Change log of the Algorithmic Transparency Recording Standard between v2.1 and v3.0

## Main changes

| Area of change | Changes | Rationale |
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| Software | Default template moved from word processing application (.docx) to spreadsheet-based application (.xlsx) | Prior to an increase mandate for the ATRS and an increase in record publication rate, we wanted to update the ATRS template for two main reasons:<br><br>1. To improve the user experience of those completing records<br>2. To improve our own backend and data management processes<br><br>Switching from word-processor to spreadsheet-based software was motivated by these two aims.<br><br>We believe that the functionality of a sheet-based template improves user experience in several ways:<br>• **Navigation**: separate sheets navigated through tabs allow users to focus on one section at a time.<br>• **Interactivity and display**: conditional formatting and programmatic design allows for a more interactive tool that can indicate progress through the completion process.<br>• **Hidden cells**: information that is not relevant to certain users can be removed from view.<br>• **Modularity**: sections and fields can be easily copied where modular components are introduced into the ATRS structure.<br><br>Spreadsheet software also significantly improves the Algorithmic Transparency team's information management capabilities:<br>• **Automation**: collecting ATRS information in spreadsheet-based tables allows us to automate multiple processes in the |

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| | | record publication cycle, including:<br>○ Concatenating record information<br>○ Querying record information<br>○ Formatting and converting record information into markdown<br>• **Storage**: spreadsheet-based software allows us to create a central database of information and improve record management and oversight processes. |
| Structure | Split section *2.4 – Technical Specification and Data* into three with a focus on a different technical component in each subsection. The three subsections are:<br>• *2.4.1 - Tool specification*<br>• *2.4.2 - Model specification*<br>• *2.4.3 - Data specification*<br><br>Model and Data specification sections are modular: they should be copied and completed where multiple models feature within the algorithmic tool. | We received feedback that users found the previous ATRS difficult or repetitive to complete where:<br>• Their algorithmic tools were complex and contained multiple models.<br>• The models they employed featured in multiple tools and use cases.<br>• Their algorithmic tool was the same as another user's but deployed in a different context.<br><br>To make the ATRS more amenable to complex or multifaceted technology, we break down our technical consideration of the tool into three interrelating components. This allows users to explain their technical systems in a clear, flexible, standardised way.<br><br>Each component – the tool, the models and the data – has its own subsection within the *Technical Specification and Data* portion of the ATRS. Modular model and data subsections can be repeated within records or used again in other records if required. |
| Structure | Addition of optional "Dataset card" for more fine-grained descriptions of individual datasets. Dataset cards can be attached to a record as a linked object, and capture information that is relevant to the new *Data specification* section. | We wanted to give users an option to disclose detailed information about datasets that goes beyond the level required in the previous ATRS or the new *Data specification* subsection.<br><br>In the context of algorithmic transparency, capturing dataset information where datasets are used to develop multiple models and |

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| | | tools that may be written about using the ATRS framework.<br><br>Dataset cards may have other useful functions outside of transparency. The attached dataset card may be useful for other functions (e.g. data monitoring and control, increasing internal visibility of datasets), and incorporated into other information capture products involving datasets (e.g. technical assurance frameworks). |

## Additional changes

| Area of change | Changes | Rationale |
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| General content | Updates to prompts across the Standard | We wanted to update prompts to improve readability and interpretability. This included removing clunky phrasing, altering content suggestions and examples for clarity, and broadening or narrowing the scope of fields, particularly in the new technical subsections. |
| General content | Addition of User feedback space for each section | We wanted to allow users to provide feedback on each section so we can continue to improve the ATRS. |
| Metadata | Addition of fields for display on repository:<br>- *Organisation type*<br>- *Function*<br>- *Capability*<br>- *Task*<br>- *Tags* | We wanted to attach additional metadata to each record for easier filtering and searching of a new ATRS record repository. The new fields are the additional facets that one can filter records by. These fields will be completed by the reviewer of a record. |
| Title Information | Addition of *Region* field | Similar to the new metadata fields, we wanted to allow ATRS repository users to filter tools by the region over which they affect the public. This field will be completed by the ATRS user. |

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| Decision-making Process | Inclusion of *Frequency and scale of usage* field from *Technical Specification and Data* section | We moved the *Frequency and scale of usage* field as it relates more to decision-making processes surrounding a tool than its technical specification. |
| Tool specification | Addition of *Models* field | We introduced the *Models* field to link directly to the *Model specification* subsection; it offers a space for users to list or specify the discrete models that comprise their tools. |
| Model specification | Substitution of *Method* with *Model architecture* field<br><br>Update of *Model performance* field<br><br>Addition of fields:<br>- *Model version*<br>- *Model task*<br>- *Model input*<br>- *Model output*<br>- *Datasets*<br>- *Dataset purposes* | We updated these fields for the following reasons:<br>- *Model architecture*: this field substitutes the previous *Method* field which we decided didn't offer enough useful detail or content suggestions.<br>- *Model performance*: the prompt now specifies that explanations of performance thresholds and fairness analysis should be included in this field.<br>- *Model version:* this field is especially relevant when different versions of a commodity model may be in use in different algorithmic tools<br>- *Model task:* this field was added to offer a simple, non-technical explanation of what the model is designed to do.<br>- *Model input:* this field was added to specify the type of information the model receives.<br>- *Model output:* this field was added to specify the type of information the model produces.<br>- *Datasets:* this field directly links to the *Data specification* subsection; it offers a space for users to list or specify the datasets they used to develop their models.<br>- *Dataset purposes:* this field was added to provide more information about how data was used in the model development process.<br><br>Where fields were added, we felt that this information was either missing or insufficient in the previous version, and was required to adequately explain a model to a general audience. |

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| Data specification | Split *Source data description* field into:<br>- *Data modality*<br>- *Data description*<br>- *Sensitive attributes*<br>- *Model performance*<br><br>Addition of the *Data quantities* field | We split the *Source data description* field from the previous version as it was relatively broad and asked for a range of information points. The information targeted is now captured by the more focused fields listed to the left, in addition to the *Model performance* field in the *Model specification* subsection which has been expanded to include consideration of disaggregated or subgroup (i.e. fairness) analysis.<br><br>The *Data quantities* field was added to sense-check proportionality of data in relation to the model task and complexity. |