AIGOV

Implementing ethical, trustworthy and fair Artificial Intelligence Systems in Public Sector

D5.1 Quality assurance and risk management plan

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Deliverable factsheet

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Abstract:	This deliverable outlines procedures to collectively help and individually guide AIGOV researchers with the operational processes for the implementation of the project. In summary, this deliverable defines: • Quality management and assurance. • Risk management plan. • An initial risks analysis.

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List of Abbreviations

The following table presents the acronyms used in the deliverable in alphabetical order.

Abbreviation	*Description*
H.F.R.I.	Hellenic Foundation for Research and Innovation
TOC	Table of Contents
WP	Work Package

1 Introduction

1.1 Scope

This deliverable presents the procedures to be followed by the AIGOV in order to assure high quality of results and effective risk monitoring and mitigation.

1.2 Audience

The intended audience for this document is the members of AIGOV research team and the Hellenic Foundation for Research and Innovation (H.F.R.I.).

1.3 Structure

The structure of the document is as follows:

- Section 2 presents the methodology for ensuring the high quality project results.
- Section 3 presents the methodology for risk monitoring in AIGOV as well as an initial risk analysis
- Section 4 concludes the document

2 Quality Assurance

2.1 Definition of Standard Formats and Naming Conventions

AIGOV adopts a simple naming convention that takes the following format:

"AIGOV_Dn.n title", which is in line with the proposal of the project,

Work in progress document and all non-contract documents in AIGOV will take on a format that is relevant for the context of use. Example variations:

AIGOV <main author name> <ddmmyy> vn.n <file reference>

Examples include:

AIGOV Peter 2309122 v0.1 UseCase_list.doc (i.e. the initial draft).

AIGOV John 301223 v1.0 stakeholders.doc (i.e. the approved release).

2.2 Documentation Version Control

Version of files will take on a logical numerical sequential flow starting from '0.1' and moving forward until and approved version is reached (i.e., assigned '1.0'). Logical flow example follows:

ID	Name	*Remark for the reader:*
0.1	TOC	
0.2	Initial draft	
0.21	Minor corrects	*Typically spelling correct and/or minor correct of sentences or addition sentences*
0.3	Second draft	
0.4	Advanced release	*Typically updated after internal peer review and revision.*
0.n		
1.0	Approved release	*Often the final version number*
1.1		*Some deliverables can have more than one iterative and maybe for example due a second release after a milestone is reached in the project.*
1.n		
2.0	Second approved release.	

Table 1 Document Version Control

2.3 Document Retention and Auditable Records

Project documents are held in Google Drive repository. Records, including emails by all partners must be maintained for audit requirements for some years after the project has completed.

2.4 Access to Documentation

Access to project documents stored in the Google Drive repository will be through a sharing method, where folders containing the documents will be shared with project participants as they join the project.

3 Risk Policy and Management

A project risk is an event or uncertain condition that if it occurs, will have an effect on at least one project objective, such as time, cost, scope or quality. Risks have their origins in the uncertainty that is present in all the projects and can be of different topology. Known risks are those that have been identified and analysed and it is possible to plan the actions to take if they happen. Unknown risks cannot be managed proactively, and a prudent response of the project team could be to assign a general contingency against it. Risks will be constantly assessed and evaluated within the whole project duration. The methodology to be followed for risk management consists of four steps: a) Risk identification. Here, areas of potential risk will be identified and classified, b) Risk quantification. Here, the probability of events will be determined and the consequences associated with their occurrence will be examined, c) Risk response. Here, methods will be produced to reduce or control the risk, and d) Risk control and report. Here, lessons learnt will be documented. Risk Management will be the responsibility of the Project Coordination Committee. Timely awareness of and reaction to potential problems will be crucial to effective risk management. In the event of technological changes, the Project Coordination Committee supported by the Scientific and Technology Team will task one or more work package leaders to investigate the development and to advise the Project Coordination Committee on appropriate actions.

3.1 Risk Management Plan

AIGOV will pay particular attention to risk management during the execution of the project. The ambitious objectives of the project together with the diverse range of RTD activities shared among a large number of partners motivate a continual monitoring of risks to ensure project's success. Risk management in AIGOV will be enacted through an iterative cycle of:

a) Identifying risk,

b) Assessing risk by estimating risk severity based on probability and impact,

c) Monitoring risk,

d) Managing risk including both contingency planning and mitigation measures

Id	*Process*	*Description*	*Tools*	*Execution time*
1.	Identification of the risks	Identify risks that may affect the project and its characteristics and note the WP(s) affected.	Participant knowledge of the project and list of risks.	At the beginning of the project and at each meeting of the project team.
2.	Analysis of the risks.	Assess the likelihood and impact of the risk.	Definition of probability and impact. Severity levels: low, medium, high.	At the beginning of the project and at each meeting of the project team.
3.	Managing the risks	Define the risk response.	Decision tree.	At the beginning of the project and at each meeting of the project team.

4.	Monitoring and control the risks.	Verify the occurrence of risks (including the emergence of new ones).	Control and monitoring meetings.	In each phase of the project.

Table 2 Processes Applied for Risk Management

3.2 Implementation

The identification of risks consists of determining what the risks are that may affect the project and then documenting their characteristics. In addition to this identification task, regular reports will be generated that ensure that all reseachers are aware of potential problems on a consistent basis and can initiate countermeasures long before a problem/situation becomes irreversible. The tight control, both at WP Level and at Management level, ensures that solutions will be available in time. The potential risks identified can be assessed based on the probability and level of (negative) impact and any risks with a high probability and a severe impact will be handled with particular caution during the project.

The following measures are foreseen to meet those risks:

1. During the first three months of the project, a risk assessment will take place aimed at identifying potential risks and evaluate their impact and probability of occurrence.

2. For risks with medium to high probability and severe impact, countermeasures and contingency plans will be decided and flagged throughout the execution of the project as “risk items”. This ensures that these items will be handled very carefully throughout the project at Management, WP and Task level.

3. For risks with low probability or low impact, it will be ensured that the necessary countermeasures are taken and that the milestones concerning the evaluation for risk treatment needs are identified.

4. For risks that were not foreseen at the beginning of the project, the risk planning and evaluation process will catch these and will be updated as needed.

3.3 Initial Risk analysis

Placing special emphasis on risk management, AIGOV has performed a preliminary identification and analysis of risks from the proposal phase. The results of this analysis are summarized in the following Table. The table presents the critical risks and includes a probability field (L: low, M: medium, H: high) as well as the proposed risk mitigation measures.

Id	*Description of risk (indicate level of likelihood: Low/Medium/High)*	***WPs involved***	***Proposed risk – Mitigation measures***
1.	Lack of effective performance of the consortium (L)	ALL	The members of the research team are carefully selected according to their particular abilities and liability for effectively accomplishing the project results. The research team has effectively collaborated before under the supervision of the PI for many years. In case, however, of poor

			consortium performance, the PI will be responsible for finding out the source of the problem and coming up with a solution such as allocate or recruit new, more skillful staff.
2.	Inadequate research team's coordination (L)	ALL	PI will be responsible for efficiently managing the research team and ensuring that each member acts according to assigned responsibilities and roles. The PI has long experience in coordinating bigger and more diverse teams and consortia in the frame of EU funded research projects.
3.	Retreat of a member from the research team (M)	ALL	In such a case, the PI will consider replacing the retreating member with a new person of similar expertise according to the rules of the program.
4.	Schedule slippage leading to deviations in work plan (M)	ALL	The planned project management tools such as continuous guidance, internal monitoring reports etc. will continuously assess the status of the project in terms of progress, quality and effort and will quickly identify this risk.
5.	Problems with the Collaborating Organisation (L)	WP1 and WP3	The Region of Macedonia was really keen in the AIGOV's research result. In the case, however, that the CO drops it support to the project, the research team will contact another public authority from Greece. The PI has a long experience in eGovernment and thus has a strong network of contacts in Greek public authorities.
6.	Unsuccessful dissemination and exploitation (L)	WP4	The PI will focus on better planning and streamlining of activities by selecting relevant, high-profile events to disseminate and by mobilizing existing networks. Moreover, frequent checkpoints will be established to check progress and take additional measures. Additionally, if needed, the research team plans to reallocate budget to strengthen this point.
7.	Public servants resist in adopting AI solutions (L)	WP3	The project will heavily involve the CO in the identification of the challenges and problems. The AIGOV will also provide guidelines and pathways to facilitate the understanding of required skills.
8.	AIGOV frameworks, methods, and tools are too complex and academic to be	WP2	Already from the beginning work package 1 management will closely work with the CO to address their needs and to

	understood and used by the practitioners (M)		understand the 'language' of the practitioners. The guidelines supporting the framework implementation will be developed with the engagement and the language of the practitioners to ensure applicability of the framework.

Table 3 Risks and Contingency Plans (Mitigation Measures)

4 Conclusions

This deliverable outlines procedures to collectively help and individually guide AIGOV researchers with the operational processes for the implementation of the project. In summary, this deliverable defines:

- Quality management and assurance.
- Risk management plan.
- An initial risks analysis.