# AIIA 2.0 for [NAAM SYSTEM] completed on [DATE]

*Blue questions are mandatory. Green questions are intended to provide additional information. They should be completed if they are relevant.*

Involved persons in completing this AIIA (including role):

* …

# Part A: Assessment

# 1 System purpose and necessity

# 1.1 Purpose of the system

|  |  |
| --- | --- |
| 1.1.1 | Provide a brief description of the intended purpose and intended result of the AI system (title, general description, definition of the problem, expected timeframe, location, target groups, the domain and operational process). |
|  | |

|  |  |
| --- | --- |
| 1.1.2 | In which risk level in the AI Regulation does your AI system fall: unacceptable, high or minimal risk? |
|  | |

|  |  |
| --- | --- |
| *1.1.3* | *Where in the organisation (in which processes) is the AI system intended to be used?* |
|  | |

## 1.2 Intended solution

|  |  |
| --- | --- |
| 1.2.1 | Provide a brief description of the intended AI system (technology, data and type of algorithm). |
|  | |

|  |  |
| --- | --- |
| 1.2.2 | Why was this form of AI chosen (e.g. generative AI, linear regression or neural network)? |
|  | |

|  |  |
| --- | --- |
| *1.2.3* | *What alternatives were considered (e.g. no AI, less complex AI, different type of algorithm)?* |
|  | |

## 

## 1.3 Role within the organisation

|  |  |
| --- | --- |
| 1.3.1 | Describe the division of tasks in setting up the AI system (such as the developer, commissioning client, project leader, IT management organisations and person with ultimate responsibility). If an external party is responsible for development: what contractual agreements are in place? |
|  | |

|  |  |
| --- | --- |
| 1.3.2 | Who will be the user of the AI system, who are the end users who will work with the system and which parties involved will be impacted by the AI system? |
|  | |

|  |  |
| --- | --- |
| *1.3.3* | *Which stakeholders, people and/or groups have been consulted in the development of the AI system?* |
|  | |

|  |  |
| --- | --- |
| *1.3.4* | *What feedback has been collected from teams or groups representing different backgrounds and experiences? And how was this feedback followed up?* |
|  | |

## 1.4 Maintenance and administration

|  |  |
| --- | --- |
| 1.4.1 | Describe the division of tasks for the administration and maintenance of the AI system (such as the developer, commissioning client, project leader, management organisations and party with ultimate responsibility). If an external party is responsible for developing the system: what contractual agreements are in place? |
|  | |

|  |  |
| --- | --- |
| 1.4.2 | How are new laws and regulations that may be introduced or updated during the lifetime of the AI system taken into account? |
|  | |

|  |  |
| --- | --- |
| *1.4.3* | *Has the expertise required to manage the AI system been documented?* |
|  | |

|  |  |
| --- | --- |
| *1.4.4* | *How are changes in the context of the AI system taken into account?* |
|  | |

# 2. Impact

## 2.1 Fundamental rights

|  |  |
| --- | --- |
| 2.1.1 | What will the potential impact be on citizens’ fundamental rights of using the AI system? |
|  | |

|  |  |
| --- | --- |
| *2.1.2* | *What legal basis underlies the use of the AI system and the intended decisions to be taken based on the AI system?* |
|  | |

|  |  |
| --- | --- |
| *2.1.3* | *Which constitutional provisions may be applicable?* |
|  | |

|  |  |
| --- | --- |
| *2.1.4* | *Which of these constitutional provisions may be breached in the event of improper implementation of the AI system?* |
|  | |

## 2.2 Sustainability

|  |  |
| --- | --- |
| 2.2.1 | What will be the environmental impact of introducing the AI system (development, installation and use), and how will this be measured? |
|  | |

|  |  |
| --- | --- |
| *2.2.2* | *What measures have been taken to minimise the (negative) environmental impact of the AI system?* |
|  | |

## 2.3 Other effects

|  |  |
| --- | --- |
| 2.3.1 | How does the AI system contribute to the organisation’s mission? |
|  | |

|  |  |
| --- | --- |
| 2.3.2 | In addition to the questions above, are there any other relevant effects (positive, negative, risks, for specific target groups, at different levels, broad prosperity) of the AI system that need to be taken into consideration? |
|  | |

# 3. Assessing whether or not to use the AI system

|  |  |
| --- | --- |
| 3.1 | Is the impact in proportion to the intended goals and are there other less radical ways of achieving these goals? In other words: is it proportional and in line with subsidiarity to deploy the system to achieve the stated goals? |
|  | |

|  |  |
| --- | --- |
| 3.2 | Are there additional measures (e.g. as part of processes) that you could take to use the system responsibly? |
|  | |

# Part B: Implementation and use of AI system

# 4. Technical robustness

## 4.1 Bias

|  |  |
| --- | --- |
| 4.1.1 | How will potentially undesirable bias, such as bias in the input, bias in the model and bias in the output of the AI system be taken into account? |
|  | |

|  |  |
| --- | --- |
| *4.1.2* | *Is the input (data) relevant and representative, taking account of the intended purpose (question 1 of 1.1) of the AI system?* |
|  | |

|  |  |
| --- | --- |
| *4.1.3* | *In random sampling, have any subpopulations been protected if necessary?* |
|  | |

|  |  |
| --- | --- |
| *4.1.4* | *Has the choice of input variables been substantiated and coordinated with the parties involved?* |
|  | |

|  |  |
| --- | --- |
| *4.1.5* | *What measures have been taken to prevent unfair or unjustified bias being created or exacerbated in an AI system?* |
|  | |

|  |  |
| --- | --- |
| *4.1.6* | *Can the AI system be used by the intended end users (in other words irrespective of their characteristics, such as age, gender or capacity)?* |
|  | |

|  |  |
| --- | --- |
| *4.1.7* | *Are there stop mechanisms, supervision mechanisms or monitoring mechanisms in place to prevent groups in society from being disproportionately affected by the negative implications of the AI system? Specifically for ILT: a distinction needs to be made here between ondertoezichtstaanden (supervised parties (OTS)) and the rest of society.* |
|  | |

## 4.2 Accuracy

|  |  |
| --- | --- |
| 4.2.1 | How will the continuous accuracy of the system be measured and safeguarded? |
|  | |

|  |  |
| --- | --- |
| *4.2.2* | *What acceptance criteria have been set up to measure the quality of the input (data) and output (data) of the model?* |
|  | |

|  |  |
| --- | --- |
| *4.2.3* | *Are the acceptance criteria appropriate for the data and the purpose of the AI system?* |
|  | |

|  |  |
| --- | --- |
| *4.1.4* | *How will the output (data) be regularly checked at random and continually monitored for correctness?* |
|  | |

|  |  |
| --- | --- |
| *4.1.5* | *How will deviations in the output (data) relative to the acceptance criteria be analysed and corrected in a timely fashion?* |
|  | |

|  |  |
| --- | --- |
| *4.1.6* | *What would the results be if alternative models were used?* |
|  | |

## 4.3 Reliability

|  |  |
| --- | --- |
| 4.3.1 | Is the AI system reliable? |
|  | |

|  |  |
| --- | --- |
| *4.3.2* | *What are the most important factors that influence the performance of the AI system?* |
|  | |

|  |  |
| --- | --- |
| *4.3.3* | *Is a part of the (sub)dataset excluded from the model’s learning process and only used to determine reliability or is the model’s reliability calculated by means of cross-validation?* |
|  | |

|  |  |
| --- | --- |
| *4.3.4* | *How has the (hyper)parameter tuning been substantiated and assessed?* |
|  | |

## 4.4 Technical implementation

|  |  |
| --- | --- |
| 4.4.1 | How has the AI system been implemented technically? |
|  | |

|  |  |
| --- | --- |
| *4.4.2* | *Has there been consideration of how the AI system fits into the existing technical and system infrastructure and have appropriate measures been taken for its roll-out (if applicable)?* |
|  | |

|  |  |
| --- | --- |
| *4.4.3* | *Describe the system architecture (how do the software components interrelate)?* |
|  | |

|  |  |
| --- | --- |
| *4.4.4* | *Have any specific hardware and software requirements been documented?* |
|  | |

|  |  |
| --- | --- |
| *4.4.5* | *If the application is hosted externally, under what conditions is this happening?* |
|  | |

|  |  |
| --- | --- |
| *4.4.6* | *How is access to the AI system and its components configured (think of the generic IT management measures)?* |
|  | |

|  |  |
| --- | --- |
| *4.4.7* | *How can the AI system interact with other hardware or software (if applicable)?* |
|  | |

|  |  |
| --- | --- |
| *4.4.8* | *How is the logging and monitoring configured?* |
|  | |

## 4.5 Reproducibility

|  |  |
| --- | --- |
| 4.5.1 | Is the AI system reproducible ? Has a process been set up to measure this? |
|  | |

|  |  |
| --- | --- |
| *4.5.2* | *Can output (data) obtained be reconstructed now or in the future (i.e. have previous versions of the model, datasets and conditions been saved by means of version management)?* |
|  | |

|  |  |
| --- | --- |
| *4.5.3* | *Is it possible to reconstruct the model based on the given parameters and a fixed seed?* |
|  | |

|  |  |
| --- | --- |
| *4.5.4* | *Can the broad outlines of the AI system be reproduced using the documentation?* |
|  | |

|  |  |
| --- | --- |
| *4.5.5* | *How will the changes be documented during the system’s lifetime?* |
|  | |

## 4.6 Explainability

|  |  |
| --- | --- |
| 4.6.1 | Is the AI system sufficiently explainable and interpretable for the developers? |
|  | |

|  |  |
| --- | --- |
| *4.6.2* | *In developing the AI system, how has account been taken of the model’s explainability, for example for the users?* |
|  | |

|  |  |
| --- | --- |
| *4.6.3* | *What technologies have been used to ensure that the AI system is explainable and why was this technology chosen?* |
|  | |

# 5. Data governance

## 5.1 Data quality and integrity

|  |  |
| --- | --- |
| 5.1.1 | Which training data will be used as input for the algorithm and from which sources do the data originate? |
|  | |

|  |  |
| --- | --- |
| 5.1.2 | How will the data quality be safeguarded? |
|  | |

|  |  |
| --- | --- |
| *5.1.3* | *Is the data used necessary for the AI system?* |
|  | |

|  |  |
| --- | --- |
| *5.1.4* | *How are you preventing unintended data duplications?* |
|  | |

|  |  |
| --- | --- |
| *5.1.5* | *Is it possible to update the training and test data when the situation requires it? When will you decide to retrain, temporarily stop or further develop the AI system?* |
|  | |

|  |  |
| --- | --- |
| *5.1.6* | *Does the data meet the assumptions underlying the model?* |
|  | |

|  |  |
| --- | --- |
| *5.1.7* | *How has the input (data) used in the AI system been collected and collated?* |
|  | |

|  |  |
| --- | --- |
| *5.1.8* | *How will the data be labelled?* |
|  | |

|  |  |
| --- | --- |
| *5.1.9* | *What factors (think of limitations in the method of collection, storage, etc.) affect the quality of the input (data)? And what can you do about that?* |
|  | |

|  |  |
| --- | --- |
| *5.1.10* | *Has the input (data) been assessed for changes that occur during training, testing and evaluation? Also during the use of the algorithm over the course of time?* |
|  | |

|  |  |
| --- | --- |
| *5.1.11* | *If the output (data) is used as new input, how will the output (data) be stored and checked for correctness and completeness?* |
|  | |

|  |  |
| --- | --- |
| *5.1.12* | *How will you ensure that the output (data) is available in a timely fashion?* |
|  | |

## 5.2 Privacy and confidentiality

|  |  |
| --- | --- |
| 5.2.1 | What approaches are being adopted for personal data or confidential data? |
|  | |

|  |  |
| --- | --- |
| *5.2.2* | *Does the AI system work with personal data (is the GDPR applicable)? If so, please also complete the following questions. If not, proceed to ‘Regarding confidential data’.* |
|  | |

|  |  |
| --- | --- |
| *5.2.3* | *Is the processing of personal data proportional and in line with subsidiarity (use the assessment in Chapter 3 as a basis for this)?* |
|  | |

|  |  |
| --- | --- |
| *5.2.4* | *Can the output of the AI system be tracked back directly or indirectly to individuals (is the GDPR applicable)?* |
|  | |

|  |  |
| --- | --- |
| *5.2.5* | *Have officials been involved, such as the Chief Privacy Officer, Information Security Officer, Chief Information Officer, Privacy Officer, etc.?* |
|  | |

|  |  |
| --- | --- |
| *5.2.6* | *How often is the quality of and necessity for processing personal data evaluated?* |
|  | |

|  |  |
| --- | --- |
| *5.2.7* | *Will confidential data be used or stored?* |
|  | |

|  |  |
| --- | --- |
| *5.2.8* | *How will the security of this information be safeguarded?* |
|  | |

# 6. Risk management

## 6.1 Risk prevention

|  |  |
| --- | --- |
| 6.1.1 | How has the system been tested for appropriate and targeted risk management measures? |
|  | |

## 6.2 Alternative procedure

|  |  |
| --- | --- |
| 6.2.1 | What will the plan be in the event of problems with the operation of the AI system? |
|  | |

|  |  |
| --- | --- |
| *6.2.2* | *What would be the impact of the system failing?* |
|  | |

|  |  |
| --- | --- |
| *6.2.3* | *See the calculator example above. What equivalent effect could occur if the AI system is put into service and is this desirable?* |
|  | |

## 6.3 Information security risks

|  |  |
| --- | --- |
| 6.3.1 | How are information security risks identified, reduced to an acceptable level and tested (from a technical perspective)? |
|  | |

|  |  |
| --- | --- |
| *6.3.2* | *How are unauthorised third parties prevented from taking advantage of vulnerabilities in the AI system?* |
|  | |

|  |  |
| --- | --- |
| *6.3.3* | *What would the impact be of third parties having unauthorised access to the source code, data or results of the AI system?* |
|  | |

|  |  |
| --- | --- |
| *6.3.4* | *Is it possible for people to take advantage of the fact that an AI system is being used instead of a human decision?* |
|  | |

|  |  |
| --- | --- |
| *6.3.5* | *What is the system for recording who is using the AI system and for how long?* |
|  | |

|  |  |
| --- | --- |
| *6.3.6* | *In addition to the standard I&W security measures, have additional measures been taken to secure the AI system?* |
|  | |

# 7. Accountability

## 7.1 Transparency towards users

|  |  |
| --- | --- |
| 7.1.1 | In what way do you provide your end users with an insight into the operation and limitations of the AI system? And are these given sufficient attention for as long as they persist? |
|  | |

|  |  |
| --- | --- |
| 7.1.2 | What role do people play in decisions based on the AI system’s input (‘humans in the loop’) and how do you enable them to play this role? |
|  | |

|  |  |
| --- | --- |
| 7.1.3 | How can the system be monitored and understood by everyone (human oversight)? |
|  | |

## 7.2 Communication to parties involved

|  |  |
| --- | --- |
| 7.2.1 | To what extent are you transparent vis-à-vis different groups of parties involved about the AI systems and in what way? |
|  | |

|  |  |
| --- | --- |
| 7.2.2 | Are mechanisms being set up to enable end users to make comments about the system (data, technology, target group, etc.)? And how and when are these validated (analysed and followed up on)? |
|  | |

|  |  |
| --- | --- |
| 7.3.3 | Pursuant to the AI Act, does the system need to be included in the algorithm register and/or (for high-risk applications) in the EU database? |
|  | |

|  |  |
| --- | --- |
| *7.2.4* | *Are the end user of and parties involved in the AI system informed that the results are generated by an AI system and what this entails for them?* |
|  | |

|  |  |
| --- | --- |
| *7.2.5* | *Has a manual been compiled?* |
|  | |

|  |  |
| --- | --- |
| *7.2.6* | *What are the potential (psychological) side-effects, such as the risk of confusion, preference or cognitive fatigue in the end user of using the AI system?* |
|  | |

|  |  |
| --- | --- |
| *7.2.7* | *In what way are different groups of parties involved (citizens, colleagues, managers, etc.) given an insight into the different aspects of the AI system? This includes such areas as data use, model or results.* |
|  | |

|  |  |
| --- | --- |
| *7.2.8* | *How have you taken measures to achieve explainability specifically towards the end user?* |
|  | |

|  |  |
| --- | --- |
| *7.2.9* | *Is the system sufficiently transparent to enable deployers to interpret the system’s output (data) and use it appropriately?* |
|  | |

|  |  |
| --- | --- |
| *7.2.10* | *Have steps been taken to provide end users with training if necessary?* |
|  | |

|  |  |
| --- | --- |
| *7.2.11* | *How are you ensuring that comments made by parties involved and end users are properly handled internally?* |
|  | |

|  |  |
| --- | --- |
| *7.2.12* | *If a party involved wishes to lodge an objection,21 or submit a complaint about the AI system,22 is it clear what steps they should take? The same applies to lodging an appeal.* |
|  | |

## 7.3 Verifiability

|  |  |
| --- | --- |
| 7.3.1 | How will the AI system be verified and by whom? |
|  | |

|  |  |
| --- | --- |
| 7.3.2 | In what way is accountability provided about the AI system? |
|  | |

|  |  |
| --- | --- |
| *7.3.3* | *Who provides the independent audit of the AI system? And in what way?* |
|  | |

## 7.4 Archiving

|  |  |
| --- | --- |
| *7.4.1* | *How is the input (data) stored?* |
|  | |

|  |  |
| --- | --- |
| *7.4.2* | *What is the retention period for the input (data)?* |
|  | |

|  |  |
| --- | --- |
| *7.4.3* | *How is the model stored?* |
|  | |

|  |  |
| --- | --- |
| *7.4.4* | *How is version management arranged?* |
|  | |

|  |  |
| --- | --- |
| *7.4.5* | *What is the retention period for the output (data)?* |
|  | |