attribute 'impact\_assessments' provides the names and a short overview of the impact assessments conducted, date of completion, and if possible a summary of the findings. If available, a publicly accessible link should be provided.  If multiple impact assessments were completed, they should all be listed in this field.  Examples of impact assessments are Data Protection Impact Assessments (DPIAs), Equality Impact Assessments, Algorithmic Impact Assessments. This field also provides an opportunity to list other monitoring and evaluation requirements under relevant legislation. | true |
| 2.5.2 | risks\* | Risks | Tier 2 | Risks, mitigations and impact assessments | UTF-8 string | The attribute 'risks' is an overview and a description of the possible risks that have been identified for the algorithmic tool.  It also gives an overview of how the risks have been mitigated. | true |
| Annex | | | | | | | |
| 3.1 | annex | Annex |  | Annex | UTF-8 string | The attribute ‘annex’ provides an option to add complementary information that contributes to a better understanding of other sections or fields in the standard but that would be too long or detailed to add to a given field in the standard itself. | false |