



Bridging the security, privacy, and data protection gap for  
smaller enterprises in Europe

## **D8.7 - The SENTINEL QA plan and periodic monitoring report – final version**



This work is part of the SENTINEL project. SENTINEL has received funding from the European Union's Horizon 2020 Work Programme for research and innovation 2018-2020 under grant agreement n°101021659.

## Project Information

<b>Grant Agreement Number</b>	<b>101021659</b>
Project Acronym	SENTINEL
Project Full Title	Bridging the security, privacy, and data protection gap for smaller enterprises in Europe
Starting Date	1 <sup>st</sup> June 2021
Duration	36 months
Call Identifier	H2020-SU-DS-2020
Topic	H2020-SU-DS-2018-2019-2020 Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises
Project Website	<a href="https://www.sentinel-project.eu/">https://www.sentinel-project.eu/</a>
Project Coordinator	Dr. George Bravos
Organisation	Information Technology for Market Leadership (ITML)
Email	gebravos@itml.gr

## Document Information

<b>Work Package</b>	Work Package - 8
Deliverable Title	D8.7 - The SENTINEL QA plan and periodic monitoring report - final version
Version	1.3
Date of Submission	17/05/2024
Main Editor(s)	Anna Maria Anaxagorou (ITML)
Contributor(s)	Siranush Akarmazyan (ITML)
Reviewer(s)	Manolis Falelakis (INTRA), Dimitra Malandraki (CECL)

Document Classification							
Draft		Final	X	Confidential		Public	X

History			
Version	Issue Date	Status	Distribution
1.0	20/02/2024	ToC ready	Confidential
1.1	08/04/2024	1 <sup>st</sup> draft ready	Confidential
1.2	30/04/2024	Reviewers' comments incorporated	Confidential
1.3	17/05/2024	Final version ready	Public

## Table of Contents

List of Figures .....	5
List of Tables .....	5
Abbreviations .....	6
Executive Summary .....	7
1. Introduction .....	8
1.1 Purpose of the document.....	8
1.2 Structure of the document.....	8
1.3 Intended readership.....	8
2. Project Organization and Management .....	9
2.1 Project governance and management structure.....	9
2.1.1 Management Structure .....	9
2.2 Project roles and responsibilities .....	9
2.2.1 General Assembly .....	9
2.2.2 Project Coordinator.....	10
2.2.3 Quality Assurance Manager.....	10
2.2.4 Scientific-Technical-Innovation Manager .....	11
2.2.5 Dissemination and Exploitation Manager .....	11
2.2.6 Project Technical Committee .....	12
2.2.7 Ethics & Data privacy Advisory Committee .....	12
2.2.8 Work Package Leader .....	13
2.2.9 Task Leader.....	13
2.2.10 External Advisory Board.....	14
2.3 Project Internal Communications .....	14
2.3.1 Project Meetings: Types and procedures .....	15
2.3.1.1 General assembly meetings.....	15
2.3.1.2 Project Technical Committee meetings .....	16
2.3.1.3 Work package meetings.....	16
2.3.1.4 Project periodic review meetings.....	16
2.4 Project Monitoring and Reporting Procedures .....	16
3. Quality Assurance.....	17
3.1 Project Document Management Process.....	17
3.2 Deliverable Preparation Process.....	18

3.3	Deliverable Review Process .....	19
3.3.1	Deliverable review planning .....	19
3.3.2	Roles and responsibilities .....	19
3.3.3	Deliverable review steps .....	20
4.	Conclusion .....	21
	Appendices .....	22
	Appendix - I: Peer review document.....	22
	Appendix - II: SENTINEL Agenda template.....	23
	Appendix - III: SENTINEL Minutes of Meeting template .....	25
	Appendix - IV: Internal Review Planning .....	26

## List of Figures

Figure 1. SENTINEL Project Management Structure .....	9
---	---

## List of Tables

Table 1. SENTINEL General Assembly Members .....	10
Table 2. SENTINEL Work Package Leaders .....	13
Table 3. SENTINEL Roles & Responsibilities .....	19
Table 4. SENTINEL Deliverable Review Process .....	20

## Abbreviations

<b>Abbreviation</b>	<b>Explanation</b>
<b>CA</b>	Consortium Agreement
<b>DEM</b>	Dissemination and Exploitation Manager
<b>DoA</b>	Description of Action
<b>EAB</b>	External Advisory Board
<b>EC</b>	European Commission
<b>EDAC</b>	Ethics and Data privacy Advisory Committee
<b>GA</b>	General Assembly
<b>IP</b>	Intellectual Property
<b>MoM</b>	Minutes of Meeting
<b>PC</b>	Project Coordinator
<b>PO</b>	Project Officer
<b>PTC</b>	Project Technical Committee
<b>QA</b>	Quality Assurance
<b>QAM</b>	Quality Assurance Manager
<b>STIM</b>	Scientific-Technical-Innovation Manager
<b>TL</b>	Task Leader
<b>ToC</b>	Table of Contents
<b>WP</b>	Work Package
<b>WGs</b>	Working Groups

## Executive Summary

The Quality Assurance plan is an internal document of the SENTINEL project, which is delivered in the context of Work Package 8 (*“Project Management, Coordination and Quality Assurance”*), to reflect the project activities conducted under the task T8.1: “Project Quality Planning and Monitoring”. More specifically, the project quality planning and monitoring procedures deal with:

- control actions
- time schedules
- requirement specifications and quality objectives
- responsibilities and authorities
- development, quality, testing, configuration, acceptance, and maintenance plans
- definitions of procedures for acceptance and quality control
- appropriate tools for planning, monitoring, and progress reporting

In addition, T8.1 activities focus on:

- identifying risk items using a structured and consistent approach to ensure that all areas are addressed;
- quantitatively assessing the risk and ranking of items to establish those of most concern;
- defining alternative paths of minimizing risks and criteria to initiate or terminate these activities;
- monitoring and managing risks throughout the project’s life with Milestones reviewed and re-assessed.

This document presents the latest updates regarding the project's organization, procedures, roles, and responsibilities concerning quality control and assurance activities, which were initially outlined in D8.5 (M3) and D8.6 (M18) and are now finalized with this version. Grounded in both the Grant Agreement and Consortium Agreement, this report serves as a complementary document, enriching the project's quality assessment.

It's important to note that the plan outlined in this document forms the cornerstone for effectively managing and coordinating the SENTINEL project. Therefore, it is imperative for all project members to adhere to this plan in order to ensure the delivery and maintenance of quality throughout the project duration.

Additionally, this document delineates the information-sharing process, electronic repository regulations, document templates, and associated protocols. To guarantee the creation of high-quality project documents, it outlines the document management process, encompassing deliverable preparation, review, and quality assurance procedures and policies.

# 1. Introduction

## 1.1 Purpose of the document

The main purpose of this document is to provide updates on the Quality Assurance (QA) plan initially reported in D8.5 (M3) and D8.6 (M18) accordingly. It gives updates on practical information related to project's governance and management structure focusing on criteria, methods, tools and formal procedures used achieving high quality outcomes in the SENTINEL project. In addition, it outlines any changes implemented in the project organization, roles, decision making procedures as well as the internal communication channels within the consortium. Furthermore, it describes day-to-day project execution activities from a quality point of view, and sets out rules, processes, and procedures for continuous monitoring and reporting throughout the project.

In conclusion, the document provides detailed explanations of the procedures necessary for managing documents, preparing deliverables, and conducting internal reviews. The procedures outlined in the QA plan align closely with the terms specified in both the Grant Agreement and Consortium Agreement.

## 1.2 Structure of the document

The document is divided into three main sections:

- Section 1 contains an introduction to the document.
- Section 2 gives a general overview of the project organization defining the roles and responsibilities for each of the project bodies. This section also covers project communication, describing the general guidelines in the form of rules for the organization of meetings.
- Section 3 describes the quality assurance procedures affecting mainly the project documents. The section explains document management plan, deliverable preparation and review process.
- Section 4 summarises the main outcomes of this deliverable.

## 1.3 Intended readership

This document is intended for all consortium members, since it comprises a set of guidelines that accompanies the Grant Agreement and Consortium Agreement documents. The report is envisioned to be used by all project members in order to ensure high quality of all project outcomes and smooth implementation of the project through efficient project management.



## 2. Project Organization and Management

### 2.1 Project governance and management structure

The project governance is the management framework which defines how the project decisions must be taken and indicates the structure including specific bodies, their roles and responsibilities and the way they interact during the lifecycle of the project.

#### 2.1.1 Management Structure

To ensure the overall project management and establish effective decision-making strategy the SENTINEL project has defined decision bodies and key roles within the consortium. The updated project management structure is presented in Figure 1.

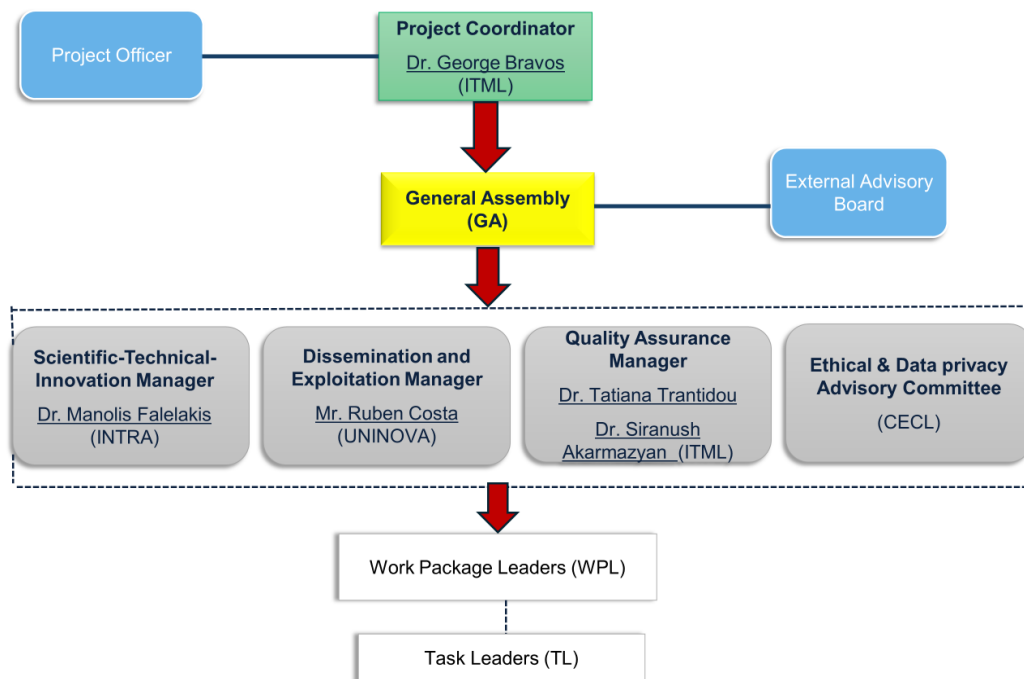


Figure 1. SENTINEL Project Management Structure

### 2.2 Project roles and responsibilities

#### 2.2.1 General Assembly

Management representatives of all partners form the General Assembly (GA), which is the highest decision board of SENTINEL. The GA has the overall responsibility for technical, financial, legal, administrative, ethical, IP management and dissemination issues of SENTINEL. The GA convenes at least every six months or, if necessary, more frequently to guarantee project progress and is chaired by the Project Coordinator. The GA a) assumes the overall management responsibility on behalf of the partners, b) takes decisions and approves changes in the work-

plan, resource allocation, deliverables, CA, etc., c) approves deliverables submission and d) reviews the project as a whole.

The updated list of the GA members of the SENTINEL project can be found in Table 1.

*Table 1. SENTINEL General Assembly Members*

No.	Partner	Member	Alternate
1	ITML	George Bravos	Siranush Akarmazyan
2	LIST	Philippe Valoggia	Djamel Khadraoui
3	IDIR	Peri Loucopoulos	Yannis Skourtis
4	INTRA	Spyros Evangelatos	Manolis Falelakis
5	STS	George Spanoudakis	Konstantinos Poulis
6	AEGIS	Marinos Tsentekidis	Manos Karampinakis
7	TUC	Sotiris Ioannidis	Giorgos Chatzivasilis
8	ACS	Thomas Oudin	Paul-Emmanuel Brun
9	UNINOVA	Ruben Costa	Cláudio Corrêa Filho
10	CG	Mihalis Roukounakis	-
11	TIG	Yannis Loucopoulos	Daryl Holkham
12	CECL	Dimitra Malandraki	Zoe Kasapi
13	FP	Elma Kalogeraki	Spyridon Papastergiou

## 2.2.2 Project Coordinator

The Project Coordinator (PC) is responsible for the project's coordination activities under the Grant Agreement signed with the EC. The SENTINEL project coordination is undertaken by Dr. George Bravos (ITML). The main responsibilities of PC include:

- Interaction with the European Commission (EC) and third parties with regard to project management as well as administrative, technical, and scientific matters (or other activities following the Grant Agreement and its annexes).
- Submission of the project's deliverables to the EC portal.
- Receive, compile and distribute to all beneficiaries the documents, the reports, statements of expenditures and minutes of meetings of Plenaries and GA meetings, as well as any other information received from contributors.
- Monitor the risk registry and manage the project risks in cooperation with the Scientific-Technical-Innovation Manager (STIM), Dissemination and Exploitation Manager (DEM), Quality Assurance Manager (QAM) and oversee the SENTINEL's ethical compliance with Ethics & Data privacy Advisory Committee (EDAC).

## 2.2.3 Quality Assurance Manager

The Quality Assurance Manager (QAM) (the effort is fulfilled by Dr. Siranush Akarmazyan (ITML) supported by Dr. Tatiana Trantidou (ITML)), is responsible for overseeing the quality of the project tasks and deliverables. The main responsibilities of QAM include:

- Formulating a detailed Quality Control Strategy and Criteria for each project deliverable.
- Assuring the conformity of deliverables with the criteria initially set for them.
- Guaranteeing that deliverables are aligned with the Technical Annex of the proposal.

Each deliverable must be handed to the QAM, who in turn is responsible for forwarding it to two appointed reviewers (members of the consortium) for the established peer review process. If there is no consensus by the reviewers on the quality of the deliverable, corrective actions are proposed in the consolidated review report, based on a synthesis of the two aforementioned individual peer reviews.

The QAM is responsible for developing, implementing, communicating, and maintaining the quality plan throughout the lifecycle of the project. Moreover, the QAM is responsible for identifying problems during internal audits and initiating corrective actions to eliminate them. The QAM also ensures that goals and guidelines set by the Project Technical Committee (PTC) and the GA are implemented throughout the project.

#### 2.2.4 Scientific-Technical-Innovation Manager

The Scientific-Technical-Innovation Manager (STIM) works closely with the PC and is responsible for the overall technical project management and coordination of the work packages. Dr. Manolis Falelakis (INTRA) has been assigned as STIM for the SENTINEL project. The responsibilities of STIM include:

- Assuring the scientific and technical cohesion and excellence of the project.
- Overseeing the organization of technical workshops and meetings.
- Proposing the agenda of technical workshops and meetings.
- Supervising the quality of the deliverables produced by the WPs.
- Cooperating with the PC to align SENTINEL's strategic objectives with the GA.

The STIM also pays special attention to the management of architectural harmonization, integration, and standardization. Finally, the STIM coordinates and monitors the outcomes of SENTINEL technical processes to align them with business opportunities.

#### 2.2.5 Dissemination and Exploitation Manager

The Dissemination and Exploitation Manager (DEM) is responsible for the dissemination and exploitation activities during the project lifecycle, as described in detail in WP7. Mr. Ruben Costa (UNINOVA) has been assigned as DEM for the project. Typical tasks of the DEM include but are not limited to:

- Ensuring project findings are systematically and efficiently disseminated to all possible interested actors and parties.
- Identifying relevant stakeholders that might be interested in the project results.
- Identifying appropriate channels and platforms to reach the intended audiences.
- Creating and distributing SENTINEL's print and digital dissemination material.
- Creating and administering SENTINEL's social network channels.
- Providing material for the SENTINEL website (mostly for the News & Events section) – see Deliverable document D7.1 (submitted in M2).
- Organizing SENTINEL's events and meetings.

Regarding exploitation, the DEM works closely with the leader of task T7.3 “Exploitation and standardization activities and practices towards a holistic privacy-by-design European solution” and coordinate issues relating to exploitation of results. More specifically, the responsibility of DEM includes:

- Managing the knowledge produced during the project lifecycle with the goal of successfully implementing innovative ideas, assessing the opportunity for applying for patents and allowing the consortium to respond to potential external or internal opportunities.
- Supervising the preparation of the exploitation activities reports, including a detailed business plan.
- Making recommendations to the GA on issues of exploitation, including warnings in case of inconsistencies with the market goals.
- Addressing the market requirements for the technological and business potential created by SENTINEL project.
- Aligning the activities across work packages towards developing mutual benefit.

### 2.2.6 Project Technical Committee

The Project Technical Committee (PTC) is responsible for making and overseeing technical decisions made in the project. It has the power to directly control all tasks through partner consensus. The PTC is responsible for putting into place mechanisms which ensure quality of work for produced deliverables and any technical papers produced within the WP. The PTC consists of one delegate from each organization participating in the project. To minimize management overload, partners acting as WP leaders are represented by the same people in the PTC. The chairperson of the PTC is the project’s STIM.

### 2.2.7 Ethics & Data privacy Advisory Committee

The main goals of the Ethics & Data privacy Advisory Committee (EDAC) are to:

- ensure that personal rights are respected.
- understand potential uses of user information requirements.
- ensure that deliverables and innovation activities meet European, national legal and ethical requirements.
- identify and address any ethical issues rising from the research methodology.
- identify and address any ethical issues rising from the research impact.
- identify guidance and regulations with which SENTINEL should comply as the following:
  - Data protection Policy.
  - Informed Consent Form policy.
  - ETSI guidance notes.
  - ISO/IEC 17799 Data security.
  - Raise awareness of any privacy and security issues in SENTINEL.
  - Monitor compliance.

The EDAC is chaired by CECL and consists of three (3) members of the consortium and further external experts. The EDAC is chaired by **Prof. Fereniki Panagopoulou**, who is Assistant Professor of Constitutional Law at Panteion University (Athens, Greece) with a proven track record on Data Protection Law, Bioethics and Medical Ethics.

Below is presented the updated list of the SENTINEL’s EDAC members:

- **Dr. Tal Soffer** (external) is the Head of the unit of Technology and Society Foresight at Tel Aviv University (Israel) with expertise in privacy and ethics rising from emerging technologies.
- **Dr. Tania (Konstantina) Kyriakou** (external) with well-demonstrated track record on data protection law, EU law and cultural heritage law. **Dr. Kyriakou** has a full membership in EDAC.

### 2.2.8 Work Package Leader

For every work package, there is a person designated as Work Package Leader (WPL) whose task is to coordinate WP work and ensure that activities within the work package are carried out in a timely manner and deliverables are submitted within schedule. All partners contributing effort in each WP are coordinated by the WPL in the detailed planning and execution of work carried out at the task level. The WPL must coordinate the interaction and collaboration with other WPLs to facilitate communication within and between interdependent WPs.

The updated list of the WPLs of the SENTINEL project can be found in Table 2.

*Table 2. SENTINEL Work Package Leaders*

No.	Name	Leader	Organisation
WP1	SENTINEL baseline: Setting the Methodological Scene	Peri Loucopoulos	IDIR
WP2	The SENTINEL privacy and personal data protection technologies	Philippe Valoggia	LIST
WP3	The SENTINEL digital core	Stavros Rafail Fostiropoulos	ITML
WP4	The SENTINEL services	Thomas Oudin	ACS
WP5	SENTINEL continuous integration and system validation	Manolis Falelakis	INTRA
WP6	Real-life experiment evaluations: SENTINEL pilots	Eleni-Maria Kalogeraki	FP
WP7	Ecosystem building, Exploitation and sustainability management	Ruben Costa	UNINOVA
WP8	Project Management, Coordination and Quality Assurance	Siranush Akarmazyan	ITML
WP9	Ethics requirements	Siranush Akarmazyan	ITML

### 2.2.9 Task Leader

The person designated as Task Leader (TL) coordinates work at the task level, organised in the same way as at the WP level (WPL). The TL is appointed by the partner leading a task, as defined in each work package and coordinates the task work among the task participants.

### 2.2.10 External Advisory Board

The project has formed an External Advisory Board (EAB) consisting of relevant external stakeholders from any industry related to the management of sensitive data in the public and private sectors. The EAB follows the development of the project and a) provides feedback to ensure that the scientific and technological evolution of the project is on-track to fulfil its stated goals, and b) provides an external global viewpoint to ensure that the project's research and development targets and activities are appropriate for producing significant advancements beyond the state-of-the-art.

The EAB gives the project access to advice from external experts from relevant domains, widens the scope of innovation and helps establish future exploitation pathways. The constituent assembly of EAB has been defined in the first three months of the project execution. The EAB participates once a year in a project meeting. The list of SENTINEL's EAB members is presented below:

- **Prof. João Mendonça**, Ass. Professor in the Department of mechanical Engineering at the University of Minho (Portugal) with a strong link with SMEs.
- **Mr Toomas Lepik**, Senior Information Security expert, SME owner of "IT Kool Ja Konsultatsioonid OÜ", Brussels, Belgium.
- **Ms. Georgia Panagopoulou**, privacy ICT auditor at the Greek Data Protection Authority, Athens, Greece.
- **Mr Rodrigo Diaz**, Head of Cybersecurity Unit in ATOS Research & Innovation department, Barcelona, Spain.

## 2.3 Project Internal Communications

Communication between the project partners is one of the most important aspects for a successful project execution according to expectations and initially set objectives. The SENTINEL communication strategy includes three main communication means:

- **Communication via email exchange:** The project mailing list (containing all members of the consortium) is set up and maintained by the project coordinator. The list is created to facilitate communication among partners for technical-, work package- or other- related purposes. Emails are used for everyday communication, while phone calls are used in case of emergencies or as an alternative communication medium.
- **Communication via face-to-face and virtual meetings:** to monitor the progress of the project, plan the future activities and build corrective measures face-to face and virtual meetings are regularly being organized according to the needs of the project. Before the meeting, an agenda is shared with the partners containing key aspects to be covered. After the meeting, the person organizing the meeting shares minutes of meeting (MoM) concluding important information shared within the meeting's context and the relevant action list is circulated among the consortium, with all partners having the right for changes and/or suggestions.
- **Communication via document/information exchange:** A project has created a common cloud-based information and files sharing environment (SENTINEL NextCloud repository), so the consortium members can have access to all project information. Project

and document templates (presentations, deliverables, agendas, peer reviews, etc.) are uploaded and collected in this repository to ensure uniformity of information presentation and identification of documents.

### 2.3.1 Project Meetings: Types and procedures

Project meetings (both virtual and face-to-face) are the most important communication channels of the project and are used to keep all partners in line with the current project status and objectives, as well as increase the efficiency of collective decision making. For official meetings (GA, plenary etc.) the project consortium follows the procedures listed in the Consortium Agreement Section 6. While more flexible and ad hoc procedures are adopted for other project meetings aiming to address the specific needs of the project.

General directions for the organization of meetings are:

- Before a planned meeting (GA, plenary, etc.) adequate notice is given to allow the participants to prepare and manage any logistics issues. For meetings that require physical presence, agenda and meeting notice is sent at least 4 weeks (30 calendar days) preceding the meeting. For virtual meetings, the agenda and notice must be sent 1 week before (7 calendar days).
- The duration and venue of the meeting is communicated beforehand.
- Notice for the meeting includes a draft version of the agenda with the main aspects to be discussed. After participants agree on the agenda, refinements are done with any additions of topics not mentioned in the draft.
- MoM is produced by the chairperson (or member of the chairperson's organisation) of the meeting and communicated to the attendees no later than two weeks (14 calendar days) after the meeting. The minutes are considered as accepted if there are no objections in written form within 1 week (7 calendar days) from the meeting. MoM should include:
  - Attendance list;
  - Agenda (or link to the agenda in the project's electronic repository);
  - Main discussion points;
  - List of action points;
  - Next steps (with dates if possible);
  - One or more photo(s) (or print screens) of the meeting with as many participants as possible.

#### 2.3.1.1 *General assembly meetings*

GA meetings are chaired by the PC and cover project's technical and non-technical aspects. The meeting aims to exchange technical status and information, prepare for interim reporting and reviews, share project progress amongst partners and provide information on next steps and actions to follow. The GA meetings are held physically or virtually at least four times a year (physical meetings can be combined with other meetings). Ad hoc meetings can take place as well if deemed necessary.

### **2.3.1.2**      *Project Technical Committee meetings*

Project Technical Committee (PTC) meetings are chaired by the STIM and cover technical aspects of the project. The meeting aims to build a solid foundation from the beginning of the project, on which technology developments are step and move forwards, review the overall progress, revise the risk register, as well as update the Data Management Plan and dissemination plans, inter-WP collaboration. The PTC schedules physical or virtual meetings at least four times a year (physical meetings can be combined with other meetings), but it is advised to meet via teleconference monthly. Minutes from the PTC meetings are shared among the consortium members, within 5 working days after each collaborating event.

### **2.3.1.3**      *Work package meetings*

Work package meetings are met to assist WP partners to coordinate work and exchange information. These meetings are initiated by the WPL (or coordinator) and include the WPL, TLs and any other partner deemed useful on the related topic. The schedule of these meetings is decided by the WPL, but it is advised to meet via teleconference at least once a month.

### **2.3.1.4**      *Project periodic review meetings*

Aligned with the formal periodic reporting and achievement of major milestones, two Periodic Review Meetings are envisioned to take place at the discretion of the EC - in M19 and M36. Within the scope of these meetings, the EC, with the help of external reviewers, evaluates the progress of the project during the project's reporting period. Besides the PC, STIM and WPLs other partners can also be requested to participate at the discretion of the PC or under the specific request of the EC.

## **2.4 Project Monitoring and Reporting Procedures**

The project monitoring and reporting procedures follow the terms and conditions detailed in the Grant Agreement. In general, SENTINEL accommodates quality management by regular project reporting of all partners, which is utilised as input for the project reports to the Project Officer (PO) and the EC. SENTINEL employs continuous reporting to the EC via its web-based project management portal. Henceforth, WPLs provide short reports regarding the related WP activities and achievements to the PC at the end of each quarter (September, January, and May). Then, the PC consolidates the material and does the continuous reporting (online). Such reports would contain progress reports (against baseline), resources, achievements, and risks. The content for the relevant reporting deliverables (D8.1-D8.7) is based on this information, as well as specific information on closed, active, or upcoming WPs directly given by the corresponding WP leaders.

Detailed technical content and detailed progress information for each WP is reported by TLs towards the relevant WPL. Thereafter, the WPL informs the PTC accordingly.



### 3. Quality Assurance

Quality assurance (QA) aims to establish a basis to ensure that the project results (mainly deliverables, documents, reports) are achieved with expected quality and are in conformity with the Grant Agreement. The quality assurance is performed through WP8 by the PC, and it concerns all phases/stages of the project thus all partners are responsible for the quality assurance of the project. SENTINEL adopts the widely accepted *Plan-Do-Check-Act* (PDCA) principle to achieve proper monitoring of project activities. Through the PDCA principle, all work done within WPs and tasks is closely monitored on a continuous basis, resulting in initiated corrective actions and changes to the project plan when necessary.

Two main processes have been adopted in the project quality assurance context that are described below:

- **Document management process**, which described the rules followed in order to produce and manage project deliverables (Plan-Do).
- **Document review process**, which describes the process that ensures deliverables produced are equivalent to the quality standards defined by the project (Check-Act).

#### 3.1 Project Document Management Process

The SENTINEL document management process (the language used within the documents, the document storage methods, the templates used to produce the various documents, etc.) has been defined by the QAM and is followed by all partners in every document creation process.

According to this process, all documents (deliverables, technical, scientific, financial reports) SENTINEL should be written in English, following appropriate grammar rules and formal language. Dissemination material (newsletters, press releases, posters, fliers, etc.,) are produced in English as well; although it can be localized/translated, when needed.

All documents should be stored and available to partners via the cloud-based repository (SENTINEL NextCloud), which is the central point for sharing information amongst partners. A specific folder structure is followed by all WPLs and TLs and maintained by all partners.

The structure of the electronic repository aims to be clear and comprehensive by all partners and it is designed to facilitate internal work and collaboration.

- **01\_Contact list:** Contains an excel file with all participants latest contact details, who also populate the project's mailing list. The folder also contains a dedicated excel spreadsheet with information about main and secondary contact points from each member organisation for the General Assembly, as well as about leading and deputy partner contact details regarding WP and task leadership.
- **02\_Contract Documents:** Contains all the appropriate documents of the project contract, specifically the Grant Agreement and Consortium Agreement.
- **03\_Meetings:** Contains information from the project meetings, such as the agenda, presentations, MoM and any other relevant material.
- **04\_Deliverables Final:** Contains the pdf documents of all deliverables that are finalized and submitted to the EC.
- **05\_Templates:** Contains all projects templates, so that they are used by all partners.

- 06\_SENTINEL WGs: Contains working documents and supporting files related to the SENTINEL Working Groups, which have been created within the second year of the project, to facilitate the technical activities of the project.
- 07\_KR&KPI\_EvaluationMatrix: Contains the KR&KPI monitoring and evaluating sheet
- Work Packages (9 folders in total): Contains one folder per WP of the project with relevant material.

Each WP folder has the following structure:

- 01\_Organisation: Contains information relevant to the organisation of the specific WP, e.g., contact points for the specific WP, WP plan, etc.
- 02\_Meetings: Contains information from the specific WP meetings, such as presentations, MoM and any other relevant material.
- 03\_Reports: Contains report documents from each reporting period with collected material from the specific WP only.
- 04\_Deliverables: Contains material relevant to the preparation of deliverables for the specific WP.
- Tasks folder: Contains one folder per task within the specific WP of the project with relevant material.

The QAM is responsible for updating and keeping the general maintenance of the repository (creating folders, adding, or deleting users, etc.).

Finally, all partners should base their project documents on the following templates that can be found in the electronic repository of the project:

- SENTINEL\_Presentation\_template.pptx
- SENTINEL\_Agenda\_template.docx (see Appendix II)
- SENTINEL\_Deliverable\_template.docx
- SENTINEL\_Peer\_review\_document.docx (see Appendix I)
- SENTINEL\_MoM\_template.docx (see Appendix III)

### 3.2 Deliverable Preparation Process

The PC informs the project partners about the upcoming deliverables that are due within 3 months from communication. The deliverable author (as identified in the Description of Action) is responsible for the preparation, editing and quality of a deliverable. As part of deliverable preparation process the deliverable author makes sure that all deliverable versions, excluding final, are named according to the following format:

***SENTINEL\_Dx.y\_Deliverabletitle\_Vx***

Where:

- SENTINEL: project's short name
- Dx.y: Deliverable number as described in the DoA (e.g., D1.1)
- Deliverable title: The name of the deliverable as it can be found in the DoA (e.g., D8.5\_Quality\_Assurance\_plan\_and\_periodic\_monitoring\_report\_first\_version)

- Vx: The version of the file (e.g., SENTINEL\_D8.5\_Quality\_Assurance\_plan\_and\_periodic\_monitoring\_report\_first\_version\_V1)

The underscore (\_) between words is necessary to activate linking of the filename.

### 3.3 Deliverable Review Process

Deliverable peer review is an integral part of deliverable preparation process and is a key step in the preparation of the deliverable to ensure that deliverables being submitted conform to the highest quality standards as defined in the Grant Agreement.

#### 3.3.1 Deliverable review planning

Created by QAM, a peer review planning document (see Appendix IV) is used to manage the deliverable review process. This document is monitored by all partners, so that they can keep track of their responsibilities for reviewing deliverables. It lists all project deliverables with two organizations assigned as peer reviewers per deliverable, based on the following criteria:

- **Partners' effort:** The number of reviews assigned to each partner is directly proportional to the effort the organization has in the project.
- **Involvement in the deliverable creation:** The organization assigned for a peer review cannot be directly involved with the creation of the deliverable.
- **Involvement in the project:** The person assigned as a reviewer should have knowledge of the project and ideally is a person working on the project. However, as mentioned above, the person should not directly be involved with the creation of the deliverable.

#### 3.3.2 Roles and responsibilities

The roles and responsibilities of the entities involved in the peer review are listed in the table below:

*Table 3. SENTINEL Roles & Responsibilities*

Role	Responsibility
Coordinator	<ul style="list-style-type: none"> <li>▪ Formally approves the version to be sent to the EC</li> </ul>
Quality Assurance Manager	<ul style="list-style-type: none"> <li>▪ Responsible for the review process, establishing deadlines, contacting the peer reviewers, and coordinating the overall procedure</li> <li>▪ Supports the reviews, if needed</li> <li>▪ Evaluates the deliverable and approve the version to be sent to the coordinator</li> <li>▪ Ensures the files are uploaded on the electronic repository</li> </ul>
Scientific-Technical-Innovation Manager	<ul style="list-style-type: none"> <li>▪ If needed, supports the QAM with the technical aspects of the deliverable when reviewing the document</li> <li>▪ Approves the technical aspects of the documents, before it is sent to the coordinator</li> </ul>

Deliverable Leader	<ul style="list-style-type: none"> <li>▪ Processes the peer reviews and address the comments made from the peer reviewers</li> <li>▪ Approves the version to be sent to the coordinator</li> </ul>
Deliverable Team	<ul style="list-style-type: none"> <li>▪ Supports the Deliverable leader in addressing the comments made by the peer reviewers as per the instructions of the Deliverable Leader</li> </ul>
Peer Reviewer	<ul style="list-style-type: none"> <li>▪ Carefully and thoroughly examines the deliverable in terms of content and format following the guidelines of the peer review evaluation form.</li> </ul>

### 3.3.3 Deliverable review steps

The following steps are accepted as deliverable review process stages (although they can be adjusted depending on the size and complexity of the deliverable). During this process, it is highly recommended that the electronic repository (NextCloud) is used for the exchange of documents.

Table 4. SENTINEL Deliverable Review Process

Step	Role	Responsibility	Timeline*
1	Deliverable Leader	▪ Sets up the deliverable structure – Table of Contents (ToC)	>2 months
		▪ Contacts the contributors and coordinates the creation of the deliverable	
		▪ Sends the draft to the work package leader for a 1 <sup>st</sup> review	>1 month
2	Work Package Leader	▪ Evaluates the deliverable and either accepts it and forwards it to the QAM for peer review or returns it back to the Deliverable Leader with recommendations	>2 weeks to 1 month
3	Deliverable Leader	▪ Addresses any feedback from the WPL and sends the latest version to the QAM	>2 weeks
4	Quality Manager	▪ Evaluates the deliverable and either forwards it to the pre-assigned peer reviewers or returns it to the Deliverable Leader with recommendations	>2 weeks to 1 month

\* Timeline refers to months/weeks before the deliverable's due date.

Once all the previous iterations are concluded and the final draft is ready, the QAM initiates the peer review process. The review process should be initiated **2 weeks to 1 month** before the official submission date (depending on the size and complexity of the deliverable, as well as the overall timeline, possible delays, etc.). The assignment plan of deliverable reviewers has been updated and is presented in Appendix IV. In parallel to the project progress, assignments have been slightly changed depending on partners' availability or increased review needs.

## 4. Conclusion

This document represents the conclusive edition of "The SENTINEL's QA Plan & Periodic Monitoring Report." It provides the latest details concerning practical information regarding the project's quality assurance plan and its periodic monitoring processes. Its preliminary aim is to upgrade and finalise:

- the procedures followed by the SENTINEL consortium to guarantee the highest possible quality for the project results expected by the EC.
- the overall project governance, management, monitoring, and quality assurance procedures.

The quality management methodologies proposed are clearly outlined and applicable across all project endeavors, facilitating precise project monitoring and management. Ensuring proper monitoring, coordination, and seamless execution of work mandates adherence to the rules and methodologies delineated in this report for every SENTINEL partner. The three iterations of the pertinent document have been designated as "public" and are readily accessible to partners and the audience via the NextCloud repository (for the consortium), as well as the SENTINEL website's 'knowledge hub' section.

## Appendices

### Appendix - I: Peer review document

#### Overall Peer Review Result

Deliverable is:

<input type="checkbox"/> Fully accepted	<input type="checkbox"/> Accepted with minor comments	<input type="checkbox"/> Rejected unless modified as suggested	<input type="checkbox"/> Rejected
---	---	--	-----------------------------------

#### Specific peer review criteria:

1. **Relevance** - “Is this deliverable relevant to SENTINEL and to the particular WP activities it covers?”
2. **Methodological framework soundness** - “Are the results arbitrary or based upon a clear methodology, involving users’ test, expert opinions, etc.?”
3. **Quality of achievements** – “Are the results of high value and as expected”?
4. **Quality of presentation of achievements** – “Are the results adequately explained and commented?”
5. **Deliverable layout / spelling / format** – “Does the deliverable include all necessary chapters; is it readable in comprehensive language, etc.?”

#### COMMENTS OF PEER REVIEWER

##### General comments

*These refer to any issue not covered by the particular topics below. They may refer to thoroughness of general contents, correspondence of the reported work to the project’s objectives as in the Description of Action and correspondence to the general programme objectives.*

## Appendix - II: SENTINEL Agenda template

### Name of event/meeting

**SENTINEL**

Bridging the security, privacy and data protection gap for smaller enterprises in Europe

### AGENDA

xx month year

start\_time-end\_time CET

**HORIZON 2020 WORK PROGRAMME 2018-2020**

**Call:** H2020-SU-DS-2018-2020: Digital Security

**Topic:** SU-DS03-2019-2020 *Small and Medium-sized Enterprises and Micro Enterprises (SMEs&MEs): defenders of security, privacy and personal data protection*

**Consortium:** ITML, LIST, IDIR, INTRA, STS, AEGIS, TUC, ACS, UNINOVA, CG, TIG, CECL, FP



<b>Project No</b>	101021659
<b>Instrument</b>	Innovation Action
<b>Start Date</b>	June 1 <sup>st</sup> , 2021
<b>Duration</b>	36 months
<b>Coordinator</b>	ITML

	Registration and Coffee	
<b>Session 1: Name of Session 1</b>		
<b>Moderator: Partner</b>		
11:00 – 11:30	Coffee Break	
<b>Session 2: Name of Session 2</b>		
<b>Moderator: Partner</b>		
14:15 – 15:00	Lunch	
<b>Session 3: Name of Session 3</b>		
<b>Moderator: Partner</b>		
16:30 – 16:40	Break	
<b>Wrap-up, Next meeting, Issues, AOB</b>		



## Appendix - III: SENTINEL Minutes of Meeting template

**Name of meeting DD Month Year**

**Minutes**

### 1. List of Participants

Name	Surname	Organisation

### 2. Presentation material and agenda

Presentations have been given according to the agenda and are all available to the consortium in our NextCloud repository (<https://nextcloud.sentinel-project.eu>) (03\_Meetings/ .....).

### 3. Main discussion points

### 4. Action Points

### 5. Next steps

## Appendix - IV: Internal Review Planning

Del. No	Del. Title	WP	Leader	Type	Dissem.	Rev1	Rev2	Date
D1.1	The SENTINEL baseline	1	IDIR	R	PU	UNINOVA	ITML	09/2021
D1.2	The SENTINEL technical architecture	1	INTRA	R	PU	ITML	TIG	11/2021
D1.3	The SENTINEL experimentation protocol	1	IDIR	R	PU	ITML	LIST	11/2021
D2.1	The SENTINEL privacy & data protection suite for SMEs/MEs: MVP	2	ITML	DEM	PU	INTRA	ACS	05/2022
D2.2	The SENTINEL privacy & data protection suite for SMEs/MEs: Full-featured version	2	FP	DEM	PU	UNINOVA	LIST	11/2022
D2.3	The SENTINEL privacy & data protection suite for SMEs/MEs: Final product	2	LIST	DEM	PU	ITML	UNINOVA	11/2023
D2.4	Continuous data privacy legislation compliance monitoring and guidelines – interim version	2	CECL	R	PU	INTRA	IDIR	11/2022
D2.5	Continuous data privacy legislation compliance monitoring and guidelines – final version	2	CECL	R	PU	AEGIS	FP	11/2023
D3.1	The SENTINEL digital core: MVP	3	ITML	DEM	PU	ACS	TUC (former TSI)	05/2022
D3.2	The SENTINEL digital core: Full-featured version	3	ITML	DEM	PU	CG	ACS	11/2022
D3.3	The SENTINEL digital core: Final product	3	ITML	DEM	PU	TIG	UNINOVA	11/2023
D4.1	The SENTINEL services: MVP	4	IDIR	DEM	PU	LIST	ITML	05/2022
D4.2	The SENTINEL services: Full-featured version	4	STS	DEM	PU	TUC (former TSI)	ITML	11/2022

## D8.7 - The SENTINEL QA plan and periodic monitoring report - final version

D4.3	The SENTINEL services: Final product	4	ACS	DEM	PU	CG	IDIR	11/2023
D5.1	The SENTINEL visualisation and UI component – first version	5	AEGIS	DEM	PU	ITML	STS	05/2022
D5.2	The SENTINEL visualisation and UI component – second version	5	AEGIS	DEM	PU	ITML	INTRA	11/2022
D5.3	The SENTINEL visualisation and UI component – final version	5	AEGIS	DEM	PU	ACS	ITML	11/2023
D5.4	The SENTINEL Minimum Viable Product	5	INTRA	R+DEM	PU	ITML	AEGIS	05/2022
D5.5	The SENTINEL integrated solution – interim version	5	INTRA	R+DEM	PU	FP	IDIR	12/2022
D5.6	The SENTINEL integrated solution – final version	5	INTRA	R+DEM	PU	LIST	TIG	11/2023
D5.7	Best practices for maintaining and operating the system in the long-term – TRL 7	5	UNINOVA	R	PU	CG	ITML	05/2024
D6.1	SENTINEL Demonstration - initial execution and evaluation	6	TIG	R	CO	ITML	IDIR	11/2022
D6.2	SENTINEL Demonstration - final execution	6	CG	R	PU	FP	AEGIS	11/2023
D6.3	Assessment report and impact analysis	6	STS	R	PU	TUC	LIST	05/2024
D7.1	The SENTINEL website and visual identity	7	ITML	R+DEM	PU	UNINOVA	CECL	07/2021
D7.2	Market analysis and preliminary business modelling	7	AEGIS	R	CO	INTRA	ACS	11/2021
D7.3	Dissemination strategy and activities – interim version	7	UNINOVA	R	PU	ITML	AEGIS	11/2022
D7.4	Dissemination strategy and activities – final version	7	UNINOVA	R	PU	STS	ITML	05/2024
D7.5	Ecosystem building and SMEs engagement report – interim version	7	UNINOVA	R	PU	CECL	FP	11/2022

## D8.7 - The SENTINEL QA plan and periodic monitoring report - final version

D7.6	Ecosystem building and SMEs engagement report – final version	7	UNINOVA	R	PU	AEGIS	FP	05/2024
D7.7	Exploitation strategy, standardisation activities and best practices – interim version	7	STS	R	CO	ITML	AEGIS	11/2022
D7.8	Exploitation strategy, standardisation activities and best practices – final version	7	STS	R	CO	ITML	ACS	05/2024
D7.9	Final business model, market analysis and long-term sustainability report	7	AEGIS	R	PU	IDIR	INTRA	05/2024
D8.1	Yearly project management report – first version	8	ITML	R	PU	AEGIS	IDIR	05/2022
D8.2	Yearly project management report – second version	8	ITML	R	PU	INTRA	IDIR	05/2023
D8.3	Yearly project management report – third version	8	ITML	R	PU	IDIR	STS	05/2024
D8.4	Risk identification and management & quality plan	8	ITML	R	CO	TUC (former TSI)	IDIR	11/2021
D8.5	The SENTINEL QA plan and periodic monitoring report – first version	8	ITML	R	PU	IDIR	AEGIS	08/2021
D8.6	The SENTINEL QA plan and periodic monitoring report – second version	8	ITML	R	PU	FP	INTRA	11/2022
D8.7	The SENTINEL QA plan and periodic monitoring report – final version	8	ITML	R	PU	INTRA	CECL	05/2024
D8.8	The SENTINEL project handbook – first version	8	ITML	R	PU	CECL	INTRA	09/2021
D8.9	The SENTINEL data management plan	8	ITML	ORDP	PU	TUC (former TSI)	STS	11/2021
D8.10	The SENTINEL project handbook – second version	8	ITML	R	PU	ACS	IDIR	05/2022
D8.11	The SENTINEL project handbook – third version	8	ITML	R	PU	STS	IDIR	05/2023

D8.7 - The SENTINEL QA plan and periodic monitoring report - final version

---

D8.12	The SENTINEL technical and innovation management report – interim version	8	INTRA	R	CO	AEGIS	ACS	11/2022
D8.13	The SENTINEL technical and innovation management report – final version	8	INTRA	R	CO	ITML	STS	05/2024
D8.14	Ethics manual and ethical controlling report – interim version	8	CECL	R	CO	ITML	FP	11/2022
D8.15	Ethics manual and ethical controlling report – final version	8	CECL	R	CO	CG	LIST	05/2024
D9.1	POPD – Requirement No. 1	9	ITML	Ethics	CO	CECL	FP	09/2021