



ATENA



H2020-DS-2015-1-Project 700581

Advanced Tools to assEss and mitigate the criticality of ICT compoNents and their dependencies over Critical InfrAstructures

D1.1 - Quality Plan

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Executive Summary

The current deliverable is provided to European Commission to present the Quality Plan of the Innovation Action named “Advanced Tools to assEss and mitigate the criticality of ICT compoNents and their dependencies over Critical InfrAstructures” - Grant Agreement Number 700581 (shortly named with acronym ATENA).

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1 Introduction

1.1 Motivation and Context

The current deliverable is provided to European Commission (in the following referred as EC) to present the Quality Plan (QP) of the H2020 Innovation Action shortly named ATENA - Grant Agreement Number 700581.

This document collects the measures, roles and procedures for assessing the quality of project deliverables and the visibility and the impact of the project results, for the whole lifetime of the ATENA project.

1.2 Objectives and Scope

The present QP is compliant to the following Quality Assurance requirements:

- EN 9001:2008 [1]

This QP is applicable to all the consortium activities relevant to the GA [2] that are ruled according to Consortium Agreement [3].

This is a live document, that will be modified throughout the whole life of the ATENA project, in order to follow the evolution of the project.

Possible revisions of the present QP are under responsibility of the project PAM (Program Assurance Manager), a quality expert in the Project Management Team. The updates to the QP could be due to modifications of any of:

- Consortium Quality System Procedures
- Role and responsibilities within the project

Additional revisions of the present QP may be due to changes to the way the key performance indicators are calculated, for example because of improvement of measurement tools and procedures.

When revisions involve only project Internal Procedures and are not relevant to the content of the QP, they do not represent a reason to re-issue the QP itself.

1.3 Document Structure

The document is made of several chapters, which respectively deals with:

- Chapter 1 is the present introduction
- Chapter 2 sums up the key points related to ATENA project, and needed for the following chapters
- Chapter 3 describes the quality objectives, defining the KPIs to quantitatively measure the quality of important aspects of the projects
- Chapter 4 sums up the organisation of ATENA project, introducing some key roles involved as stakeholders in the quality process
- Chapter 5 describes the activities of the Quality Management System in ATENA
- Chapter 6 describes the rules for producing the expected deliverables, and the process to be adopted when modifying, reviewing and validating a deliverable in ATENA.

- Chapter 7 is a listing of quality records established for ATENA.
- Chapter 8 contains the bibliographic references

1.4 Acronym and symbols

Acronym or symbols	Explanation
CA	Consortium Agreement
CI	Critical Infrastructure
EC	European Commission
GA	Grant Agreement
IACS	Industrial and Automation Control System
ICT	Information & Communication Technology
KPI	Key Process Indicator
PAM	Program Assurance Manager
PC	Project Coordinator
PM	Project Manager
PMT	Project Management Team
QA	Quality Assurance
QAR	Quality Audit Report
QP	Quality Plan
SC	Steering Committee
SCADA	Supervisory Control and Data Acquisition
WBS	Work Breakdown Structure
WP	Work Package

2 Project Description

Note: The project description (with the list of envisaged WPs, deliverables and milestones) is inserted for the sake of completeness and easy reference for following section, in order to give a minimal context to the quality plan. For a detailed and official description of the project, readers are invited to refer to the Grant Agreement of the Innovation Action [2].

Over recent years, Industrial and Automation Control Systems (IACSs) and Supervisory Control and Data Acquisition (SCADA) systems adopted in industry-related Essential Services (traditionally known as Critical Infrastructures, and referred in the following as CIs) have become more complex due to the increasing number of interconnected distributed devices, sensors and actuators and to the large amount of information exchanged among system components. With the emergency of such an “Internet of Things” generation of IACS, the boundaries to be protected have grown well beyond that of the single or aggregated-plant, typical of the mono-operator vision. At the same time, new ICT paradigms provide interesting new features for flexibly and efficiently managing, monitoring and controlling devices and data traffic, but they may introduce new threats that potentially can impact CIs. The aim of ATENA project is to provide new tools and models capable of protecting the whole value chain of CIs, while preserving their efficient and flexible management.

ATENA will develop an innovative framework of tools and processes to increase security and resilience of CIs, by combining new anomaly detection algorithms and risk assessment methodologies within a distributed cyber-physical environment, and will provide a suite of integrated market-ready ICT networked components and advanced tools embedding innovative algorithms for both correct static CI configuration and fast dynamic CI reaction in presence of adverse events.

More in detail, ATENA objectives are:

1. Develop a Unified Modelling Framework with ad-hoc models to control physical flow efficiency and to improve resilience across CIs against threats of their IACSs and of their related ICT infrastructures;
2. Develop methodologies and technologies for increasing auto-reconfiguring capability of ICT-controlled CIs;
3. Develop new anomaly detection algorithms and risk assessment methodologies within a distributed ICT-controlled CI environment;
4. Develop a suite of integrated market-ready ICT networked components for detection and reaction in the presence of adverse events in industrial distributed systems;
5. Validate the ATENA models and tool suite in significant Use Cases.

The ATENA project has an overall length of 36 months.

2.1 Work Breakdown Structure

The WBS of the project is shortly displayed in the following table:

WP no.	WP Title	Lead Beneficiary	Start Month	End Month
WP1	Project Management	FNM	1	36
WP2	Resilience & Efficiency models for flow prediction across CIs against adverse events on their IACS	ENEA	1	36

WP no.	WP Title	Lead Beneficiary	Start Month	End Month
WP3	IACS design for security	CRAT	1	30
WP4	Distributed Awareness	UC	5	30
WP5	Distributed Mitigation and Resiliency in interdependent scenario	UNIROMA3	3	30
WP6	Development and components Integration	FNM	9	36
WP7	Validation and evaluation	IEC	3	36
WP8	Project dissemination and commercial strategy	ITRUST	1	36

Table 1: Work Package List

2.1.1 Deliverables

A long list of deliverables with their deadline is described in [4] (section 1.3.2 WT2 List of deliverables). Please refer to that list when evaluating the KPIs in section 3.1.

2.1.2 Milestones

The list of the milestones is described in the following table (see also section 1.3.4 WT4 List of milestones in [4]). Please refer to the original list in [4] for the verification criteria:

MS no.	Milestone title	WPs involved	Who	Due Month	Delivery Documents
MS1	Quality, training, dissemination and communication plans ready	WP1, WP8	FNM	3	D1.1, D8.1
MS2	SoTA interim assessment	WP2, WP3, WP5	FNM	6	D2.1, D3.1, D5.1
MS3	1 st project review	WP1, WP2, WP3, WP5, WP6, WP8	FNM	12	D1.2, D1.3, D1.4, D2.2, D2.3, D2.4, D3.2, D5.2, D5.6, D6.1, D8.2, D8.3, D8.4, D8.5
MS4	Consolidated ATENA system requirements and specifications	WP1, WP2, WP3, WP4, WP5, WP7, WP8	FNM	20	D1.5, D1.6, D1.7, D2.5, D3.3, D3.4, D3.6, D4.1, D4.2, D4.3, D5.3, D5.4, D7.1, D8.6, D8.7, D8.8, D8.9, D8.10, D8.11
MS5	2 nd project review	WP3, WP4, WP5, WP6, WP7	FNM	24	D3.5, D4.4, D4.5, D5.7, D6.2, D7.2, D7.3
MS6	1 st release of the ATENA software components	WP3, WP4, WP5, WP6	FNM	30	D3.7, D3.8, D3.9, D4.6, D4.7, D4.8, D5.5, D5.8, D5.9,

MS no.	Milestone title	WPs involved	Who	Due Month	Delivery Documents
					D6.3
MS7	1 st release of the integrated tools suite, 2 nd release of the software components	WP2, WP6	FNM	33	D2.6, D6.4, D6.5, D6.6
MS8	Final project review	WP1, WP2, WP6, WP7, WP8	FNM	36	D1.8, D1.9, D1.10, D2.7, D2.8, D6.7, D6.8, D7.4, D7.5, D8.12, D8.13, D8.14, D8.15, D8.16, D8.17, D8.18

Table 2: Milestone List

3 Quality Objectives

As regards quality objectives, metrics have been identified and summarised in two classes:

- Governance metrics: the indicators for effective governance & project management;
- Service metrics: the indicators defined for the service provision.

Each quality objective will be identified by a KPI and defined by a set of elements (ID, Name, Scope, Description, Class, Basic Measurable Data, Unit of measure, Formula, Acceptance criteria, Time of measuring, Time of reporting, Notes) according to the following annotated table schema:

(Unique) ID - Name (a short title for the KPI)			
Scope – (the aim and the scope of the KPI - purpose of the metrics)			
Description – (a description of the KPI's measurements)			
Class	Basic Data	Unit	Acceptance Criteria
<i>(Type of KPI, according to a defined classification; in this case class is Governance or Service)</i>	<i>(Data element useful for the calculation of the KPI)</i>	<i>(Type of Measure for the calculated KPI)</i>	<i>(Measurable criteria for establishing if the KPI is accepted or not)</i>
Time of measuring: <i>(when the basic data elements are measured)</i>			
Formula: <i>(formula to calculate the KPI starting from the basic data elements)</i>			
Time of reporting: <i>(when the KPI is reported)</i>			
Notes: <i>(additional comments; e.g., explanations on the decisions behind the KPI definition or possibly additional hints for calculation)</i>			

Table 3: Annotated schema for KPI description

3.1 Governance metrics

The governance metrics directly measure the effectiveness in WP1. Indirectly, they also measure the effectiveness in all the other WPs, because all the WPs have to provide the PC with the envisaged deliverables within scheduled deadlines.

KPI01 - Delivery to PC			
Scope	Check the compliance with the deadlines of the internal schedule agreed among WP leaders and PC, establishing when each WP leader has to provide the reviewed/validated version of the deliverables to the Project Coordinator (PC)		
Description	Average delay (number of working days late with respect to the schedule) on delivering the envisaged deliverables to PC		
Class	Basic Data	Unit	Acceptance Criteria
Governance	DaySub: Date of the email to submit the deliverable to PC (notification) DayDead: Scheduled deadline for delivery (notification) NoDeliverables: Number of expected deliveries in reporting time periods M1-11, M12-18, M18-36	Working days	KPI01 ≤ 3

Time of measuring:	at delivery time
Formula:	$KPI01 = \sum_{Deliverables} \left(\frac{\max(DaySub - DayDead; 0)}{NoDeliverables} \right)$
Time of reporting (month):	M11, M18, M36 (in the planned reports for project review)
<p>Notes: The average number of days is calculated for the project as a whole in each reporting periods, starting from the data elements related to each single deliverable. Deliverables submitted in advance of the schedule do not compensate for delay on the submission of other deliverables. No real interest to maintain the average number of days per single WP.</p>	

Table 4: KPI01 – Delivery to PC

KPI02 - Delivery to EC			
Scope	Check compliance with the deadlines of the schedule promised to EC (European Commission) in the Grant Agreement [2], establishing when the PC is asked to provide the final version of each deliverable to the EC		
Description	Maximum delay (number of working days late with respect to the schedule) on delivering the envisaged deliverable to EC		
Class	Basic Data	Unit	Acceptance Criteria
Governance	DaySub: Date of submission of the deliverable to EC (on Participant Portal) DayDead: Scheduled deadline for the delivery according to GA noDeliverables: number of expected deliveries in reporting time periods M1-11, M12-18, M18-36	Working days	KPI02 ≤ 1
Time of measuring: on submission of the deliverable Formula: $KPI02 = \max(DaySub - DayDead ; 0)$ Time of reporting (month): M11, M18, M36 (in the planned reports for project review)			
<p>Notes: The number of days is calculated for the project as a whole in each reporting period, starting from the data elements related to each single deliverable. Deliverables submitted in advance to the schedule do not compensate for delay on the submission of other deliverables. No real interest to maintain the average number of days per single WP.</p>			

Table 5: KPI02 – Delivery to EC

KPI03 - Risk Management			
Scope	Check the periodic revision of the risks (intended as risks and opportunities) associated to the ATENA project		
Description	Periodic (at least quarterly) occurrence of risk management activities inside the ATENA Project Management Team		
Class	Basic Data	Unit	Acceptance Criteria
Governance	Events: distinct times (sessions) when the PMT works on the revision of the critical implementation risks and their related mitigation actions (occurring in a quarter)	Number of times	KPI03 ≥ 1

Time of measuring:	at the end of the session of revision of the risks
Formula:	$KPI03 = \sum \text{times the PMT was working on risks (during the quarter)}$
Time of reporting (month):	M11, M18, M36 (in the planned reports for project review)
Notes: The number of times is calculated in each reporting period, counting the number of work sessions when PMT worked on the risks during a past quarter.	

Table 6: KPI03 – Risk Management

3.2 Service Metrics

The service metrics for ATENA will measure the communication effectiveness in the WP8 and will be measured according to KPIs that will be coherent with the values claimed in the GA - Table 8 page 39 [5]:

KPI	Means	Metric	Poor	Good	Excellent
KPI04	Project website	Number of Website views (by year)	<5000	5000-10000	>10000
KPI05	Social media	Number of Followers (from the start of the Project)	<50	50-100	>100
KPI06	Press releases & newsletters	Number of press releases and newsletters (by year)	<2	2-5	>5
KPI07	Scientific publications	Number of Papers in scientific journals and international conferences (by year)	<7	7-10	>10

Table 7: KPI04, KPI05, KPI06, KPI07 - Communication effectiveness

The table above is inserted in a format that is as similar as possible to mentioned Table 8 page 39 [5] in order to show the fact that promised metrics and acceptance criteria are kept unchanged wrt the GA.

The described KPI04, KPI05, KPI06, KPI07 are very simple to calculate, being simply the count of distinct occurrences of the relevant metric of interest. For this reason, hopefully the reader will forgive us if we decide to avoid adding four distinct KPI description tables just to repeat the same content.

In addition, a KPI measuring the website (un)availability is introduced in the following table:

KPI08 - Website Unavailability			
Scope – Check the availability of the ATENA public website			
Description – How long (in hours) the website is not accessible from the Internet			
Class	Basic Data	Unit	Acceptance Criteria
Service	HoursDown: number of hours when the Project website is down noHours: calendar hours in reporting time periods M1-11, M12-18, M18-36	Percentage	KPI08 <= 3%

Time of measuring:	before M11, M18 and M36, with the periodicity allowed by the automatic measurement tools chosen by the web site administrator
Formula:	$KPI04 = \text{HoursDown} / \text{noHours}$
Time Reporting (month):	M11, M18, M36 (in the planned reports for project review)
<p>Notes: This KPI is measured since the day the web site is publicly declared as ready (M3). It is calculated in working hours, not in working days, in order to correctly cope with events when a very short lapse of service occurs in a day, while the website is fully working in the rest of the day. Measured unavailability may be due to a number of reasons, external (e.g., electric black-out) or internal (e.g., extraordinary maintenance). Whenever possible with automatic measurement tools chosen by the web site administrator, a differentiated measure will be reported</p>	

Table 8: KPI08 - Website Unavailability

3.3 Measurements

The measurements of KPIs will be calculated by the PAM with the support of the relevant basic data made available by other project partners, in particular the PC (Governance Metrics) and the project WP8 leader (Service Metrics).

4 Organization and Responsibilities

4.1 Project Organization

The project organisation for ATENA is thoroughly described in [5] (section B.3.2.2 Operational Management Structure, page 44). Here a graphical view of the organisation is shown for the sake of completeness of the Quality Plan:

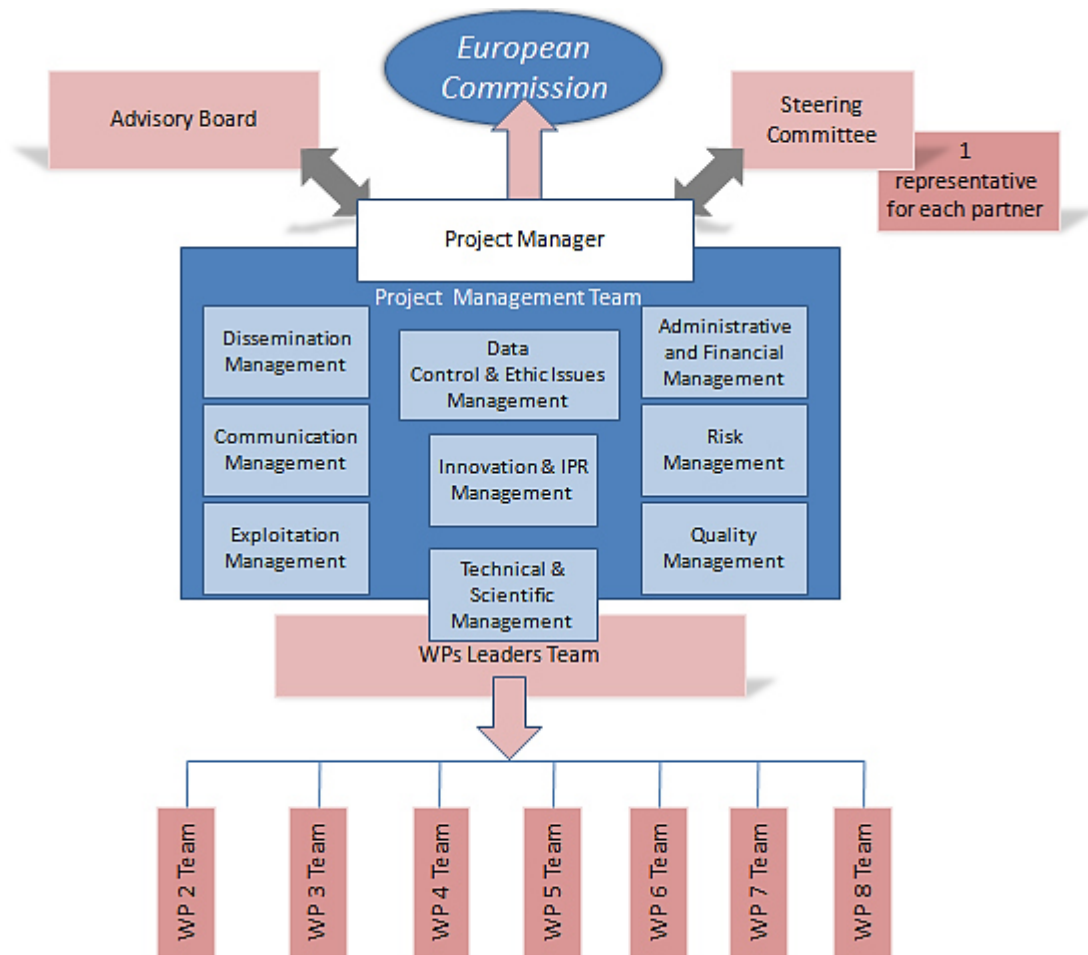


Figure 1: Operational Structure

4.2 Responsibilities

The organisation is composed by:

- A Governance Structure;
- An Operative Structure.

The Governance Structure has in charge all the management activities and is composed by:

- **Project Manager (PM):** he/she is a representative of the Project Coordinator (PC) who has the overall technical and administrative responsibility for the project and is the contact with the European Commission (EC). For the sake of simplicity, the PM is often named as PC, even if formally speaking this is not correct.

- **Project Management Team (PMT):** a team of people supporting the PM in the daily duties and comprising the following functions (sometimes appointed to the same person):
 - Administrative and Financial Management
 - Quality Management
 - Risk Management
 - Innovation and IPR Management
 - Dissemination (including standardisation)
 - Communication
 - Exploitation
 - Technical & Scientific Coordination (also representing WP Leaders)
 - Data Control and Ethical Aspects

It is worth noting that, according to the present QP naming, the Quality Management of ATENA is done by the PAM (Program Assurance Manager) who is the responsible for the Quality of the ATENA project and is part of PMT.

- **Steering Committee (SC):** a collegial body, chaired by the PM and including one delegate representative from each partner of the consortium, with the responsibility to oversee the overall progress of the project, verify the compliance of project advances with the milestones, and solve possible consortium-level problems.

The Operative Structure has in charge all the technical WP activities and is composed by:

- **WP Leaders Team (WPL Team):** a team composed of the seven technical WP leaders; each WP Leader has the responsibility for the proper management and execution of the WP activity and the compliance with the envisaged dates;
- **WP Team (WP Team):** a team composed by the partners involved in the specific WP; the team is responsible for the implementation of the WP's activities.

5 Activities for the Quality Management System

Quality Management implemented in ATENA is made up of activities performed to coordinate, lead and keep under control all the items concerned with the quality of project and processes.

The Quality Management is implemented through a set of activities:

- **Quality Planning:** identifying the quality objectives, the quality standards, the methodologies to ensure the measure and the monitoring of processes; creating the quality environment and how to satisfy them; planning review and inspection. The description of this activity is in the Quality Plan (QP) document;
- **Quality Assurance:** applying systematically quality to all activities of the project, to ensure requirements are met; preventing defects by recurring audits in order to evaluate quality and to define corrective measures;
- **Quality Measurement and Control:** measuring and monitoring results to determine whether they comply with standards, to prevent potential problems or once they occur to eliminate the causes of unsatisfactory performance by eliminating the roots of identified defects;
- **Quality Analysis & Improvement:** monitoring, measurement and analysis of processes, to set the necessary actions to achieve results and the continuous processes improvement.

5.1 Quality Plan

During the execution of ATENA, the PAM involved in the ATENA project performs internal audits on management, planning and development processes.

The audits consist in the examination of a representative sample of documentation and/or other planned materials produced by these processes, with the following purposes:

- Verify that every deliverable (report or other kind of documentation), required by the GA or added to the list of planned deliverables because of EC's request or PMT's decision, exists and is subject to the established review and tests, by the competent offices in accordance with GA requirements and standards;
- Check the effective reach of planned milestones;
- Identify nonconformity and/or lacks of processes and delivery and start opportune corrections or corrective actions, verifying their application and effectiveness;
- Inform the PC about the quality status of the program.

The audits are documented in the Quality Audit Report (QAR).

The PAM keeps under continual control the audit planning, making the necessary updates in case of changes of the timing of the project schedule.

The following is a tentative timing table of the audits, but possible revisions are defined in agreement with PAM and PC.

Audit No.	Scope	Month
#1	Verify Management Activity & Delivery	M7 (after milestones MS1 and MS2)
#2	Verify Management Activity & Delivery Verify Activity of critical WPs	M21 (after milestones MS3 and MS4)

#3	Verify Management Activity & Delivery Verify Activity of WPs	M31 (after milestones MS5 and MS6)
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Table 9: Audit Timetable

5.2 Internal Project Reviews

Recurrently and within the jointly agreed period of time (after the quality audits mentioned in 5.1), the PC organizes a project review where the Project Management Team and the Steering Committee members are involved.

The agenda of this review is pre-established and ensures that all following domains are systematically covered, namely: contractual aspects, planning and progress achieved, status of deliverables, KPI, risk analysis and assessment.

5.3 Verification and Approval of Deliverables

PAM checks and reviews any project deliverables before submission to EC. The result of the verification is reported in an internal note and sent to the Project Coordinator for the opportune review.

The Verification Process is described in section 6.5.

5.4 Analysis and Improvement

The Consortium will identify, collect and analyze data to demonstrate the adequacy and effectiveness of quality management and to evaluate where improvements can be made to continue the effectiveness of the quality management system.

In order:

- to maintain a precise technical control on deliverables, any products or technical problems or remarks from EC, highlighted by technical bodies corporate or EC, will be formalized on reports for tracking in a single database the state of technical problems and the activated actions for their resolution;
- KPI results will be recorded and analyzed to identify areas for improvement.

These activities aim to continual improvement of the processes and, in general, of the factors which determine the success and its results.

The measures will be in input to the scheduled Internal Project Reviews (see section 5.2).

6 Documentation and Data Control

The documents issued by the Consortium, in relation to the ATENA project, must be checked and validated by the:

- WP Leader (with the help of internal reviewers chosen among experts in the consortium);
- Program Assurance Manager;
- Project Coordinator.

After the conclusion of the verification/approval process, the document is submitted to EC.

The author of the document is responsible for checking that the document respects the rules defined in this chapter.

The document modifications are described synthetically in the change log register. This description identifies the modified parts and the occurred change. If the document is widely modified, it is defined as completely reviewed, indicating, however, the review motivations.

6.1 Document Classification

Characteristic	Rule
Code	The code related to the deliverable (see section 2.1.1)
File Naming Convention for internal documents (intermediate versions)	<p><DocTitle>_<YYYYMMDD>_<ACR></p> <p>DocTitle: Title of the deliverable</p> <p>YYYY-MM-DD: Date of upload to the project file server or date of transmission (usually inside the Consortium by email)</p> <p>ACR: Reference of editor (short partner's name)</p>
File Naming Convention for official deliverable (intermediate versions)	<p><DX.X>_<DocTitle>_<YYYYMMDD>_<ACR></p> <p>DX.X: Code of the deliverable</p> <p>DocTitle: Title of the deliverable</p> <p>YYYYMMDD: Date of upload to the project file server or date of transmission (usually inside the Consortium by email)</p> <p>ACR: Reference of editor (short partner's name)</p>
Versioning	<p>Default version : M.N where:</p> <p>M: Major Version = 0,1,....</p> <p>N : Minor Version = 1,2,....</p> <p>New document as first version = 0.1</p>
Status	<p>Draft: the document is incomplete.</p> <p>Final Draft: the version considered is finished by the author(s) and delivered to the internal reviewer partners for final comments/remarks.</p> <p>Validation: the document is ready to be submitted for quality (the internal reviewer partners have given all the comments and the editor merged them into a ready-to-send version).</p> <p>Final: the document passed the quality checks and is ready to be submitted to EC or to other recipient (AFTER CHANGING THE FILENAME, THE VERSION AND THE FORMAT IN ORDER TO COMPLY WITH EC RULES AND/OR OPPORTUNITY REASONS)</p>

Table 10: Classification Document

6.2 Template

ATENA documents must follow the structure and physical layout agreed in the templates defined as a joint work of WP1 and WP8. The templates are made available for Consortium partners in the project web site (<https://www.aterna-h2020.eu>).

6.3 Standard and tools

All the documents must be written in English.

All the document deliverables are produced by means of the standard tools included in Microsoft® Office 2007® or later (or compatible tools): Microsoft® Word® (.docx), PowerPoint® (.pptx), and Excel® (.xlsx).

6.4 Modification and Update

The document modifications are described synthetically in the Change Log register. This description allows a simple identification of the modified parts and the comprehension of the change motivations to the recipients of the new review of the document.

If the document is widely modified, it is defined as completely reviewed, indicating, however, the review motivations.

After modification, the document follows the review procedures.

6.5 Review Procedures

In the following steps the process of internal review is described:

- The PC and the WP leader will define the time schedule for the deliverable, and the tentative names of internal expert reviewers;
- The WP leader (also known as Lead Beneficiary) prepares a Draft 0.1 version and send it to WP partners asking for comments and contributions;
- The involved partners may contribute by providing their proposals and contributions to the WP leader acting as editor, maintaining unchanged the Major.Minor numbering.
- Whenever the WP leader merges the partners' contributions and edit a new stable version, the WP leader decides to sent this new version to the partners with a different version numbering (increasing the Major numbering by one, putting the Minor to zero; or leaving unchanged the Major numbering and increasing the Minor numbering by one, as usual). At any time, the WP leader will have the master of the deliverable.
- When the deliverable is mature enough (at any time in the production of the deliverable, and possibly more times during the preparation, if it seems worth doing it) the WP leader provides internal expert reviewers with a Final Draft version, within the agreed deadline;
- The remarks originating from the internal review must be notified to the WP leader and WP partners.
- The WP leader – asking contributions to WP partners when needed - collects and analyses all the remarks providing adequate explanations and modifications when required. The WP leader is responsible for updating the document to take the accepted remarks into account;
- The WP leader provides the merged version (with status Validation) to the Project Coordinator within the agreed deadline;

- The Project Coordinator has to decide whether or not to involve partners in the Security Advisor Board according to the content and the nature of the deliverable;
- If needed, the Security Advisor Board is asked to assess the sensitivity aspects (only for the public deliverables that are possibly revealing sensitive information);
- The PAM assesses the quality review, and applies if needed the name, version and format conventions required by EC or considered as adequate for publishing externally to the Consortium (e.g. deleting the internal history change log). The status of the deliverable is now Final and a new versioning is especially defined for deliverables submitted to EC - so starting again from 1.0 independently from possible higher numbers in intermediate (i.e. non-Final) versions and, in case of future submissions, increasing this special EC-related version and updating the history change log of previously submitted Final deliverables;
- The Project Coordinator delivers the Final document to the EC.

7 Quality Records

In the table below are reported the quality records established for this project.

Document	To be delivered
Review Reports	No
KPI Reports	Yes
Test Plan	Yes
Test Report	No
Audit Report	No

Table 11:Quality Records

8 References

- [1] *ISO 9001:2008 — Quality management systems — Requirements*. On line (June 2016): http://www.iso.org/iso/catalogue_detail?csnumber=46486
- [2] *ATENA Grant Agreement Number 700581*, signed agreement, 2016
- [3] *ATENA Consortium Agreement 700581 IA under Horizon 2020*, internal agreement, 2016
- [4] *ATENA Grant Agreement Number 700581 - Annex 1 (part A)*, document included with separate numbering in [2] (pagg. 85-147), 2016
- [5] *ATENA Grant Agreement Number 700581 - Annex 1 (part B)*, document included with separate numbering in [2] (pagg. 212-301), 2016