D9.1 – PROJECT HANDBOOK

WP9 – MANAGE: Administrative and Technical Project Management

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ABSTRACT	This document serves as a guideline to all partners in regard to how they should collaborate with each other, which procedures are going to be followed and which tools are going to be used. Additionally, it provides the reader with a Quality Plan on how the quality of the operations taken place within the context of i4Q is going to be assured and measured.		

Document History

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0.1	27-Jan-2021	ToC	ToC created and sent for review	CERTH
0.2	22-Feb-2021	Working version	First input to all sections	CERTH

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0.5	18-Mar-2021	Final doc	Final quality check and issue of final document	CERTH

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ABBREVIATIONS/ACRONYMS

AB	Advisory board
CA	Consortium Agreement
CO	Consortium confidential
DM	Data Manager
DMP	Data management plan
EB	Executive Board
EC	European Commission
EU	European Union
GA	General Assembly
IM	Innovation Manager
IMC	Innovation and IPR Management Committee
IPR	Intellectual property rights
LM	Legal Manager
PC	Project coordinator
PMB	Project management board
PS	Project Secretariat
PU	Public
QCM	Quality Control Manager
RA	Responsible author
RIDS	IoT-based Reliable Industrial Data Services
RTD	Research and Technological Development
SP	SharePoint
TL	Task leader
TM	Technical Manager
WP	Work package
WPL	Work package leader

1. Executive summary

This document - Project Handbook (D9.1) - is the first deliverable of WP9 – Administrative and Technical Project Management. It will serve as reference point for all i4Q personnel in order to familiarise with the project's day-to-day operations, way of working, used tools and other relevant matters that guarantee an efficient and successful cooperation among the i4Q Consortium.

In brief, i4Q is a 3-year EU funded project that is focused on assisting the manufacturing domain with the challenges that it is currently facing. As a result, i4Q will produce a complete suite of 22 solutions consisting of sustainable IoT-based Reliable Industrial Data Services (RIDS) that will be able to manage the huge amount of industrial data coming from cost-effective, smart, and small size interconnected factory devices for supporting manufacturing online monitoring and control processes. The project involves 24 partners across Europe and Israel that have different backgrounds and expertise and are split into 5 main categories: end users, implementers, technology providers, research & development partners, technology providers and specialists (for dissemination/exploitation, legal and standardisation matters).

The project comprises of 10 different work packages, each of which focuses on a different aspect of the project and all of which aim at i4Q's final products (22 manufacturing solutions). Each partner has been allocated to specific tasks according to their expertise and additional roles have been given to some of them in order to supervise the processes that will be running for the project's entire duration: (i) project coordinator (CERTH), (ii) technical manager (UPV), (iii) quality control manager (UPV), (iv) innovation manager (FBA), (v) data manager (ITI), and (v) legal manager (LIF). Moreover, boards and committees have also been formed in order to consult all partners and accommodate the decision-making processes: (i) project management board, (ii) executive board, (iii) general assembly, (iv) innovation and intellectual property committee, (v) data management committee and (vi) external advisory board. The contractual obligations of the partners and the formed boards/committees as well as rules in regard to their internal cooperation may be found in the project's Grant and Consortium's Agreements, respectively.

In regard to their everyday way of operation, 2 main management tools have been chosen to facilitate the information and document exchange among partners: (i) Doku.wiki and (ii) SharePoint. Additionally, other electronic tools are used for everyday communication, such as a dedicated Google Calendar, dedicated mailing lists (administered by CERTH) and meeting platforms used for bi-weekly and ad-hoc calls.

In terms of progress and financial reporting, an internal report process will take place every 3-6 months and will be initiated by CERTH in order to monitor financial expenditure and technical progress. This input is going to be further used for the compilation of the official period reports the Consortium is obliged to submit in M18 and M36. Guidelines on the compilation of these reports are further explained below. During these internal reporting process (and throughout the project's lifetime) a Quality Plan set in Section 7 below is going to be followed and is going to be based on ensuring the high quality of research and technological development taking place within the context of this project. Complementary to this Quality Plan, a Risk Management process has been set in place in order to ensure that the Quality Plan is not going to be compromised by unforeseen factors. With the Risk Management process that is going to be followed by all partners, mitigation measures and corrective actions in case of a quality flaw identification are introduced.

The following section explains the main objectives and structure of this document.

2. Introduction

Deliverable D9.1, the Project Handbook, provides the reader with the basic and most important information of the project and supports the progress and the quality of the research in a successful and efficient way throughout the project's lifetime. This applies to the successful progress of all tasks and the creation of the deliverables.

In addition, all involved partners will have an active role in ensuring that their Task/Work Package (WP) is moving towards a successful path, by having established concrete evaluation strategies and specific indicators for each one of them. In this manner, the achievement of the objectives stated in the Grant Agreement could be monitored more easily and the current actions to be altered in a timely manner, if not efficient to the project's goals.

D9.1 shows the progression of the management procedures from the start of the project (January 2021) to the deliverable deadline (March 2021), which are also going to be followed for the entirety of its duration. It details the i4Q project from various perspectives, with a focus on management, financial and development procedures. The intent of the document is thus to effectively put all participants in the project on the same page concerning the locations of documents, the methodology of reporting (finances, efforts, tasks, and processes in the project.

The Project Handbook aims to serve as a guideline to all partners regarding the way of collaborating with each other, the procedures that are going to be followed and the tools to be used. Additionally, it provides the reader with a Quality Plan on how the quality of the operations taken place within the context of i4Q is going to be assured and measured. The goal of this document is to be used as a guide, anytime the partners or people that work in the project have questions, misunderstandings or would like to clarify issues with a fast, accurate and efficient way.

Here, in this section the skeleton/structure of the document is thoroughly described. More specifically, the project overview is presented in Section 3, including basic information about the project (Section 3.1) and an overview of the Consortium as a whole (Section 3.2). Section 3.3 focuses on the i4Q structure and work plan and is followed by Section 3.4 that is explaining the roles each partner will have in it. Sections 3.6 and 3.5 elaborate on the management structure that is adopted by the i4Q Consortium and the additional roles the partners are going to have. Finally, the contractual agreements are explained in Section 3.7 and the matters that are going to be ruled by each of them.

Section 4 addresses the tools that are being used in the i4Q project, the Doku.wiki (Section 4.1), the SharePoint (Section 4.2) and the Google Calendar (Section 4.3). Communication, such as mailing lists, online meeting platforms, external communication and dissemination are explained in Section 5. Furthermore, in Section 6 the reporting of the project, e.g., internal reporting, financial details, technical reports, and finally periodic reports are explained in detail.

The document continues with Section 7 and the presentation of the Quality Plan for both high quality research and high quality development, which include the deliverables and the project results, Section 8 where the Risk Management is analysed and finally with the conclusions in Section 9.

3. Project Overview

3.1 i4Q basic information

Manufacturing companies are continuously facing the challenge of redesigning and adjusting their systems to produce goods adapted to specific requirements and to produce under the minimum required production rate, guaranteeing high quality and limiting the use of resources. Therefore, reducing waste, scraps and defects, as well as production costs and lead times is crucial to increase productivity. In this context, the implementation of zero defect strategies plays a decisive role. Towards this goal, the i4Q Project will provide a complete suite of 22 solutions consisting of sustainable IoT-based Reliable Industrial Data Services (RIDS) that will be able to manage the huge amount of industrial data coming from cost-effective, smart, and small size interconnected factory devices for supporting manufacturing online monitoring and control. It will be able to guarantee the reliability of this data with functions grouped into five basic capabilities around the data cycle: (i) sensing, (ii) communication, (iii) computing infrastructure, (iv) storage, and (v) analysis and optimisation.

Start date	1-Jan-2021
End date	31-Dec-2023
Cost	€ 11,442,342
MAX EU budget	€ 9,997,486
Reporting periods	RP1 (Jan. 2021 – Jun. 2022), RP2 (Jul. 2022 – Dec. 2023)
Deliverables	119
Partners	24 partners from 11 European countries
Coordinator	Stefanos Vrochidis (CERTH)

Table 1. i4Q basic information

3.2 i4Q consortium

The i4Q consortium is made up of 24 partners, from 11 countries, that can be found in ***Table 2*** below.

ID	Organisation	Acronym	Logo	Country	Role
1	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS	CERTH	CERTH CENTRE FOR RESEARCH & TECHNOLOGY HELLAS	GR	R&D
2	ENGINEERING - INGEGNERIA INFORMATICA SPA	ENG	ENGINEERING	IT	TECH
3	IBM ISRAEL - SCIENCE AND TECHNOLOGY LTD	IBM	IBM	IL	TECH
4	INSTITUTO TECNOLOGICO DE INFORMATICA	ITI	ITI INVESTIGATE TO INNOVATE	ES	TECH

ID	Organisation	Acronym	Logo	Country	Role
5	KNOWLEDGEBIZ CONSULTING-SOCIEDADE DE CONSULTORIA EM GESTAO LDA	KBZ		PT	TECH
6	EXOS SOLUTIONS SL	EXOS		ES	TECH
7	IKERLAN S. COOP	IKER		ES	R&D
8	BIBA - BREMER INSTITUT FUER PRODUKTION UND LOGISTIK GMBH	BIBA		DE	R&D
9	UNIVERSITAT POLITECNICA DE VALENCIA	UPV		ES	R&D
10	TECHNISCHE UNIVERSITAT BERLIN	TUB		DE	R&D
11	UNINOVA-INSTITUTO DE DESENVOLVIMENTO DE NOVAS TECNOLOGIASASSOCIACAO	UNI		PT	R&D
12	TTTECH INDUSTRIAL AUTOMATION AG	TIAG		AT	IMP
13	CE.S.I. CENTRO STUDI INDUSTRIALI SRL	CESI		IT	IMP
14	AIMPLAS - ASOCIACION DE INVESTIGACION DE MATERIALES PLASTICOS Y CONEXAS	AIMPLAS		ES	IMP
15	FUNDINGBOX ACCELERATOR SP ZOO	FBA		DK	SPEC
16	LABORATOIRE VIRTUEL EUROPEEN DANS LE DOMAINE DE L'INTEROPERABILITE DESENTREPRISES	IVLAB		BE	SPEC
17	DIN DEUTSCHES INSTITUT FUER NORMUNG E.V	DIN		DE	SPEC
18	PRAVO I INTERNET FOUNDATION	LIF		BG	SPEC
19	WHIRLPOOL EMEA SPA	WHI		IT	USER
20	BIESSE SPA	BIES		IT	USER

ID	Organisation	Acronym	Logo	Country	Role
21	FACTOR INGENIERIA Y DICOLETAJE SL	FACT		ES	USER
22	RIA STONE FABRICA DE LOUCA DE MESAEM GRES SA	RIAS		PT	USER
23	FARPLAS OTOMOTIV ANONIM SIRKETI	FARP		TR	USER
24	FIDIA SPA	FIDIA		IT	USER

Table 2. i4Q Consortium

Each one of them is covering a different area of expertise necessary for the correct execution of the project. More specifically, the i4Q consortium is divided into:

- **Industrial partners** (USER): WHI (White goods manufacturer), BIES (Wood industrial equipment), FACT (Metal machining), RIAS (Ceramic pressing), FARP (Plastic injection), FIDIA (Metal industrial equipment)
- **Implementers** (IMP): TIAG (Industrial Communication Protocols and Standards), CESI (Machine tools, Advanced Materials, Micro-technology), AIMP (Thermoplastic and thermosetting plastic materials)
- **Technology providers** (TECH): IBM (Information Technologies Company), ENG (Software and Services Company), ITI (Information Technologies Institute), KBZ (Information Systems Company), EXOS (Operations Consulting Company)
- **Research & development** (R&D): IKER (Technological Centre), BIBA (Research Institute), UPV (Technical University), TUB (Technical University), UNI (Research Institute), CERTH (Research Institute)
- **Specialist Companies** (SPEC): FBA (Dissemination and Exploitation), IVLAB (Dissemination and Exploitation), DIN (Standardisation), LIF (Legal)

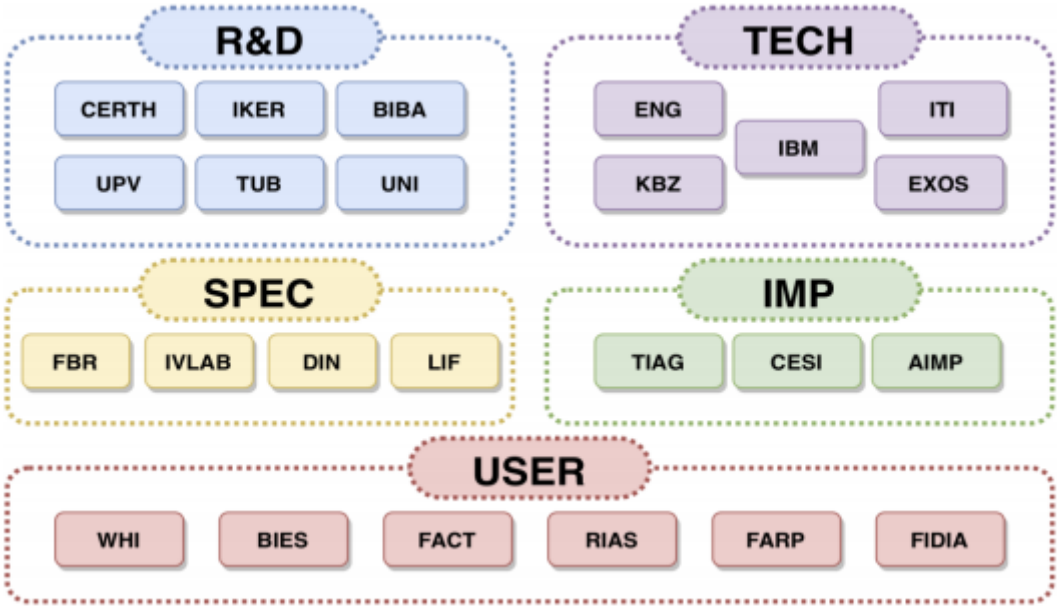


Figure 1. i4Q partners per category

3.3 i4Q structure

i4Q is split into 10 different work packages (WP) that may be found in ***Table 3*** below:

WP1 - NEED: Industrial Scenarios and Requirements Analysis. Leader: CERTH, PMs: 184, M1-M36
WP1 aims at defining a consensual project vision, establishing the state of the art in terms of technologies for quality in manufacturing, as well as regulation and trustworthy system for data management and setting the specifications driving the creation of i4Q Solutions and Key Performance Indicators. Additionally, this WP collects and analyses the technical and pilot requirements.
WP2 - DESIGN: i4Q Framework Design. Leader: ENG, PMs: 143, M1-M9
WP2 aims at providing a holistic approach to the design of the i4Q Framework, based on a clear and detailed Reference Architecture for i4Q. Furthermore, this WP will perform a detailed analysis of the different ontologies and data models to be used for supporting interoperability and data exchange among tools, platforms and organisations. The reference framework will be then described using multiple perspectives, such as the viewpoints related to business, usage, functional and implementation
WP3 - BUILD: Manufacturing Data Quality. Leader: ITI, PMs :156, M10-M24
WP3 aims at providing methodologies, tools and infrastructure to ensure the necessary data quality to enable operational intelligence and improve data analysis results effectiveness.
WP4 - BUILD: Manufacturing Data Analytics for Manufacturing Quality Assurance. Leader: UNINOVA, PMs: 167, M10-M24
WP4 aims at turning data into information and actionable insights. Ways to achieve this are to move analysis workloads close to the data sources, thus contributing to the reduction of the Big Data challenge. In addition, this WP helps with security / privacy aspects of the project, while maintaining a low latency response time which may be crucial for multiple occasions – e.g., in production facilities. Moreover, it communicates such insights to the end consumer, via smart monitoring and alerting mechanisms or through the integration with digital twins and other simulation models.
WP5 - BUILD: Rapid Manufacturing Line Qualification and Reconfiguration. Leader: IKERLAN, PMs: 154, M10-M24
WP5 aims at developing new and improved strategies and methods for process qualification as well as process reconfiguration and optimisation using existing manufacturing data and smart algorithms (e.g., machine learning).
WP6 - EVALUATE: Piloting and Demonstrating.

Leader: EXOS, PMs: 269, M10-M36
WP6 aims to act as the experimental base for the i4Q Solutions by applying the methodologies, software tools, and technologies developed by the consortium against specified and real-world scenarios and requirements as well as their exploitation potential.
WP7 - DISSEMINATE: Communication, Dissemination and Standardisation. Leader: IVLAB, PMs: 167.03, M1-M36
WP7 will disseminate and provide outreach of the project activities and results in order to encourage the spread of i4Q within and outside the industrial sector. This will result in paving the way for a broad adoption of i4Q Solutions both at B2B and consumers' level.
WP8 - EXPLOIT: Business Approach and Market Preparation. Leader: FBA, PMs: 107.3, M1-M36
The general objective of this work package is to facilitate technology uptake by the start-up company that is being created and long-term adoption of the i4Q Solutions by the industry.
WP9 - MANAGE: Administrative and Technical Project Management. Leader: CERTH, PMs: 115, M1-M36
WP9 aims to guarantee the success of the project objectives, related to management and innovation, are met by ensuring the successful completion of the project on-resource, on-quality and on time.
WP10 - Ethics requirements. Leader: CERTH, PMs: 0, M1-M36
This work package sets out the 'ethics requirements' that the project must comply with

Table 3. i4Q work packages

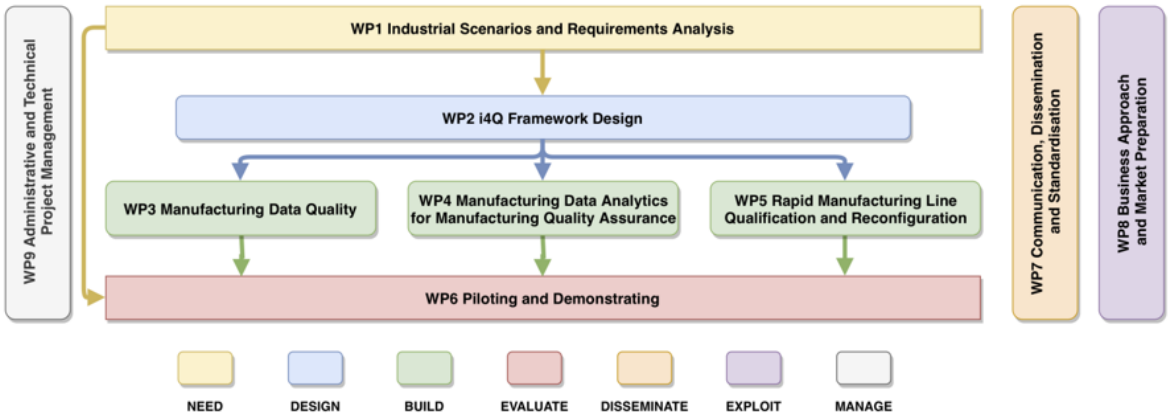
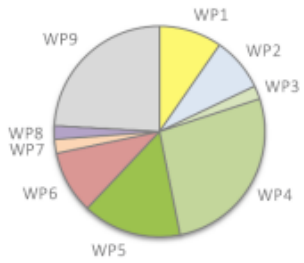


Figure 2. i4Q work packages correlations

3.4 Partners' roles in each WP

Apart from the leadership of certain WPs, some partners have a horizontal role in other WPs in order to assist the involved partners with the proper execution of their tasks. The contribution of each partner to the i4Q project may found summarized in the figures below:

CERTH



WP	PM	%
WP1	14	10%
WP2	12	8%
WP3	3	2%
WP4	39	27%
WP5	22	15%
WP6	14	10%
WP7	3,1	2%
WP8	3	2%
WP9	35	24%
Total	145,1	100%

Partner 1 CERTH
Role
Research & Development
Extra Leadership
Project Coordinator
Project Secretariat
General Assembly Chair
Executive Board Chair
Project Management Board Chair
WP Leadership
WP1 NEED: Industrial Scenarios and Requirements Analysis
WP9 MANAGE: Administrative and Technical Project Management

Deliverable Editor
D1.1 Project Vision Guide Document
D1.2 Benchmarking of Digital Technologies with potential to i4Q
D4.1 i4Q Data Integration and Transformation Services
D4.7 i4Q Infrastructure Monitoring
D5.2 i4Q Rapid Quality Diagnosis
D9.1 Project Handbook
D9.2 Strategic and Operational Coordination
D9.3 Periodic and Final Reports

Task Leadership
T1.1 Project Vision Consensus
T1.2 Benchmarking of Technologies for Quality in Manufacturing
T4.1 Manufacturing Data Integration and Fusion
T4.5 Smart Manufacturing Monitoring and Alerting
T5.2 Manufacturing Line Quality Diagnosis and Smart Alerting
T9.1 Project Management: Set Up, Quality Procedures, and Metric Definitions
T9.2 Project Management: Strategic and Operational Coordination
T9.3 Project management: EU Liaison, Reporting and Reviewing
Task viceLeadership
T4.6 Manufacturing Digital Simulation Models
T5.3 Simulation and Optimisation for Smart Manufacturing Line Reconfiguration Prescripti
T9.4 Technical Management: Leadership and Technical WP Reporting
T9.5 Technical Management: Ops Setup and Quality Control

Figure 3. CERTH contribution

ENG

WP	PM	%
WP1	9	8%
WP2	31	28%
WP3	22	20%
WP4	9	8%
WP5	0	0%
WP6	28	25%
WP7	3	3%
WP8	3	3%
WP9	6	5%
Total	111	100%

Partner 2 ENG
Role
Technology Provider
WP Leadership
WP2 DESIGN: i4Q Framework Design
WP viceLeadership
WP3 BUILD: Manufacturing Data Quality
Task Leadership
T2.1 i4Q Reference Framework
T2.3 Business Viewpoint
Task viceLeadership
T3.3 Manufacturing Data Trusted Communication and Distribution
T6.2 Pilot 2: BIESSE - Diagnostics and IoT Services
T6.3 Pilot 3: WHIRLPOOL - White Goods Product Quality
T6.8 Continuous Integration and Validation

Deliverable Editor
D2.1 i4Q Reference Architecture and Viewpoints Analysis
D2.3 Report on Business Viewpoint

Figure 4. ENG contribution

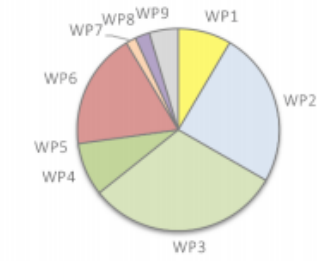
IBM

WP	PM	%	Partner 3 IBM
WP1	1	2%	**Role**
WP2	2	3%	Technology Provider
WP3	12	19%	**WP viceLeadership**
WP4	32	50%	WP4 BUILD: Manufacturing Data Analytics for Manufacturing Quality Assurance
WP5	0	0%	**Task Leadership**
WP6	6	9%	T3.2 Manufacturing Data Trustiness and Traceability
WP7	2,1	3%	T4.3 Scalable Policy-based Model Distribution from Cloud to Edge
WP8	3	5%	T4.4 AI Workload Placement and Deployment
WP9	6	9%	**Task viceLeadership**
Total	64,1	100%	T4.5 Smart Manufacturing Monitoring and Alerting

Deliverable Editor
D3.3 i4Q Blockchain Traceability of Data
D4.5 i4Q AI Models Distribution to the Edge
D4.6 i4Q Edge Workloads Placement and Deployment

Figure 5. IBM contribution

ITI

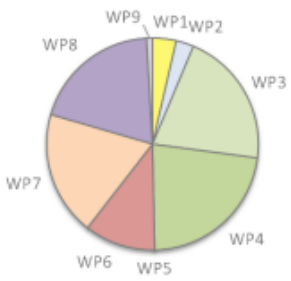


WP	PM	%	Partner 4 ITI
WP1	11	9%	**Role**
WP2	32	25%	Technology Provider
WP3	40	31%	**Extra Leadership**
WP4	11	9%	Data Manager
WP5	0	0%	Data Management Committee Chair
WP6	24	19%	**WP Leadership**
WP7	2,1	2%	WP3 BUILD: Manufacturing Data Quality
WP8	3	2%	**WP viceLeadership**
WP9	6	5%	WP2 DESIGN: i4Q Framework Design
Total	129,1	100%	**Task Leadership**

Deliverable Editor	
D1.6 Data Management Report	T2.4 Usage Viewpoint
D2.4 Report on Usage Viewpoint	T3.3 Manufacturing Data Trusted Communication and Distribution
D3.4 i4Q Trusted Networks with Wireless & Wired Industrial Interfaces	T3.5 Manufacturing Data Storage and Use
D3.7 i4Q Guidelines for Building Data Repositories for Industry 4.0	T6.8 Continuous Integration and Validation
D3.8 i4Q Data Repository	**Task viceLeadership**
D6.8 Continuous Integration and Validation Report	T1.5 Regulation and Trustworthy System / Data Management
D6.9 i4Q Solutions Handbook	T2.5 Functional Viewpoint
	T2.6 Implementation Viewpoint
	T3.4 Manufacturing Data Security
	T4.3 Scalable Policy-based Model Distribution from Cloud to Edge
	T4.4 AI Workload Placement and Deployment
	T6.1 Pilot 1: FIDIA - Smart Quality in CNC Machining
	T6.6 Pilot 6: FARPLAS - Automatic Advanced Inspection of Automotive Plastic Parts

Figure 6. ITI contribution

KBZ



WP	PM	%	Partner 5 KBZ
WP1	4	4%	**Role**
WP2	3	3%	Technology Provider
WP3	23	21%	**WP viceLeadership**
WP4	25	23%	WP7 DISSEMINATE: Communication, Dissemination and Standardisation
WP5	0	0%	WP8 EXPLOIT: Business Approach and Market Preparation
WP6	12	11%	**Task Leadership**
WP7	21	19%	T7.3 Impact Activities: Awareness and Outreach, Community Building
WP8	21,7	20%	T8.2 Market Analysis and PEDR
WP9	1	1%	T8.5 Creation of i4Q Startup and Sustainability Analysis
Total	110,7	100%	**Task viceLeadership**

Deliverable Editor	
D7.3 Impact Activities	T7.1 Target-Driven Dissemination Strategy, Plan, and Reporting
D8.2 Plan for Exploitation and Dissemination of Results - PEDR	T8.1 Defining the Key Exploitable Results (KERs) and Business Model Canvas
D8.5 Sustainability Analysis report	T8.4 Application of Customer Discovery Methodology
D8.6 Go-to-market Plan	T8.6 Leveraging Additional Funds for the i4Q Exploitation Phase
D8.7 IPR protection Strategy Report	

Figure 7. KBZ contribution

EXOS

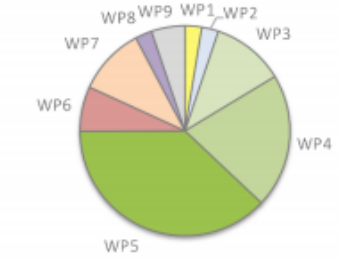
WP	PM	%
WP1	13	15%
WP2	22	25%
WP3	0	0%
WP4	0	0%
WP5	22	25%
WP6	24	28%
WP7	2,1	2%
WP8	3	3%
WP9	1	1%
Total	87,1	100%

Partner 6 EXOS
Role
Technology Provider
WP Leadership
WP6 EVALUATE: Piloting and Demonstrating
Task Leadership
T2.2 Digital Models and Ontologies
T2.6 Implementation Viewpoint
T6.7 Generic Pilot. i4Q Solutions Demonstrator
Task viceLeadership
T1.3 Use Cases Scenarios and KPIs
T1.4 Requirements Analysis and Functional Specification
T6.4 Pilot 4: FACTOR - Aeronautics and Aerospace Metal Parts Quality
T7.2 Dissemination Materials, Website and Intranet

Deliverable Editor
D2.2 Digital Models and Ontologies
D2.6 Technical Specifications
D6.7 i4Q Solutions Demonstrator

Figure 8. EXOS contribution

IKER



WP	PM	%
WP1	3	3%
WP2	3	3%
WP3	13	11%
WP4	24	21%
WP5	44	38%
WP6	8	7%
WP7	12,1	10%
WP8	3	3%
WP9	6	5%
Total	116,1	100%

Partner 7 IKER
Role
Research & Development
WP Leadership
WP5 BUILD: Rapid Manufacturing Line Qualification and Reconfiguration
Task Leadership
T3.4 Manufacturing Data Security
T4.6 Manufacturing Digital Simulation Models
T5.3 Simulation and Optimisation for Smart Manufacturing Line Reconfiguration Prescriptic
T7.5 Industrial Advisory Board and Workshops
Task viceLeadership
T4.1 Manufacturing Data Integration and Fusion
T4.2 Manufacturing Data Analysis for Quality Qualification
T5.1 Manufacturing Line Continuous Process Qualification
T5.4 Manufacturing Line Reconfiguration

Deliverable Editor
D3.5 i4Q Cybersecurity Guidelines
D3.6 i4Q IIoT Security Handler
D4.8 i4Q Digital Twin
D5.3 i4Q Prescriptive Analysis Tools
D7.5 Industrial Advisory Board and Workshops Feedback Report

Figure 9. IKER contribution

BIBA

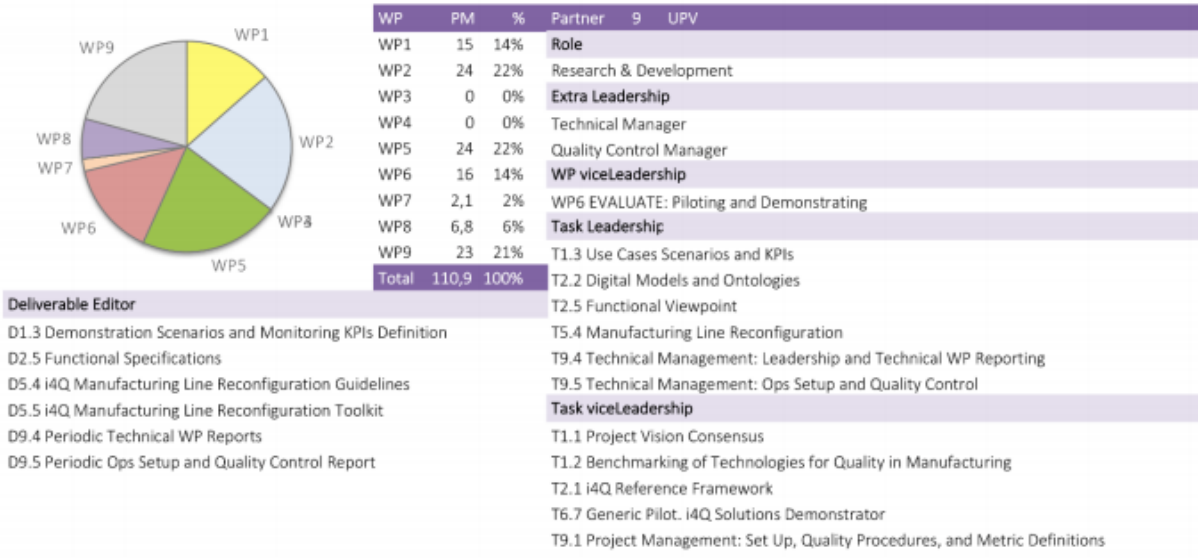
WP	PM	%
WP1	2	3%
WP2	14	20%
WP3	20	29%
WP4	4	6%
WP5	10	14%
WP6	8	12%
WP7	2,1	3%
WP8	3	4%
WP9	6	9%
Total	69,1	100%

Partner 8 BIBA
Role
Research & Development
Task Leadership
T3.1 Manufacturing Data Quality Strategy
Task viceLeadership
T2.3 Business Viewpoint
T2.4 Usage Viewpoint
T3.2 Manufacturing Data Trustiness and Traceability
T5.5 Certification and Audit Procedure

Deliverable Editor
D3.1 i4Q Data Quality Guidelines
D3.2 i4Q QualiExplore for Data Quality Factor Knowledge

Figure 10. BIBA contribution

UPV



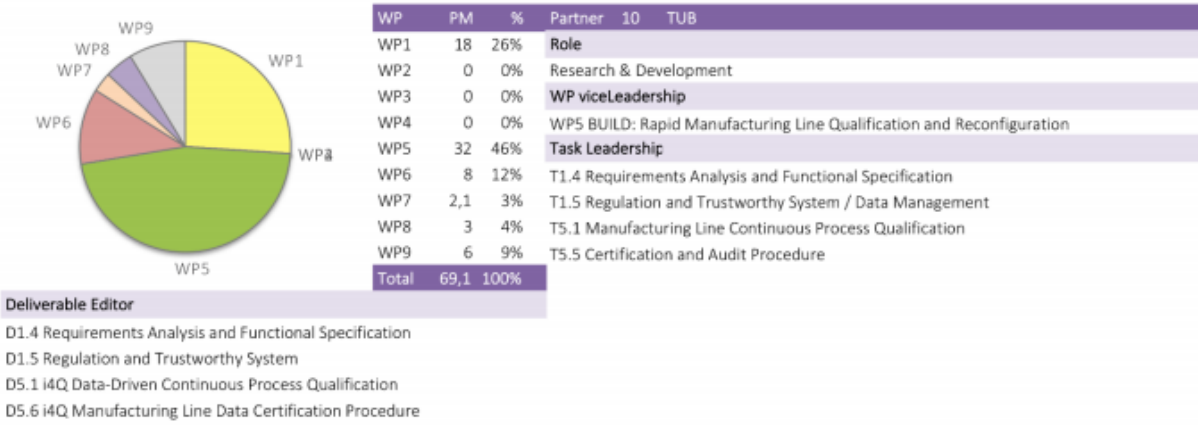
WP	PM	%
WP1	15	14%
WP2	24	22%
WP3	0	0%
WP4	0	0%
WP5	24	22%
WP6	16	14%
WP7	2,1	2%
WP8	6,8	6%
WP9	23	21%
Total	110,9	100%

Partner 9 UPV
Role
Research & Development
Extra Leadership
Technical Manager
Quality Control Manager
WP viceLeadership
WP6 EVALUATE: Piloting and Demonstrating
Task Leadership
T1.3 Use Cases Scenarios and KPIs
T2.2 Digital Models and Ontologies
T2.5 Functional Viewpoint
T5.4 Manufacturing Line Reconfiguration
T9.4 Technical Management: Leadership and Technical WP Reporting
T9.5 Technical Management: Ops Setup and Quality Control
Task viceLeadership
T1.1 Project Vision Consensus
T1.2 Benchmarking of Technologies for Quality in Manufacturing
T2.1 i4Q Reference Framework
T6.7 Generic Pilot. i4Q Solutions Demonstrator
T9.1 Project Management: Set Up, Quality Procedures, and Metric Definitions

Deliverable Editor
D1.3 Demonstration Scenarios and Monitoring KPIs Definition
D2.5 Functional Specifications
D5.4 i4Q Manufacturing Line Reconfiguration Guidelines
D5.5 i4Q Manufacturing Line Reconfiguration Toolkit
D9.4 Periodic Technical WP Reports
D9.5 Periodic Ops Setup and Quality Control Report

Figure 11. UPV contribution

TUB



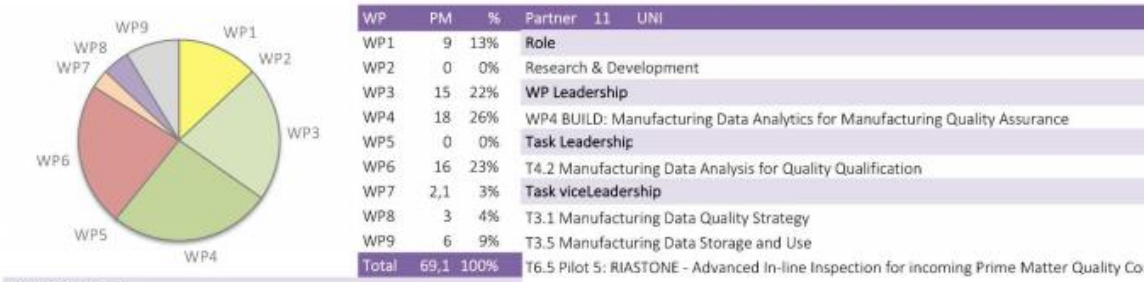
WP	PM	%
WP1	18	26%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	32	46%
WP6	8	12%
WP7	2,1	3%
WP8	3	4%
WP9	6	9%
Total	69,1	100%

Partner 10 TUB
Role
Research & Development
WP viceLeadership
WP5 BUILD: Rapid Manufacturing Line Qualification and Reconfiguration
Task Leadership
T1.4 Requirements Analysis and Functional Specification
T1.5 Regulation and Trustworthy System / Data Management
T5.1 Manufacturing Line Continuous Process Qualification
T5.5 Certification and Audit Procedure

Deliverable Editor
D1.4 Requirements Analysis and Functional Specification
D1.5 Regulation and Trustworthy System
D5.1 i4Q Data-Driven Continuous Process Qualification
D5.6 i4Q Manufacturing Line Data Certification Procedure

Figure 12. TUB contribution

UNI



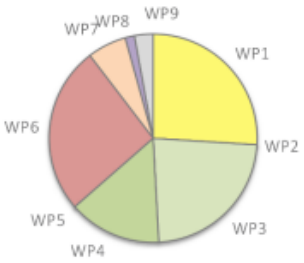
WP	PM	%
WP1	9	13%
WP2	0	0%
WP3	15	22%
WP4	18	26%
WP5	0	0%
WP6	16	23%
WP7	2,1	3%
WP8	3	4%
WP9	6	9%
Total	69,1	100%

Partner 11 UNI
Role
Research & Development
WP Leadership
WP4 BUILD: Manufacturing Data Analytics for Manufacturing Quality Assurance
Task Leadership
T4.2 Manufacturing Data Analysis for Quality Qualification
Task viceLeadership
T3.1 Manufacturing Data Quality Strategy
T3.5 Manufacturing Data Storage and Use
T6.5 Pilot 5: RIASTONE - Advanced In-line Inspection for incoming Prime Matter Quality Co

Deliverable Editor
D4.2 i4Q Services for Data Analytics
D4.3 i4Q Big Data Analytics Suite
D4.4 i4Q Analytics Dashboard

Figure 13. UNI contribution

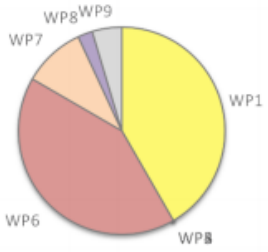
TIAG



WP	PM	%	Partner 12 TIAG
WP1	9	26%	Role
WP2	0	0%	Implementer Partner
WP3	8	23%	
WP4	5	14%	
WP5	0	0%	
WP6	9	26%	
WP7	2,1	6%	
WP8	0,5	1%	
WP9	1	3%	
Total	34,6	100%	

Figure 14. TIAG contribution

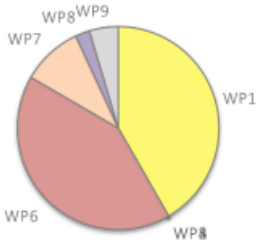
CESI



WP	PM	%	Partner 13 CESI
WP1	9	42%	Role
WP2	0	0%	Implementer Partner
WP3	0	0%	
WP4	0	0%	
WP5	0	0%	
WP6	9	42%	
WP7	2,1	10%	
WP8	0,5	2%	
WP9	1	5%	
Total	21,6	100%	

Figure 15. CESI contribution

AIMP



WP	PM	%	Partner 14 AIMP
WP1	9	42%	Role
WP2	0	0%	Implementer Partner
WP3	0	0%	
WP4	0	0%	
WP5	0	0%	
WP6	9	42%	
WP7	2,1	10%	
WP8	0,5	2%	
WP9	1	5%	
Total	21,6	100%	

Figure 16. AIMP contribution

FBA

WP	PM	%
WP1	1	1%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	0	0%
WP7	35.7	50%
WP8	34	47%
WP9	1	1%
Tota	71.7	100%

Partner: 15 FBA
Role
Exploitation Specialist
Extra Leadership
Quality Control Manager
WP Leadership
WP8 EXPLOIT: Business Approach and Market Preparation
WP viceLeadership
Task Leadership
T7.4 Industry Clustering and Regional Interactions, DIH Connection, Supporting Partners
T8.1 Defining the Key Exploitable Results (KERs) and Business Model Canvas
T8.4 Application of Customer Discovery Methodology
T8.6 Leveraging Additional Funds for the i4Q Exploitation Phase
Task viceLeadership
T7.3 Impact Activities: Awareness and Outreach, Community Building
T8.2 Market Analysis and PEDR
T8.5 Creation of i4Q Startup and Sustainability Analysis

Deliverable Editor
D7.4 Clustering and Regional Interactions
D8.1 Report on KERs and Business Model Canvas
D8.4 Report of the Customer Discovery Process
D8.8 Investors Involvement Report

Figure 17. FBA contribution

IVLAB

WP	PM	%
WP1	1	2%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	0	0%
WP7	48	88%
WP8	4,7	9%
WP9	1	2%
Total	54,7	100%

Partner 16 IVLAB
Role
Disemmination Specialist
WP Leadership
WP7 DISSEMINATE: Communication, Dissemination and Standardisation
Task Leadership
T7.1 Target-Driven Dissemination Strategy, Plan, and Reporting
T7.2 Dissemination Materials, Website and Intranet
Task viceLeadership
T7.4 Industry Clustering and Regional Interactions, DIH Connection, Supporting Partners
T7.5 Industrial Advisory Board and Workshops
T8.3 Societal/Economic Value Management Including IPR evaluation and EU and National Law and Regulations

Deliverable Editor
D7.1 Target-Driven Dissemination Strategy, Plan, and Reporting
D7.2 Website and Materials Production

Figure 18. IVLAB contribution

DIN

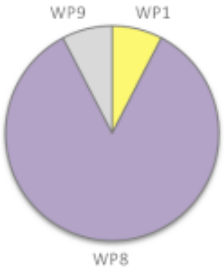
WP	PM	%
WP1	1	7%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	0	0%
WP7	11,1	82%
WP8	0,5	4%
WP9	1	7%
Total	13,6	100%

Partner 17 DIN
Role
Standardisation Specialist
Task Leadership
T7.6 Standardisation

Deliverable Editor
D7.6 Standardisation Plan and Status Report

Figure 19. DIN contribution

LIF



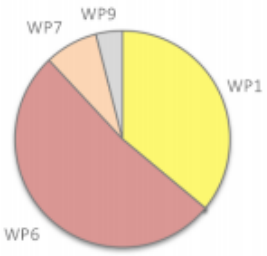
WP	PM	%
WP1	1	8%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	0	0%
WP7	0	0%
WP8	11,1	85%
WP9	1	8%
Total	13,1	100%

Partner 18 LIF
Role
Legal Specialist
Extra Leadership
Legal Manager
Innovation and IPR Management Committee Chair
Task Leadership
T8.3 Societal/Economic Value Management Including IPR evaluation and EU and National Law and Regulations

Deliverable Editor
D8.3 FTO Analysis Report

Figure 20. LIF contribution

WHI



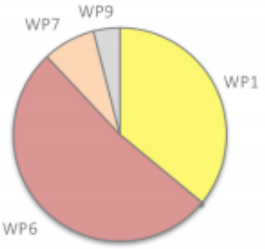
WP	PM	%
WP1	9	36%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	13	52%
WP7	2	8%
WP8	0	0%
WP9	1	4%
Total	25	100%

Partner 19 WHI
Role
User (Pilot)
Task Leadership
T6.3 Pilot 3: WHIRLPOOL - White Goods Product Quality

Deliverable Editor
D6.3 Pilot 3: WHIRLPOOL - White Goods Product Quality

Figure 21. WHI contribution

BIES



WP	PM	%
WP1	9	36%
WP2	0	0%
WP3	0	0%
WP4	0	0%
WP5	0	0%
WP6	13	52%
WP7	2	8%
WP8	0	0%
WP9	1	4%
Total	25	100%

Partner 20 BIES
Role
User (Pilot)
Task Leadership
T6.2 Pilot 2: BIESSE - Diagnostics and IoT Services

Deliverable Editor
D6.2 Pilot 2: BIESSE - Diagnostics and IoT Services

Figure 22. BIES contribution

FACT

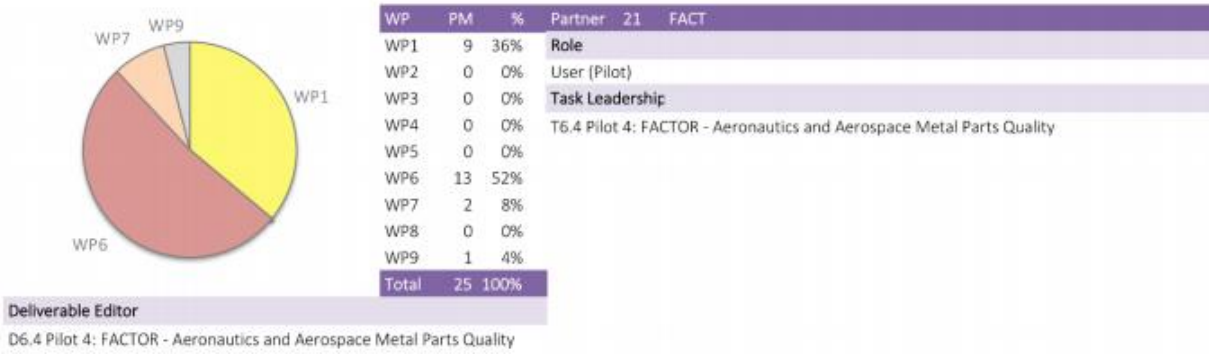


Figure 23. FACT contribution

RIAS

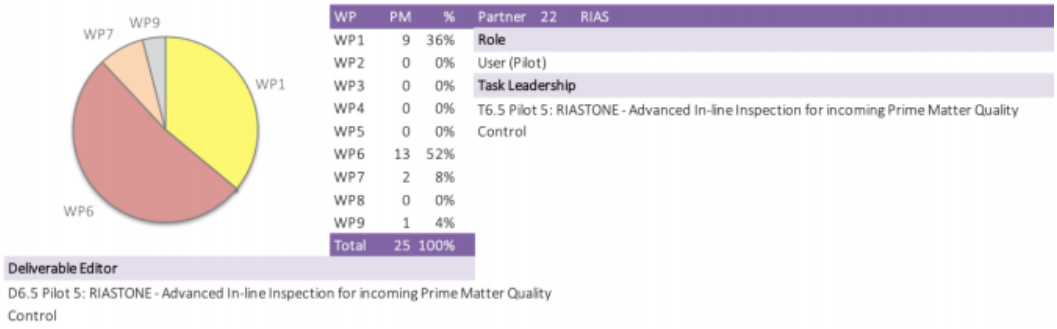


Figure 24. RIAS contribution

FARP

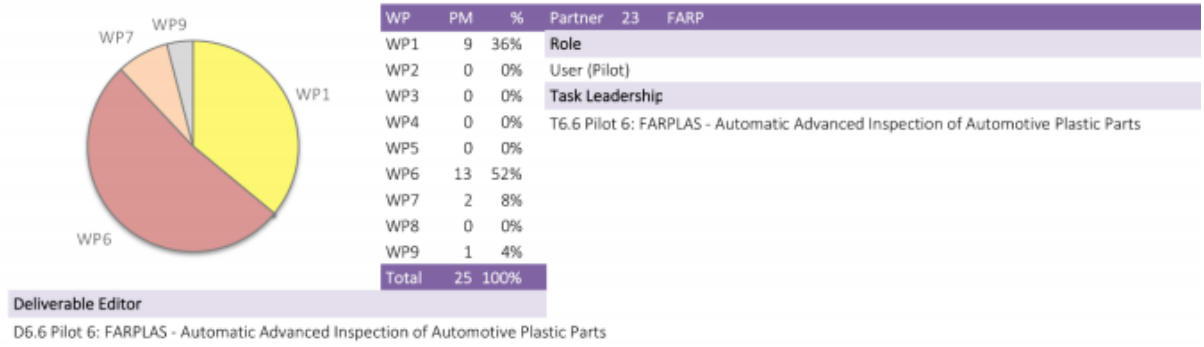


Figure 25. FARP contribution

FIDIA

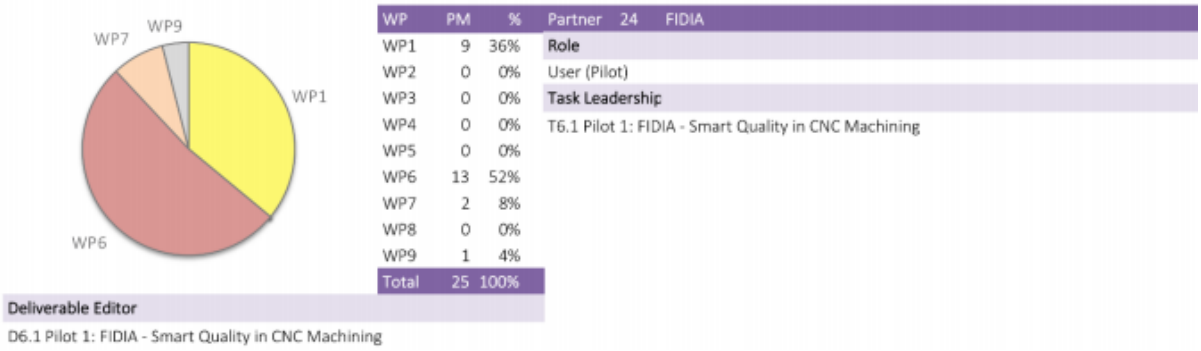


Figure 26. FIDIA contribution

3.5 Partners' additional roles

- Project coordinator (CERTH)

The Project Coordinator (PC) is the primary intermediary between the consortium and the European Commission. He is in charge of the overall project management and representation, ensuring that appropriate outputs are being generated, milestones reached, deliverables timely produced, handling the payments and accounts, and correct application of EC rules. The PC will also chair the General Assembly and Executive Board. i4Q will also have a deputy coordinator. Dr. Stefanos Vrochidis (CERTH) will be the Project Coordinator of i4Q, while Dr. Anastasios (Tasos) Karakostas (CERTH) will be the Deputy Project Coordinator.

- Project secretariat (CERTH)

The Project Secretariat (PS) manages all day-to-day administrative aspects of the project, providing advice regarding financial and procedural issues and keeping track of all important administrative procedures. The PS will also undertake assistance duties such as facilitating meetings, providing logistics, compiling reports, disseminating documentation, etc. The Project Secretariat will be Maria Papadopoulou (CERTH).

- Technical manager (UPV)

The Technical Manager (TM) is a managerial role that has the overall RTD responsibility in the project. He will provide support to the PC when technical management is concerned and is responsible for the day-to-day technical coordination within and among work packages. Furthermore, they are responsible for being an intermediary technical link between the manufacturing companies and the technical partners in the customer discovery process (T8.4). The Project Technical Manager will be Raul Poler (UPV).

- Innovation manager (FBA)

The Innovation Manager (IM) main task is to lead, coordinate and overview the implementation of exploitation strategy and plan adopted by the IPR and Innovation Management Committee (IMC) to maximize exploitation opportunities. The project IM will be Kati Nikopensius (FBA).

- Quality Control Manager (UPV)

The Quality Control Manager (QCM) is in charge of optimising the quality of the deliverables and solutions developed by the consortium. The project QCM will be Raquel Sanchis (UPV).

- Data Manager (ITI)

The Data Manager (DM) chairs the Data Management Committee (DMC) and is in charge of designing and developing the Data Management Plan (DMP) (D1.6) of the project, where all details about collection, processing, storage and usage of data will be specified. The project is focused on industrial data, however, in the case that some use cases involve personal data, the DMP will provide the needed details and will manage them according to GDPR and corresponding local legislation. The DMC will be also responsible to execute oversight in terms of the internal compliance with the DMP. The DM shall be responsible for ensuring that no Personal Data (as such term is defined in the GDPR) will be shared between the partners unless (i) it has been fully anonymized prior to the data sharing, or (ii) the specific partners who have elected to exchange or otherwise process Personal Data, have entered into separate data processing agreement and have determined what operational measures should be taken prior to such Personal Data exchange or processing, all in accordance with the EU Data Protection Legislation. The DM will be Santiago Gálvez (ITI).

- Legal Manager (LIF)

The Legal Manager (LM) chairs the Innovation and IPR and Innovation Management Committee (IMC). Also, they will be responsible for identifying the EU regulatory framework for the project, and will take care of setting up the legal framework of the start-up entity. Furthermore, they will develop the IPR protection strategy of the start-up entity, as described in WP8. The Project LM will be Denitsa Kozhuharova (LIF).

- Project Management Board (PC, PS, TM, IM, QCM)

PMB has the overall responsibility of keeping the project permanently focused, guaranteeing high standard results in every task. It is composed of the PC and their PS, together with the TM, IM, QCM and DM, addressing several issues regarding (i) quality and risk management, (ii) financial and administrative management, (iii) contractual, legal and ethical organisational issues and (v) innovation and exploitation aspects.

- General Assembly (ALL PARTNERS)

The General Assembly (GA) is the highest decision body. It consists of one representative from each project partner and is responsible for taking final decisions on the overall policy of the consortium, modifications or extensions of the Consortium Agreement or project objectives, and all project related financial issues.

- Executive Board (PC, TM, IM, QCM, WPL)

The Executive Board (EB) is in charge of the operational coordination of the project. It gathers the PC, the TM, the IM, QCM as well as Work Package Leaders (WPL). Chaired by the PC, the EB supervises the WP progress of work and aligns the efforts with a common work plan ensuring a smooth implementation of the project objectives.

- WP Leaders and Task Leaders

Project activities are split into distinct Work Packages (WPs). Each WP is led by a WP Leader (WPL). Each WP comprises several tasks, each led by a Task Leader (TL) who coordinates the work performed under his/her task and is responsible for the related deliverable(s), with the support of all partners involved in the task. TLs report directly to and work in close cooperation with their WPLs. WPLs are responsible for the day-to-day technical management and coordination of the work undertaken within their work package, coordinating the contributions from all work package's tasks and ensuring that they comply with the work package description. WPLs will periodically report to TM.

- Innovation and IPR Committee

The Innovation and IPR Management Committee (IMC) contributes to the control and monitoring of impacts achieved by project activities. It is composed of the IM and other members of the consortium with experience in dissemination and exploitation activities in other EC Funded Research projects.

- Data Management Committee (ITI)

The Data Management Committee (DMC) will be responsible that the data collected in the i4Q Project will be in compliance with ethical guidelines, the confidentiality and security of data and the reliability of ICT methods used in the project and will use particular care concerning privacy and data protection rights, considering them as fundamental rights to be protected.

- Advisory Board

The Advisory Board (AB) gathers recognised specialists and experts invited to support the project, who will meet regularly with the consortium GA throughout the project duration. The AB will provide input and feedback on scientific and technological issues, related ethical issues, and advice on relationship with relevant stakeholders. It will moreover encourage the potential interactions of the project consortium with other projects, initiatives and activities.

3.6 Management structure

i4Q's management structure described above has been based on the partners' extensive previous experience in other relevant European Union (EU) funded projects in combination with the exploration on i4Q's specific needs. It has deemed as appropriate to the size of the consortium and the complexity of the project's tasks. As a result, i4Q's management structure is depicted in ***Figure 27*** below.

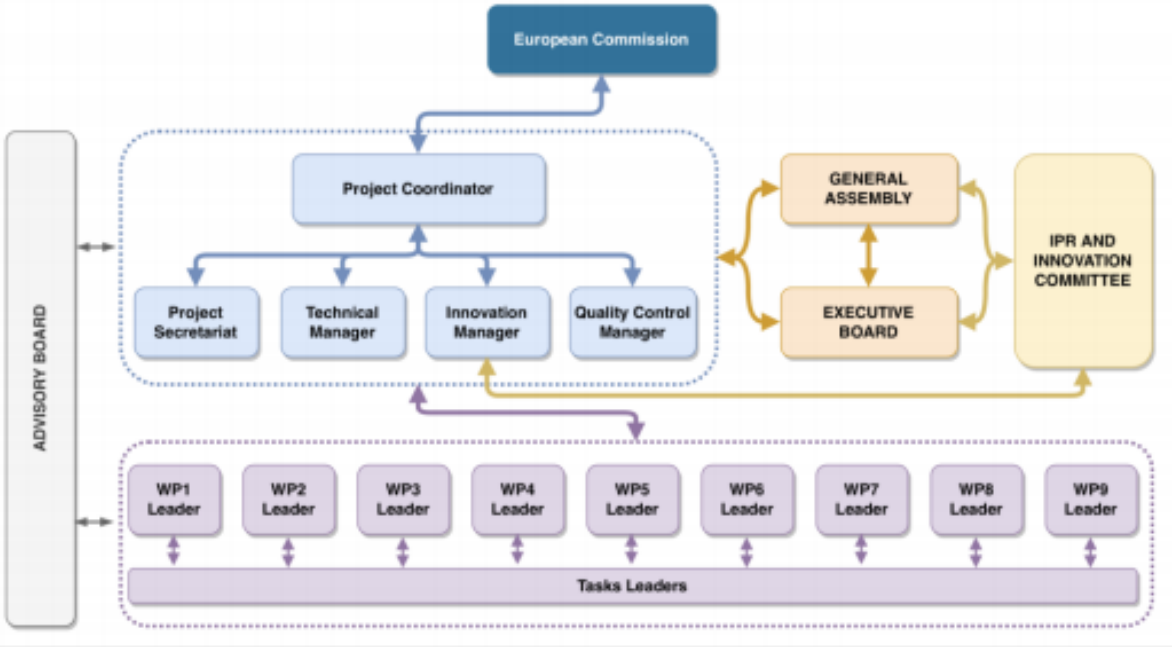


Figure 27. i4Q management structure

The involved partners in each component of the management structure may be found in ***Table 4*** below:

General Assembly (GA)	**Chair**: Stefanos Vrochidis (CERTH) **Co-chair**: Anastasios (Tasos) Karakostas (CERTH) **Members**: Angelo Marguglio (ENG), Benjamin Mandler (IBM), David Aleixo (KBZ), Arcadio Garcia (EXOS), Oscar Salgado (IKER), Stefan Wellsandt (BIBA), Raul Poler (UPV), Roland Jochem (TUB), Ruben Costa (UNI), Martijn Rooker (TIAG), Angelo Merlo (CESI), Amparo Beltran (AIMP), Kati Nikopensius (FBA), Guy Doumeingts (IVLAB), Christian Grunewald (DIN), Denitsa Kozhuharova (LIF), Pierluigi Petrali (WHI), Andrea Forlani (BIES), Amparo Gastaldo (FACT), Paulo Soeiro (RIAS), Enes Uğuroğlu (FARP), Alessia Focareta (FIDIA), Santiago Gálvez (ITI)
Executive Board (EB)	**Chair**: Stefanos Vrochidis (CERTH) **Members**: WP1 Leader - Anastasios (Tasos) Karakostas (CERTH), WP2 Leader Sabrina Verardi (ENG), WP3 Leader - Santiago Gálvez (ITI), WP4 Leader - Paulo Figueiras (UNI), WP5 Leader - Oscar Salgado (IKER), WP6 Leader - Shukri Bassoumi (EXOS), WP7 Leader - Sophie-Agnes Fensterbank (IVLAB), WP8 Leader and IM - Kati Nikopensius (FBA), WP9 Leader – Anastasios (Tasos) Karakostas (CERTH), QCM – Raquel Sanchis (UPV), TM – Raul Poler
Project Management Board (PMB)	**PC**: Stefanos Vrochidis (CERTH); **Deputy PC**: Anastasios (Tasos) Karakostas; **TM**: Raul Poler (UPV), **IM**: Kati Nikopensius (FBA), **QCM**: Raquel Sanchis (UPV)

Innovation and IPR Management Committee (IMC)	**Chair** (Legal Manager): Denitsa Kozhuharova (LIF) **Members**: Guy Doumeingts (IVLAB), Anastasios Karakostas (CERTH), Josefa Mula (UPV), Kati Nikopensius (FBA), Santiago Gálvez (ITI), Oscar Salgado (IKER), David Aleixo (KBZ)
Advisory Board	Tonny Velin, Silvia Castellvi, Stefan Beyer, Stefano Ierace

Table 4. Members of i4Q's boards and committees

As there are many partners involved in i4Q, there is a dense network of information exchange among partners taking place on many different levels. Having this in mind, the communication strategy among all partners is designed to prevent conflicts and guarantee that each partner's interests will be taken care of during the project lifetime. Therefore, consensual decision process will be highly encouraged; however, in case of a disagreement, minor decisions of the project bodies will be taken on the basis of simple majority, while major decisions will be taken on the basis of a 2/3 qualified majority. If conflicts nevertheless arise within the consortium, rigorous and effective dispute resolution mechanisms, described in more detail in the Consortium Agreement, will be in place.

Problems in regard to non-fulfilment of contractual obligations will instantly be brought to the attention of the PC who will attempt to resolve the issue, while limiting possible damages or delays for the project as a whole. All disputes will be properly documented, and the PC will keep the involved partners as well as the European Commission updated on the process. If the arisen problems cannot be resolved within WPs or by the EB, an ad-hoc GA meeting will be organized in order to find a solution that satisfies all involved parties and move forward with the progress of the project. Apart from these ad-hoc meetings, the GA will meet every 4 months. The decisions will be taken on a qualified majority principle (2/3 of the votes cast). For particular decisions, according to the Consortium Agreement, the GA members have veto rights.

The EB will also have a meeting every 4 months, coinciding with the i4Q plenary meetings and regularly by teleconference and works continuously between the meetings. Decisions within this board will be taken on a qualified majority principle (2/3 of votes cast). During the project, at least two face-to-face meetings will be organised among the AB and the EB in order to gather their opinion and feedback. In case this is not feasible due to travelling restrictions imposed on EU countries, teleconferences will take place.

3.7 Contractual documents

The way of operation among all partners will be described in two contractual agreements: the Grant Agreement and the Consortium Agreement. Each one of them will describe how certain matters should be executed and handled during the project's lifetime. Both of these documents apply to all partners and must be respected by all involved parties. They are both available to all partners through the chosen management tools that will be further explained in Section 4 below.

3.7.1 Grant Agreement

The Grant Agreement is the main contractual document between the Consortium and the European Commission (EC). The work plan of the whole project is described in detail and the Consortium's contractual obligations towards the EC are stated. All partners should make sure to take into serious account the results mentioned in the Grant Agreement in order to ensure that they will be able to deliver what they have planned during the proposal phase. No deviation from the estimated time plan and budget should occur during the implementation phase of the project. If such a need arises, the partners should inform the PC in due time in order to find mitigation measures and/or alternative routes that could be followed in order to ensure the achievement of the established milestones. If needed, an amendment of the Grant Agreement could take place, following the consultation of the project's Officer – Dr. Laszlo Hetey.

3.7.2 Consortium Agreement

A Consortium Agreement has been compiled and accepted by all partners in the initial stages of the project. Matters such as the distribution of the EU received funds by the PC, the internal organisation of work, methods on internal reporting, the evolution of the Consortium, Intellectual Property Rights issues, confidentiality arrangements, risk management, collective responsibility, decision-making processes for each management body as well as conflict resolution among partners will be handled within the context of this document. This document is defined by the Rules for Participation[1] and the Grant Agreement. In case the need of an amendment arises, the partners should inform the PC in due time in order to assess this need and initiate a new round of consultation among all partners in order to ensure the approval of the new document by all involved parties.

[1] Available online at https://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h2020-rules-participation_en.pdf

4. Tools

In order to facilitate the exchange of information among all 24 partners, two main management tools have been chosen towards this goal: (i) Doku.wiki and (ii) SharePoint. These tools are commonly used among consortia as their functionalities allow partners to create, upload and share files that can be accessed and edited from multiple users simultaneously. Each tool will be used for different matters, as described in Sections 4.1 and 4.2 to follow.

4.1 Doku.wiki

This wiki is the central repository for internal information of the i4Q project and may be found here. All partners have been granted access (with a unique username and password) by the PC and all basic information regarding the project, e.g., contract documents, effort tables, financial and technical reporting guidelines, quality assurance guidelines, management entities and boards, mailing lists, meetings planned, WPs and their deliverables, etc. may be found within its pages.

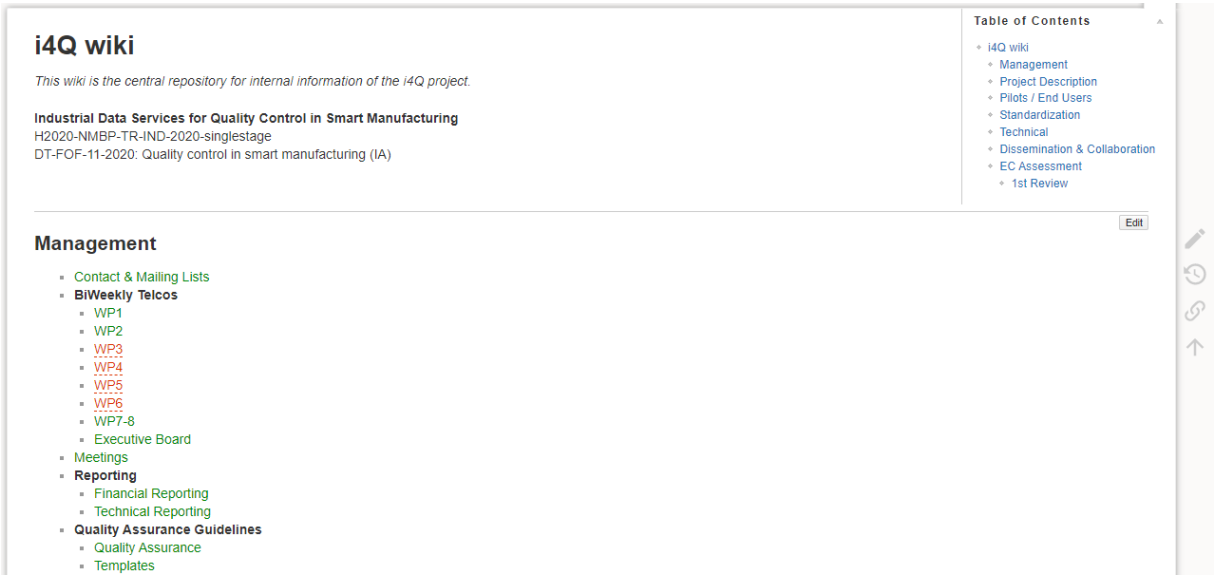


Figure 28. i4Q wiki home page

As seen in the right part of **Figure *28***, through this option “ ”wiki provide its users with the ability to see old revisions of each page, avoiding in this manner the loss of data in case of a mistake made by a partner. All consortium members have the ability to create a new sub-page, edit, comment and/or add content to the wiki. All wiki pages are directly linked to i4Q’s SharePoint that will be further explained in the sub-section to follow.

4.2 SharePoint

Sharepoint is the second management tool of the project and is a private group page, counting 103 members at the moment. As the wiki will mostly accommodate basic information on the project’s Grant Agreement and multiple guidelines on processes, the SharePoint will be used for all documentation regarding the project; e.g., templates, deliverables, presentations, meeting minutes etc. All documents will be directly accessible to all group members and everyone’s actions are visible to everybody in the group.

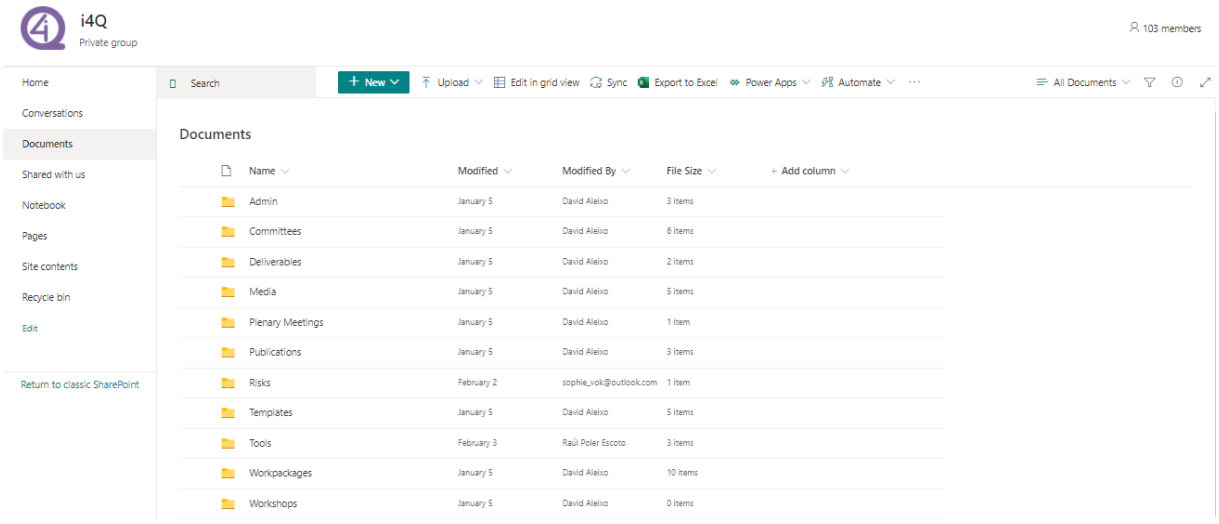


Figure 29. i4Q SharePoint Documents page

As seen in ***Figure 29*** the current folders in the SharePoint are:

- **Admin** – where all information on the Grant Agreement, the Consortium Agreement as well as on reporting is stored.
- **Committees** – where information on i4Q's Committees such as meeting minutes or bios are stored.
- **Deliverables** – where all finalized and submitted deliverables per WP are being stored.
- **Media** – where all communication and dissemination material, such as posters, leaflets, etc. can be found.
- **Plenary Meetings** – where the preparations (meaning agendas, presentations etc.) of each plenary meeting is taking place.
- **Publications** – where all accepted publications of the project can be found.
- **Risks** – where a risk inventory per WP can be found, in which all WP leaders are requested to keep updated throughout the project's lifetime as an attempt to be as pro-active as possible.
- **Templates** – where all presentation, deliverable, agenda, meeting minutes etc. templates are being stored. Additionally, a style guide for all these templates may found in this folder in order to ensure that the visual identity of the project is being followed. Examples may be found in Appendix I.
- **Tools** – where information and direct links to all used tools within the consortium can be found.
- **Workpackages** – where progress on each WP is being documented. Additionally, templates, WP meeting minutes and the working version of each deliverable per WP may be found in this folder.
- **Workshops** – where information on the workshops attended or organized by the consortium may be found.

Additionally, in the "Documents" page of the SharePoint, one may find an "Actions Log" excel file, where all partners action points for the forthcoming period are being reported with assignees and concrete deadlines. This file is being updated by WP leaders and is being discussed in the WPs biweekly meetings that will be further explained in Section 5.

4.3 Google Calendar

As shown in ***Figure 30*** a google calendar dedicated to i4Q has been created by the PC, where all involved partners have been granted access to. i4Q events and their invitations are going to be available to all partners through this calendar. If a member of the consortium is using another calendar on their day-to-day operations, they are able to sync it with their calendar of choice via by contacting the PC so they can provide him/her with an iCal address.

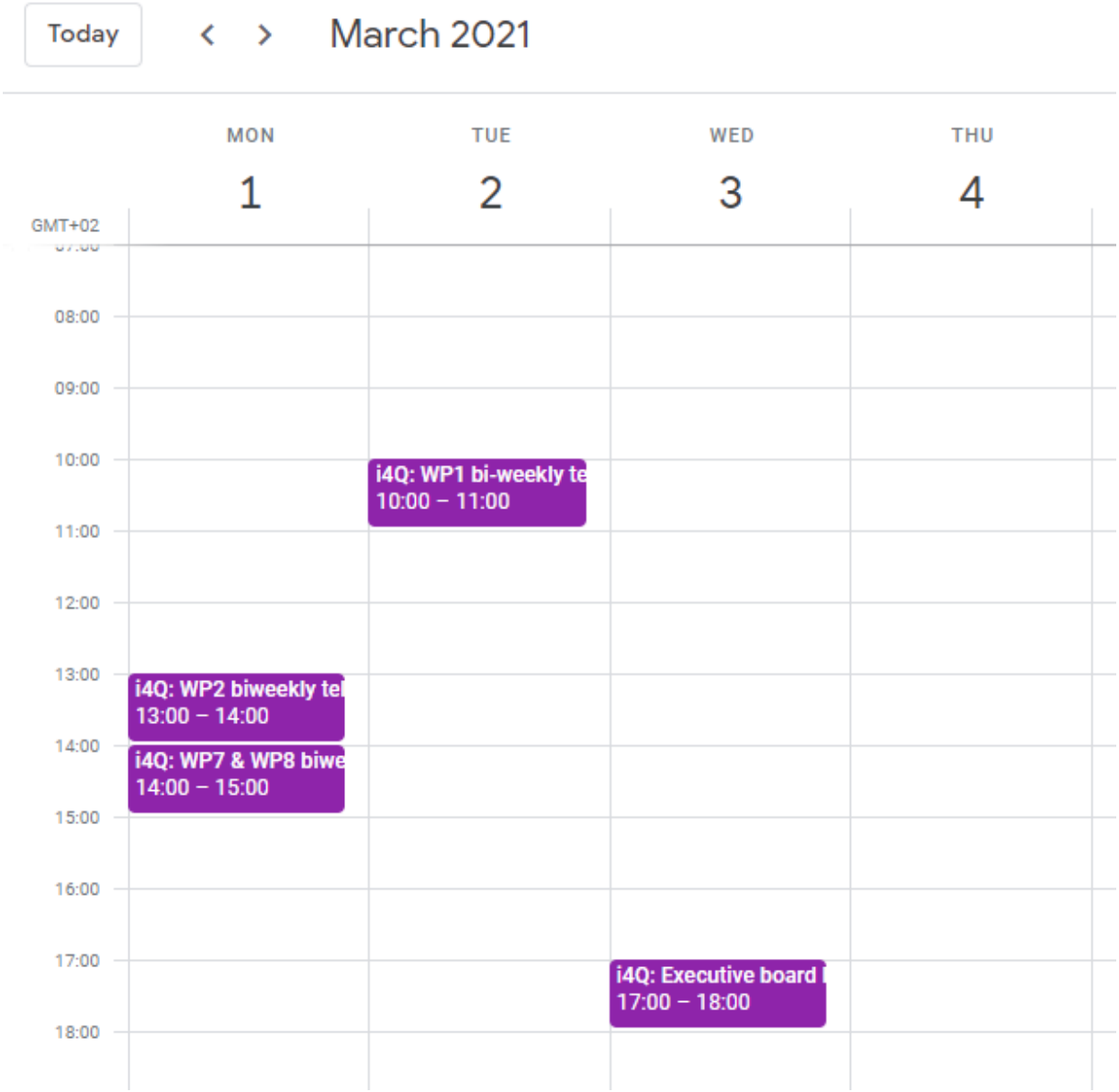


Figure 30. i4Q calendar

Biweekly telcos, bilateral telcos, plenary meetings, advisory board meetings, workshops, etc. will be added in the calendar so all partners are duly informed in order to participate.

5. Communication

As mentioned before, the partners involved in i4Q are quite a lot in number; therefore, proper communication among all involved partners is of major importance for the successful execution of the project. Towards this goal, dedicated mailing lists have been created by the PC and circulated to the consortium and biweekly meetings are going to take place in order for all involved parties to discuss the progress of their WP as well as any issue that might have arisen. Additionally, certain guidelines in regard to external communication with other stakeholders are set in order for the entire consortium to be compliant and in line with the dissemination and communication goals mentioned in the Grant Agreement. All of the aforementioned matters will be further discussed in the sections to follow.

5.1 Mailing lists

There are currently 15 mailing lists created and managed by CERTH, one for each WP and 6 additional lists that are referring to the consortium to its entirety, to the administration, to the Project Management Board, to the Executive Board, to the General Assembly as well as to the project's indicated Exploitation Managers. These lists and their members can be found in ***Table 5*** below.

LIST	EMAIL	COMMENT
WP1 list	i4q-wp1@iti.gr	contains the emails of all members involved in this WP
WP2 list	i4q-wp2@iti.gr	contains the emails of all members involved in this WP
WP3 list	i4q-wp3@iti.gr	contains the emails of all members involved in this WP
WP4 list	i4q-wp4@iti.gr	contains the emails of all members involved in this WP
WP5 list	i4q-wp5@iti.gr	contains the emails of all members involved in this WP
WP6 list	i4q-wp6@iti.gr	contains the emails of all members involved in this WP
WP7 list	i4q-wp7@iti.gr	contains the emails of all members involved in this WP
WP8 list	i4q-wp8@iti.gr	contains the emails of all members involved in this WP
WP9 list	i4q-wp9@iti.gr	contains the emails of all members involved in this WP
ALL list	i4q-all@iti.gr	contains the emails of all members involved
ADMIN list	i4q-admin@iti.gr	contains the emails of all members involved in administration
PMB list	i4q-pmb@iti.gr	contains the emails of all Project Management Board members
GA list	i4q-ga@iti.gr	contains the emails of all General Assembly members
EB list	i4q-eb@iti.gr	contains the emails of all Executive Board members
Exploitation Managers	i4q-em@iti.gr	contains the emails of all Exploitation Managers per partner

list		

Table 5. i4Q mailing lists

All the lists are hosted and managed by CERTH's server (@iti.gr) and are administrated by Anastasios Karakostas (akarakos@iti.gr). It should be noted here that in order to avoid any spamming, only the members of a list can send mails to that specific list. In case of a change in the people involved in the project by a partner, CERTH should be informed in order to make all the necessary updates both in the lists as well as in the management tools.

5.2 Online meeting platforms

The partners involved in the WPs that are active will have bi-weekly telcos in order to discuss the progress of their WP. In addition, the Executive Board will also have a telco of the same frequency in order for all WP leaders to discuss any issues that might have arisen during these telcos and what is to be expected from them for the upcoming period. These telcos are going to take place on Zoom. CERTH has scheduled meetings for WP1, WP2, WP7, WP8 that are currently active and an additional slot for the Executive Board telco:

- **WP1**:
  When: Biweekly on Tuesdays - 09:00-10:00 CET
  Where: Zoom

- **WP2**:
  When: Biweekly on Mondays - 12:00-13:00 CET
  Where: Zoom

- **WP7-8**:
  When: Biweekly on Mondays - 13:00-14:00 CET
  Where: Zoom

- **Executive Board**:
  When: Biweekly on Wednesdays - 16:00-17:00 CET
  Where: Zoom

In case additional ad-hoc meetings are to be scheduled between partners, they can communicate with CERTH in order to provide them with a meeting link for Zoom or GoToMeeting. If the indicated slot for the ad-hoc telco is not available in CERTH's meeting platforms, partners are welcome to use another secure platform of their choice.

Given the fact that many European partners are not allowed to travel due to Covid-19 restrictions, plenary/technical meetings are also going to be realized virtually, until further notice. The same meeting platforms are going to be used for these meetings as well. shows when some of the most important meetings are scheduled to take place at the moment (indicative plan – dates are susceptible to change according to partners' availability.

Important Dates and Relevant Actions		
Beginning of May 2021	1st Workshop with AB members	Share and receive feedback: - D1.1 Project Vision - D1.3 Pilots - D1.4 Requirements Analysis - D2.1 Reference Architecture - D1.2/D2.2
Beginning of May 2021	2nd plenary meeting	With first inputs from AB
Mid-September 2021	3rd plenary meeting	
Beginning of January 2022	2nd Workshop with AB members	Share and receive feedback: - Initial developments of i4Q Solutions
Beginning of January 2022	4th plenary meeting	
Beginning of May 2022	5th plenary meeting	
Mid-September 2022	6th plenary meeting	
November 2022	1st Dissemination Workshop	General insights and approach of i4Q
Beginning of January 2023	2nd Workshop with AB members	Share: - Final versions of i4Q Solutions - Evolutions of Pilots Receive feedback
Beginning of January 2023	7th plenary meeting	
Beginning of May 2023	8th plenary meeting	
Mid-September 2023	9th plenary meeting	
November 2023	2nd Dissemination Workshop	Project results
December 2023	4th Workshop with AB members	Share and receive feedback: - Final results of the project - Exploitation
December 2023	End of Project meeting	

Table 6. i4Q upcoming meetings

6. Reporting

In order to keep track of technical progress and expenditure, both internal and official reporting is going to take place. The internal reports are going to be initiated by CERTH every 3 months at first and every 6 months at a later stage. The main reason for this is to ensure that all partners are fully aware of what needs to be reported in the first stages of the project and as soon as everything is moving along and according to the plan, the internal reporting could take place on a less frequent basis. This internal reporting procedure is going to assist partners when compiling the official report (periodic and final) initiated by the EC. Guidelines and timelines for both types of reports may be found in the sections to follow.

6.1 Internal reports

As mentioned above, internal reports are going to take place every 3-6 months in order to keep track of progress and expenditure. More specifically, the internal reporting periods will be the following:

- **M1-M3:** Jan. 2021 - Mar. 2021
- **M4-M6:** Apr. 2021 - Jun. 2021
- **M7-M12:** Jul. 2021 - Dec. 2021
- **M13-M18:** Jan. 2022 - Jun. 2022
- **M19-M24:** Jul. 2022 - Dec. 2022
- **M25-M30:** Jan. 2023 - Jun. 2023
- **M31-M36:** Jul. 2021 - Dec. 2023

The input from these reports is going to be used for the compilation of the official periodic and final reports at a later stage. In the same rationale the official EC reports are based, these internal reports are going to be split into two parts: (i) the financial part and (ii) the technical part.

6.1.1 Financial reporting

All partners will be requested to provide an internal financial report every 3 months at first (to be done on a 6-month basis later) in order to keep track of their effort and expenditure and to make sure that all expenses are taking place according to estimated budget for the action as found in the Grant Agreement. For this report, a template has been created by CERTH and UPV that is available on the project's SharePoint.

Each partner can find the template addressed to their organization in which they can report their financial expenses and effort. An example from CERTH's financial reporting template is depicted in ***Figure 31*** and ***Figure 32***.

			Start	End	NM	LEADER	vLEADER	PM	Hours	1									
								CERTH	CERTH	CERTH	1	2	3	4	5	6	7	8	9
WP1	NEED: Industrial Scenarios and Requirements Analysis		1	36	36	CERTH	TUB	14	2007	2006,667	573,33	573,33	573,33	286,67					
T1.1	Project Vision Consensus		1	3	3	CERTH	UPV	6	860	860	286,67	286,67	286,67						
T1.2	Benchmarking of Technologies for Quality in Manufacturing		1	4	4	CERTH	UPV	8	1147	1146,667	286,67	286,67	286,67	286,67					
T1.3	Use Cases Scenarios and KPIs		1	9	9	UPV	EXOS	0	0	0									
T1.4	Requirements Analysis and Functional Specification		1	9	9	TUB	EXOS	0	0	0									
T1.5	Regulation and Trustworthy System / Data Management		1	36	33	TUB	ITI	0	0	0									
WP2	DESIGN: i4Q Framework Design		1	9	9	ENG	ITI	12	1720	1720	191,11	191,11	191,11	47,78	219,78	219,78	219,78	219,78	219,78
T2.1	i4Q Reference Framework		1	9	9	ENG	UPV	3	430	430	47,78	47,78	47,78	47,78	47,78	47,78	47,78	47,78	47,78
T2.2	Digital Models and Ontologies		1	3	3	EXOS	UPV	3	430	430	143,33	143,33	143,33						
T2.3	Business Viewpoint		4	7	4	ENG	BIBA	0	0	0									
T2.4	Usage Viewpoint		5	9	5	ITI	BIBA	3	430	430					86,00	86,00	86,00	86,00	86,00
T2.5	Functional Viewpoint		5	9	5	UPV	ITI	3	430	430					86,00	86,00	86,00	86,00	86,00
T2.6	Implementation Viewpoint		5	9	5	EXOS	ITI	0	0	0									
WP3	BUILD: Manufacturing Data Quality		10	24	15	ITI	ENG	3	430	430									
T3.1	Manufacturing Data Quality Strategy		10	24	15	BIBA	UNI	0	0	0									
T3.2	Manufacturing Data Trustiness and Traceability		10	24	15	IBM	BIBA	0	0	0									
T3.3	Manufacturing Data Trusted Communication and Distribution		10	24	15	ITI	ENG	0	0	0									
T3.4	Manufacturing Data Security		10	24	15	IKER	ITI	0	0	0									
T3.5	Manufacturing Data Storage and Use		10	24	15	ITI	UNI	3	430	430									
WP4	BUILD: Manufacturing Data Analytics for Manufacturing Quality Assurance		10	24	15	UNI	IBM	39	5590	5590									
T4.1	Manufacturing Data Integration and Fusion		10	24	15	CERTH	IKER	10	1433	1433,333									
T4.2	Manufacturing Data Analysis for Quality Qualification		10	24	15	UNI	IKER	6	860	860									
T4.3	Scalable Policy-based Model Distribution from Cloud to Edge		10	24	15	IBM	ITI	0	0	0									
T4.4	AI Workload Placement and Deployment		10	24	15	IBM	ITI	5	716,7	716,6667									
T4.5	Smart Manufacturing Monitoring and Alerting		10	24	15	CERTH	IBM	10	1433	1433,333									
T4.6	Manufacturing Digital Simulation Models		10	24	15	IKER	CERTH	8	1147	1146,667									
WP5	BUILD: Rapid Manufacturing Line Qualification and Reconfiguration		10	24	15	IKER	TUB	22	3153	3153,333									

Figure 31. Internal financial reporting template - effort

DIRECT COSTS (€)												
Personnel costs (€)	reporting period	1	2	3	4	5	6	7			%	REMAINING
	from	Jan-21	Apr-21	Jul-21	Jan-22	Jul-22	Jan-23	Jul-23				
Budget: €725,500.00	to	Mar-21	Jun-21	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23			0,69%	720 500,00 €
	5 000,00 €	5 000,00 €	0,00 €	0,00 €	0.00 €	0.00 €	0.00 €	0.00 €				
Other costs (€)	reporting period	1	2	3	4	5	6	7			%	REMAINING
	from	Jan-21	Apr-21	Jul-21	Jan-22	Jul-22	Jan-23	Jul-23				
Budget: €64,680.00	to	Mar-21	Jun-21	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23			1,55%	63 680,00 €
	1 000,00 €	1 000,00 €	0.00 €	0.00 €	0.00 €	0.00 €	0.00 €	0.00 €				

Figure 32. Internal financial reporting template - costs

In the "**WPs**" sheet, one may find a list of the WPs, the WP leaders, vice leaders, start and end date as well as the WP's/task's duration. In the "**Efforts**" sheet, one may find the efforts per partner and per WP. In the "**WPs Tasks Efforts**" sheet, the efforts per partner and task as well as the start and end date and duration may be found. The "**Follow-up**" sheet contains the efforts of a partner per task. Within the "Follow-up" sheet, the "**Planned efforts linearly distributed**" (indicated in purple) shows the efforts per task and month, linearly distributed over the duration of the task; the "**real efforts**" (indicated in green - not depicted here) is used to enter the efforts per month and task, actually performed. The cells in which efforts are expected to be noted, initially contain a zero value and are shaded in green; and the "**Planned Efforts Linearly Distributed – Real Efforts Accumulated**" (indicated in blue - not depicted here) shows the difference between the planned efforts (accumulated up to each month) and the efforts actually made (accumulated). If the real (cumulative) effort is less than the planned (cumulative) effort, a positive number (remaining effort) will appear on a red background. If the actual (cumulative) effort is greater than the planned (cumulative) effort, a negative number (excess effort) will appear with a green background. Finally in the "Costs" sheet one may find their estimated budget for personnel and other direct costs.

6.1.1.1 Guidelines on filling in the internal financial report template

For the reporting of the **efforts**:

- All partners should find the workbook that is addressed to their organization in the project's SharePoint.
- They should go to the "Follow-Up" sheet.
- They should decide if they prefer to follow-up efforts in person-months or in hours. If you person-months are preferred an "X" should be added in cell H66. If hours are preferred an "X" should be added in cell I66.
- According to the aforementioned choice, the organization's efforts are loaded in PMs or in hours.
- Real effort spent in PMs or hours should be reported in the "Real Efforts" section of the "Follow-up" sheet that is indicated in green.

For the reporting of the **costs**:

- All partners should go to the "Costs" tab.
- They should add their personnel costs for the respective reporting period.
- They should add their other costs (e.g., equipment, dissemination, travel, etc.) for the respective reporting period.
- Their consumption rate so far appears in Cells N3 and N9.
- Their remaining amount in EUR appears in Cells O3 and O9.
- Note: expenditure should always be according to the estimated budget each partner has for the action as well as the time period the project is when this report is taking place.

These reports are going to be monitored by CERTH and additional justifications for over- or under-spending might follow.

6.1.2 Technical reporting

In the same manner as the internal financial reporting, the internal technical reporting is also going to take place every 3-6 months. The goal of this report is to note down all actions taken place within the reporting period and the milestones achieved. In this manner, it will be easier to monitor whether all needed steps have been taken towards the scope and goals of the project or if alternative routes should be explored. CERTH has created a dedicated wiki page where a reporting page for each WP and for each period may be found (see ***Figure 33***).

Reporting table

	Reporting Periods (in Months)				
WPs	M1-M3	M4-M6	M7-M12	M13-M18	M19-M24
WP1	report	report	report	report	report
WP2	report	report	report	report	report
WP3	report	report	report	report	report
WP4	report	report	report	report	report
WP5	report	report	report	report	report
WP6	report	report	report	report	report
WP7	report	report	report	report	report
WP8	report	report	report	report	report
WP9	report	report	report	report	report
WP10	report	report	report	report	report

Figure 33. Internal technical reporting table

6.1.2.1 Guidelines on filling in the internal technical report template

In each reporting period:

- CERTH creates links for reporting wiki pages (the ones in green font).
- Each page has sections referred to “WP leader” and “WP contributor” as indicated in the example of WP1 template in ***Figure 34***.
- WP leaders should make sure to ask for input for their contributors (mainly their task leaders)
- WP contributors add their input in all WPs they are involved in.
- WP Leaders review partners' contributions, updated the section addressed to them and finalize the report.

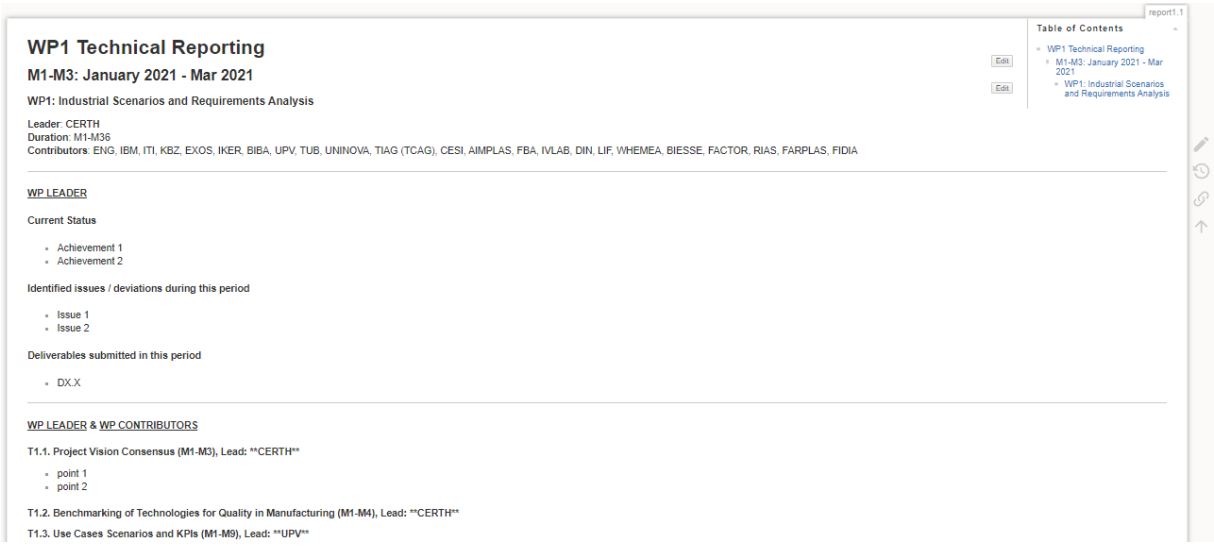


Figure 34. Example of WP1 internal technical reporting

In the “**current status**”, the current status of the WP should be reported in regard to what has been done so far and which milestones have been achieved. In the “**identified issues**”, the WP leader should report any issue that might have arisen and the mitigation measures that have been adopted to its tackling. In the “**deliverables submitted**”, the deliverables submitted within this period should be reported. If no deliverables were submitted during this period, then this should be explicitly stated. Under each task, the contribution of all involved partners should be added (e.g., the telcos they attended, the deliverables they have contributed to, the experiments that they had run etc.). Based on this input, the WP leader will be able to fill in the aforementioned sections. Finally, a **risk inventory** may be found at the bottom of the wiki page, in which both contributors and the WP leader can add any risks they can identify for the upcoming period, their likelihood of taking place (high-medium-low), their impact (high-medium-low) and the proposed mitigation measure. All input added by WP contributors should be reviewed and finetuned by the WP leader before being submitted to the TM (UPV) and the PC (CERTH).

6.2 Periodic/Final reports

Periodic reports are currently scheduled to take place in M18 (Jun. 2022) and in the end of the project in M36 (Dec. 2023) in accordance with the Grant Agreement (GA) and the DoA. The

consortium shall submit a periodic report, **within 60 days after the end of each respective period**, to the Commission for each reporting period. The periodic report must include the following:

- a periodic technical report containing:
  - an explanation of the work carried out by the beneficiaries;
  - an overview of the progress towards the objectives of the action, including milestones and deliverables. This report must include explanations justifying the differences between work expected to be carried out and that actually carried out. The report must also detail the exploitation and dissemination of the results and an updated plan for the exploitation and dissemination of the results;
  - a summary for publication;
  - the answers to the questionnaire, covering issues related to the action implementation and the economic and societal impact, notably in the context of the Horizon 2020 key performance indicators and the Horizon 2020 monitoring requirements;
- a periodic financial report containing:
  - an individual financial statement from each beneficiary, for the reporting period concerned. The individual financial statement must detail the eligible costs (actual costs, unit costs and flat-rate costs; The beneficiaries must declare all eligible costs, even if — for actual costs, unit costs and flat-rate costs — they exceed the amounts indicated in the estimated budget;
  - an explanation of the use of resources and the information on subcontracting;
  - a periodic summary financial statement.

For the compilation of this report, templates are going to be created by the PC for all partners to fill in within the indicated deadline. It should be highlighted here that for each partner's financial report in regard to the periodic report, the partners should fill in the templates created by CERTH and proceed with the submission of their organisation's official financial statement (Form C) on the SyGMa portal. Detailed guidelines and timelines will be communicated to the consortium by the PC.

7. Quality Plan

7.1 High quality research

The following steps will be followed for the assurance of high-quality research during the i4Q project:

- work performed during the project will be presented in conferences and journals with high impact factor;
- deliverables of high quality, such as reports, models, tools, prototypes, will be provided;
- for the production of high-quality software, self-assessment techniques will be applied;
- i4Q performance indicators will be defined and the progress of i4Q objectives, according to these indicators, will be monitored.

Regarding journal and conference publications; partners will publish parts of the i4Q project, where their work will be presented, in high impact factor scientific journals and at conferences in areas related to their expertise. During the lifetime of the i4Q project, from January 2021 to December 2023, it is estimated that around 18 scientific publications will be achieved, including conference papers and journal articles. Details regarding project's publications, such as scientific journals, European and international conferences, and/or events, which are of interest according to the project's partners and related to their field of expertise, will be presented in Deliverable D7.5 - Target-Driven Dissemination Strategy, Plan, and Reporting v1 (due in M12 – December 2021).

There are two main types of deliverables in the i4Q project; reports and demonstrators (of the i4Q' solutions prototypes) in which different handling is required. Regarding reports, in Section 6 three types of reporting are presented in detail; namely internal reports (paragraph 6.1), which are either financial reports (6.1.1) or technical reports (6.1.2) and periodic or final reports (Section 6.2). Section 6 describes thoroughly the preparation process of these deliverables and the specific time during project's lifetime, where each report should be submitted, in order to ensure high quality results.

Regarding solutions of i4Q project; here, handling differentiates from the reporting that was discussed above. In order to ensure high quality software prototypes, specific procedures should be followed. The goal of these procedures is the risk limitation, in order to achieve requirements' agreement and high-quality software tools. Risk management is discussed in Section 8 of this deliverable, where possible risks that could occur during project's lifetime, as well as mitigation measures are both explained in detail.

Figure 35 illustrates the development lifecycle of the project. "**Requirements' analysis**" is considered as the first stage of the project's lifecycle. At this stage, the project plan, work packages and deliverables, as well as stakeholders' requirements and i4Q objectives should be analysed and clarified to all partners. Here, a partial system's implementation or a rapid-prototyping might be useful, in order to ensure the clarification of the requirements and their better comprehension.

"**Design**" is the second stage of the project's lifecycle and includes the previous design of tasks and/or work packages that was addressed at the first stage, with a further in-depth design

phase, where solutions' features are extensively described. This stage offers a useful tool towards a better understanding of the requirements, and the recognition of the crucial decisions that are necessary to be made in order to build high quality solutions.

"**Development**" is the third stage of the project's development lifecycle. It is based on the previous stage of "Design" and it focuses on the solutions' implementation, according to the identified stakeholders' requirements. During this stage, testing of the solutions is required, in order to ensure i4Q solutions' accuracy and reliability.

The last stage of the development lifecycle is "**Testing**". At this stage pilots/industries test i4Q solutions independently. Here, the whole system is in operation and i4Q solutions' performance is tested, in order to check solutions' performance under certain conditions.

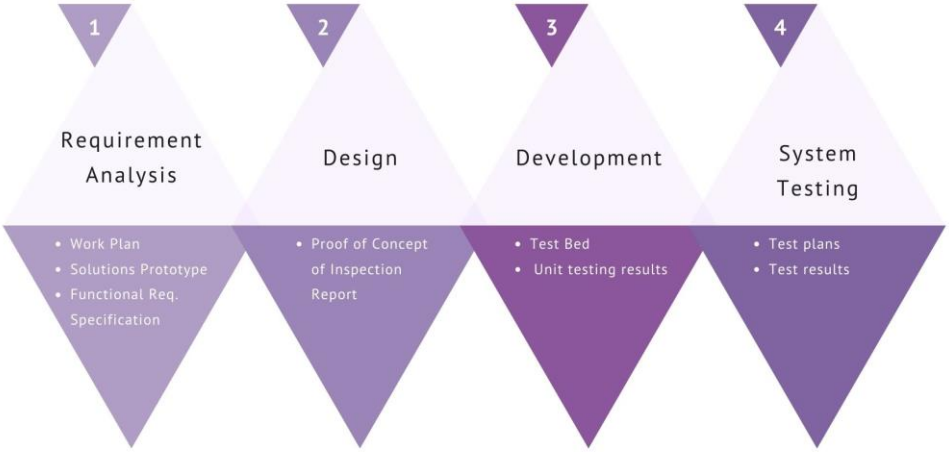


Figure 35. i4Q Development Lifecycle

It is important to emphasize that at every stage of the project's development lifecycle, nonconformities from the previous stages must be traced. In case any deviations are traced, then the necessary modifications on the solutions should be made. This can also lead to modifications on time schedules, financial costs, and/or risks. When the development lifecycle is successfully accomplished, then the final prototypes/solutions can be evaluated.

Three development cycles will be used during the project's lifecycle. i4Q solutions (prototypes) are released at four main stages; namely, first release will take place in M18, second one in M24, third one will take the form of "intermediate releases" within M27-M33 and the fourth one (final release) will take place in M36, all of which will lead to the milestones MS10, MS11, MS14-MS16, MS19, respectively. After each cycle/release, results will be evaluated and stakeholders'/end-users' feedback will be used for the evaluation of the requirements and the preparation of the next updated release of i4Q solutions.

7.2 High quality development

In order to succeed high quality development in i4Q project, the application of methodologies and controls is crucial, not only at the process level (methodology applied at the development lifecycles of the project), but also at the prototype level (i4Q solutions).

A software/prototype development practice that is commonly used by the development team for the integration of their work when necessary is the so-called continuous integration. Applying continuous integration is vital in order for problems that arise at an early stage of project's development to be identified and validated. More specifically, the latest modifications that took place in the continuous integration will be validated with the rest of the application. The automation of the integration process is important among the pilots' developers. For that reason, it is necessary to use automation tools.

Continuous integration is quite useful, when applied in the development process of a software/prototype. Projects' activities can be integrated in systematic code and quality measurements can be predefined. Moreover, any changes in the development process are possible to be tracked, sent to the integration server and via the above-mentioned automation tools, functional tests can be applied to the system.

Some extra techniques that project's consortium can also apply for the assurance of solutions' quality are the following:

- Solutions' quality can be managed via a static code analysis, based on the appropriate tools. Thus, problems such as uncertainties, errors, and malfunctions of the solutions/software can be easily detected.
- Requirements, quality standards, and metrics can be defined or checked if followed during the projects' development lifecycle, as well as the quality of the final prototype can be assured. To do so, guidelines, checklists and coding standards will be used.
- Last but not least, all changes and adaptations during the development lifecycle of i4Q solutions can be recorded, restored in a database and be available to be reached at any time, when necessary.

Through the above-mentioned techniques and integration principles, the initial prototype is tested, evaluated and all necessary changes and improvements are applied to the next prototype. The practice of continuous integration offers the advantage to always keep the prototype functional without failures and finally lead to the final prototype's demonstration.

7.3 Deliverables

Within the context of i4Q, 119 deliverables should be prepared, reviewed and submitted. ***Table 7*** shows all deliverables, under which WP they are falling, the lead beneficiary, the type of the deliverable, the dissemination level, the due date (both in project months as well as in actual dates) and the indicated reviewers that have been assigned for the internal review process for the 1st year of the project. More reviewers for the remaining two years will be added on an annually basis by CERTH in order to take into consideration the partners' workload on that given time. The internal reviewers will mostly be one end user and one technical partner that will be able to review the document from both perspectives. In this manner, it will be ensured that the

document will be understandable to an external reviewer regardless of their backgrounds (to the extent possible).

The process that is going to be followed for the compilation, review and submission of all deliverables is the following:

- **At the beginning of each task**: The deliverable responsible partner sends the ToC and sections allocation to all task participants, the Quality Control Manager (Raquel Sanchis - UPV) and the Technical Manager (Raul Poler - UPV) for review. The QCM and the TM will make sure to check whether the ToC is in alignment with the descriptions found in the GA or if any modifications should be made. Comments are sent within 2-3 days and the editor starts to ask the rest of the partners for input (if needed) for the compilation of the document.
- **8 weeks before the deadline**: CERTH sends a reminder of the "Deliverable timeplan" informing the responsible author and the internal reviewers about the process that is going to be followed.
- **4 weeks before the deadline**: Deliverable is sent for internal review to the indicated internal reviewers; the technical manager; and the quality control manager.
- **3 weeks before the deadline**: The reviewers return their internal review form and any in-text comments they may have to the responsible author.
- **2 weeks before the deadline**: The responsible author addresses the received comments and returns the final document back to CERTH.
- **1 week before the deadline**: CERTH runs a final quality check in order to make any necessary adjustments to the deliverable's formatting and proceeds with the submission.

Regarding the drafting of the document:

- The responsible author (RA) creates the respective folders in the SharePoint (according to already existing ones, e.g., D1.1).
- The RA creates the first version of the ToC and uploads it to the SharePoint.
- The ToC should also include sections allocation to all partners whose input is going to be needed.
- The RA informs the involved partners (via the respective mailing lists) that the ToC/deliverable working version is ready for them to review.
- Everyone who has something to comment or suggest, they could do either via email to the responsible author or by adding comments on the document found in the SP ("reviewing" mode).
- After the deadline of the review, the responsible author will take a look at the comments and try at his/her best to address them before starting with the compilation of the document.
- All partners that have to add their contribution to the deliverable should make sure to take care of this within the indicated date. They should add any input they have in "editing" mode in the SP (especially if this is the first version of their section).
- The RA is responsible for acquiring all necessary input from the partners involved.
- Once the document is ready for internal review, the RA should inform CERTH, UPV and the internal reviewers that the document is ready on the SharePoint (an email sent by CERTH

has been sent prior to this in order for the internal reviewers to be informed when to expect the document).

- The reviewers should make sure to fill in the internal review forms (in "editing" mode) that they find in the "Reviews" folder under each deliverable and to add any in-text comments/suggestions they have directly in the document (in "Reviewing" mode). Examples of the internal review form may be found in Appendix I.
- Once the review is completed by both internal reviewers, they should inform the RA, CERTH & UPV.
- The RA addresses to the best extent the received comments and sends the final doc back to CERTH & UPV.
- UPV approves the final version of the document and CERTH runs a final quality check (in editing mode) in order to make sure that everything is alright with the document before submission.
- The final version of the deliverable is moved to "Deliverables" folder.
- The final version of the deliverable is submitted by CERTH.
- All partners should work with the online office in Sharepoint or if they have office 365 you are able to open in the app and you can work locally, and the file is syncing automatically. For those without an office 365, they should use the online office directly in the SharePoint.

Additional quality assurance guidelines on the formatting of the document may be found on the "Quality Assurance" wiki page.

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D1.1	Project Vision Guide Document	WP1	CERTH	Report	PU	3	Mar-21	UPV, TUB
D2.1	i4Q Reference Architecture and Viewpoints Analysis	WP2	ENG	Report	PU	3	Mar-21	IBM, BIESSE
D2.2	Digital Models and Ontologies	WP2	EXOS	Report	PU	3	Mar-21	ITI, FACTOR
D9.1	Project Handbook	WP9	CERTH	Report	CO	3	Mar-21	TIAG, RIAS
D1.2	Benchmarking of Digital Technologies with potential to i4Q	WP1	CERTH	Report	PU	4	Apr-21	IKER, DIN
D1.3	Demonstration Scenarios and Monitoring KPIs Definition	WP1	UPV	Report	PU	4	Apr-21	ENG, FIDIA
D1.4	Requirements Analysis and Functional Specification	WP1	TUB	Report	PU	4	Apr-21	EXOS, UNINOVA
D1.5	Data Management Plan	WP1	ITI	ORDP	CO	6	Jun-21	AIMP, LIF
D8.1	Report on KERs and Business Model Canvas	WP8	FBA	Report	CO	6	Jun-21	KBZ, IVLAB
D9.8	Short Interim Management Report v1	WP9	CERTH	Report	CO	6	Jun-21	-
D2.3	Report on Business Viewpoint	WP2	ENG	Report	PU	7	Jul-21	TUB, WHI
D10.1	H - Requirement No. 1	WP10	CERTH	Report	CO	8	Aug-21	FBA, DIN
D1.8	Demonstration Scenarios and Monitoring KPIs Definition v2	WP1	UPV	Report	PU	9	Sep-21	BIBA, BIESSE
D1.9	Requirements Analysis and Functional	WP1	TUB	Report	PU	9	Sep-21	CERTH,

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
	Specification v2							FACTOR
D2.4	Report on Usage Viewpoint	WP2	ITI	Report	PU	9	Sep-21	IBM, RIAS
D2.5	Functional Specifications	WP2	UPV	Report	PU	9	Sep-21	IKER, FARPLAS
D2.6	Technical Specifications	WP2	EXOS	Report	CO	9	Sep-21	UNINOVA, FIDIA
D2.7	i4Q Reference Architecture and Viewpoints Analysis v2	WP2	ENG	Report	PU	9	Sep-21	CESI, IVLAB
D1.6	Regulation and Trustworthy System	WP1	TUB	Report	CO	12	Dec-21	AIMP, LIF
D1.7	Data Management Report	WP1	ITI	Report	CO	12	Dec-21	EXOS, FBA
D7.3	Industrial Advisory Board and Workshops Feedback Report	WP7	IKERLAN	Other	PU	12	Dec-21	ENG, WHI
D7.4	Standardisation Plan and Status Report	WP7	DIN	Report	PU	12	Dec-21	BIBA, UPV
D7.5	Target-Driven Dissemination Strategy, Plan, and Reporting v1	WP7	IVLAB	Report	PU	12	Dec-21	CESI, BIESSE
D7.6	Website and Materials Production v1	WP7	IVLAB	Websites,patents etc.	PU	12	Dec-21	IBM, FACTOR
D8.2	Plan for Exploitation and Dissemination of Results - PEDR	WP8	KBZ	Report	CO	12	Dec-21	TIAG, RIAS
D8.3	FTO Analysis Report	WP8	IVLAB	Report	CO	12	Dec-21	UNINOVA, FARPLAS

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D9.9	Short Interim Management Report v2	WP9	CERTH	Report	CO	12	Dec-21	-
D2.1	i4Q Reference Architecture and Viewpoints Analysis	WP2	ENG	Report	PU	3	Mar-21	IBM, BIESSE
D2.2	Digital Models and Ontologies	WP2	EXOS	Report	PU	3	Mar-21	ITI, FACTOR
D9.1	Project Handbook	WP9	CERTH	Report	CO	3	Mar-21	TIAG, RIAS
D3.1	i4Q Data Quality Guidelines	WP3	BIBA	Report	PU	18	Jun-22	
D3.2	i4Q QualiExplore for Data Quality Factor Knowledge	WP3	BIBA	Other	PU	18	Jun-22	
D3.3	i4Q Blockchain Traceability of Data	WP3	IBM	Other	PU	18	Jun-22	
D3.4	i4Q Trusted Networks with Wireless & Wired Industrial Interfaces	WP3	ITI	Other	PU	18	Jun-22	
D3.5	i4Q Cybersecurity Guidelines	WP3	IKERLAN	Report	PU	18	Jun-22	
D3.6	i4Q IIoT Security Handler	WP3	IKERLAN	Other	PU	18	Jun-22	
D3.7	i4Q Guidelines for Building Data Repositories for Industry 4.0	WP3	ITI	Report	PU	18	Jun-22	
D3.8	i4Q Data Repository	WP3	ITI	Other	PU	18	Jun-22	
D4.1	i4Q Data Integration and Transformation Services	WP4	CERTH	Other	PU	18	Jun-22	
D4.2	i4Q Services for Data Analytics	WP4	UNINOVA	Other	PU	18	Jun-22	
D4.3	i4Q Big Data Analytics Suite	WP4	UNINOVA	Other	PU	18	Jun-22	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D4.4	i4Q Analytics Dashboard	WP4	UNINOVA	Other	PU	18	Jun-22	
D4.5	i4Q AI Models Distribution to the Edge	WP4	IBM	Other	PU	18	Jun-22	
D4.6	i4Q Edge Workloads Placement and Deployment	WP4	IBM	Other	PU	18	Jun-22	
D4.7	i4Q Infrastructure Monitoring	WP4	CERTH	Other	PU	18	Jun-22	
D4.8	i4Q Digital Twin	WP4	IKERLAN	Other	PU	18	Jun-22	
D5.1	i4Q Data-Driven Continuous Process Qualification	WP5	TUB	Other	PU	18	Jun-22	
D5.2	i4Q Rapid Quality Diagnosis	WP5	CERTH	Other	PU	18	Jun-22	
D5.3	i4Q Prescriptive Analysis Tools	WP5	IKERLAN	Other	PU	18	Jun-22	
D5.4	i4Q Manufacturing Line Reconfiguration Guidelines	WP5	UPV	Report	PU	18	Jun-22	
D5.5	i4Q Manufacturing Line Reconfiguration Toolkit	WP5	UPV	Other	PU	18	Jun-22	
D5.6	i4Q Manufacturing Line Data Certification Procedure	WP5	TUB	Other	PU	18	Jun-22	
D6.1	Pilot 1: Fidia - Smart Quality in CNC Machining	WP6	FIDIA	Demo	CO	18	Jun-22	
D6.2	Pilot 2: Biesse - Diagnostics and IoT Services	WP6	BIESSE	Demo	CO	18	Jun-22	
D6.3	Pilot 3: Whirlpool - White Goods Product Quality	WP6	WHI	Demo	CO	18	Jun-22	
D6.4	Pilot 4: Factor - Aeronautics and Aerospace Metal Parts Quality	WP6	FACTOR	Demo	CO	18	Jun-22	
D6.5	Pilot 5: RiaStone - Advanced In-line Inspection for	WP6	RIAS	Demo	CO	18	Jun-22	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
	incoming Prime Matter Quality Control							
D6.6	Pilot 6: Farplas - Automatic Advanced Inspection of Automotive Plastic Parts	WP6	FARPLAS	Demo	CO	18	Jun-22	
D7.1	Impact Activities	WP7	KBZ	Websites,patents etc.	PU	18	Jun-22	
D7.2	Clustering and Regional Interactions	WP7	FBA	Websites,patents etc.	PU	18	Jun-22	
D9.2	Strategic and Operational Coordination	WP9	CERTH	Report	CO	18	Jun-22	
D9.3	Technical WP Reports	WP9	UPV	Report	CO	18	Jun-22	
D9.4	Ops Setup and Quality Control Report	WP9	UPV	Report	CO	18	Jun-22	
D3.9	i4Q Data Quality Guidelines v2	WP3	BIBA	Report	PU	24	Dec-22	
D3.10	i4Q QualiExplore for Data Quality Factor Knowledge v2	WP3	BIBA	Other	PU	24	Dec-22	
D3.11	i4Q Blockchain Traceability of Data v2	WP3	IBM	Other	PU	24	Dec-22	
D3.12	i4Q Trusted Networks with Wireless & Wired Industrial Interfaces v2	WP3	ITI	Other	PU	24	Dec-22	
D3.13	i4Q Cybersecurity Guidelines v2	WP3	IKERLAN	Report	PU	24	Dec-22	
D3.14	i4Q IIoT Security Handler v2	WP3	IKERLAN	Other	PU	24	Dec-22	
D3.15	i4Q Guidelines for Building Data Repositories for Industry 4.0 v2	WP3	ITI	Report	PU	24	Dec-22	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D3.16	i4Q Data Repository v2	WP3	ITI	Other	PU	24	Dec-22	
D4.9	i4Q Data Integration and Transformation Services v2	WP4	CERTH	Other	PU	24	Dec-22	
D4.10	i4Q Services for Data Analytics v2	WP4	UNINOVA	Other	PU	24	Dec-22	
D4.11	i4Q Big Data Analytics Suite v2	WP4	UNINOVA	Other	PU	24	Dec-22	
D4.12	i4Q Analytics Dashboard v2	WP4	UNINOVA	Other	PU	24	Dec-22	
D4.13	i4Q AI Models Distribution to the Edge v2	WP4	IBM	Other	PU	24	Dec-22	
D4.14	i4Q Edge Workloads Placement and Deployment v2	WP4	IBM	Other	PU	24	Dec-22	
D4.15	i4Q Infrastructure Monitoring v2	WP4	CERTH	Other	PU	24	Dec-22	
D4.16	i4Q Digital Twin v2	WP4	IKERLAN	Other	PU	24	Dec-22	
D5.7	i4Q Data-Driven Continuous Process Qualification v2	WP5	TUB	Other	PU	24	Dec-22	
D5.8	i4Q Rapid Quality Diagnosis v2	WP5	CERTH	Other	PU	24	Dec-22	
D5.9	i4Q Prescriptive Analysis Tools v2	WP5	IKERLAN	Other	PU	24	Dec-22	
D5.10	i4Q Manufacturing Line Reconfiguration Guidelines v2	WP5	UPV	Report	PU	24	Dec-22	
D5.11	i4Q Manufacturing Line Reconfiguration Toolkit v2	WP5	UPV	Other	PU	24	Dec-22	
D5.12	i4Q Manufacturing Line Data Certification Procedure v2	WP5	TUB	Other	PU	24	Dec-22	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D6.7	i4Q Solutions Demonstrator	WP6	EXOS	Demo	PU	24	Dec-22	
D6.9	Continuous Integration and Validation	WP6	ITI	Other	PU	24	Dec-22	
D8.9	FTO Analysis Report v2	WP8	IVLAB	Report	CO	24	Dec-22	
D9.10	Short Interim Management Report v3	WP9	CERTH	Report	CO	24	Dec-22	
D6.17	Continuous Integration and Validation v2	WP6	ITI	Other	PU	30	Jun-23	
D8.4	Report of the Customer Discovery Process	WP8	FBA	Report	CO	30	Jun-23	
D8.5	Sustainability Analysis report	WP8	KBZ	Report	CO	30	Jun-23	
D8.6	Go-to-market Plan	WP8	FBA	Report	CO	30	Jun-23	
D8.7	IPR protection Strategy Report	WP8	LIF	Report	CO	30	Jun-23	
D8.8	Investors Involvement Report	WP8	FBA	Report	CO	30	Jun-23	
D9.11	Short Interim Management Report v4	WP9	CERTH	Report	CO	30	Jun-23	
D1.10	Regulation and Trustworthy System v2	WP1	TUB	Report	CO	36	Dec-23	
D1.11	Data Management Report v2	WP1	ITI	Report	CO	36	Dec-23	
D6.8	i4Q Solutions Handbook	WP6	ITI	Report	PU	36	Dec-23	
D6.10	4Q Solutions Demonstrator v3	WP6	EXOS	Demo	PU	36	Dec-23	
D6.11	Pilot 1: Fidia - Smart Quality in CNC Machining v2	WP6	FIDIA	Demo	CO	36	Dec-23	
D6.12	Pilot 2: Biesse - Diagnostics and IoT Services v2	WP6	BIESSE	Demo	CO	36	Dec-23	
D6.13	Pilot 3: Whirlpool - White Goods Product Quality v2	WP6	WHI	Demo	CO	36	Dec-23	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D6.14	Pilot 4: Factor - Aeronautics and Aerospace Metal Parts Quality v2	WP6	FACTOR	Demo	CO	36	Dec-23	
D6.15	Pilot 5: RiaStone - Advanced In-line Inspection for incoming Prime Matter Quality Control v2	WP6	RIAS	Demo	CO	36	Dec-23	
D6.16	Pilot 6: Farplas - Automatic Advanced Inspection of Automotive Plastic Parts v2	WP6	FARPLAS	Demo	CO	36	Dec-23	
D6.18	Continuous Integration and Validation v3	WP6	ITI	Other	PU	36	Dec-23	
D7.7	Impact Activities v2	WP7	KBZ	Websites,patents etc.	PU	36	Dec-23	
D7.8	Clustering and Regional Interactions v2	WP7	FBA	Websites,patents etc.	PU	36	Dec-23	
D7.9	Industrial Advisory Board and Workshops Feedback Report v2	WP7	IKERLAN	Other	PU	36	Dec-23	
D7.10	Standardisation Plan and Status Report v2	WP7	DIN	Report	PU	36	Dec-23	
D7.11	Target-Driven Dissemination Strategy, Plan, and Reporting v4	WP7	IVLAB	Report	PU	36	Dec-23	
D7.12	Website and Materials Production v4	WP7	IVLAB	Websites,patents etc.	PU	36	Dec-23	
D8.10	Report of the Customer Discovery Process v2	WP8	FBA	Report	CO	36	Dec-23	
D8.11	Sustainability Analysis report v2	WP8	KBZ	Report	CO	36	Dec-23	
D8.12	Go-to-market Plan v2	WP8	FBA	Report	CO	36	Dec-23	

No.	Title	WP	Author	Type	Diss. Level	Due date		Reviewer
D8.13	IPR protection Strategy Report v2	WP8	LIF	Report	CO	36	Dec-23	
D8.14	Investors Involvement Report v2	WP8	FBA	Report	CO	36	Dec-23	
D8.15	Plan for Exploitation and Dissemination of Results - PEDR v3	WP8	KBZ	Report	CO	36	Dec-23	
D9.5	Strategic and Operational Coordination v2	WP9	CERTH	Report	CO	36	Dec-23	
D9.6	Technical WP Reports v2	WP9	UPV	Report	CO	36	Dec-23	
D9.7	Ops Setup and Quality Control Report v2	WP9	UPV	Report	CO	36	Dec-23	

Table 7. List of deliverables details

Additionally, a mapping among these deliverables as depicted in ***Figure 36*** has been created by UPV in order to identify the correlations between deliverables and whose output is going to be used as an input for another deliverable. The mapping shown in the figure below will be kept updated by all partners throughout the project's lifetime in order to ensure all input/output is taken into consideration when a deliverable is drafted. Additional feedback on the deliverables will also be requested from the Advisory Board within the context of the Workshops to be organized and as an attempt to ensure the high quality of the project's reports and demos.

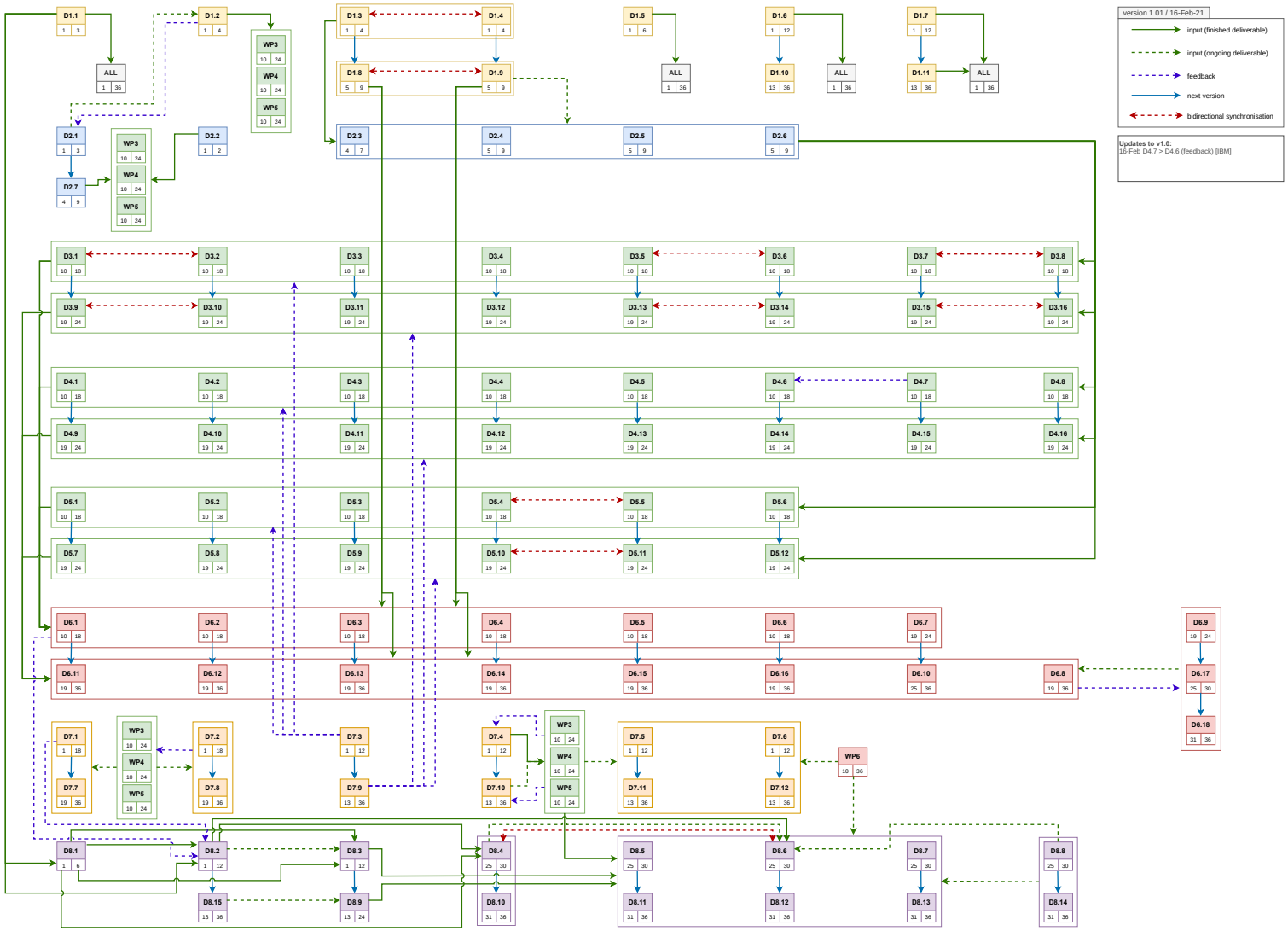


Figure 36. Deliverables' map

8. Risk Management

The focal point of this section will be the processes followed in order to timely identify and manage risks within the project's lifetime, as well as the measures that will be taken towards handling non-conformity and/or flaws in quality. Apart from the Critical Risks reported in the Grant Agreement, additional risks may arise throughout the project's duration that need to be efficiently handled.

8.1 Risk Management procedure

Events that could have problematic consequences may be considered as risks. They could be either internal or external to the system; meaning that if a source of risk lies within the context of WPX activities and affects WPX outcomes can be considered as internal. On the contrary, if this WPX risk can generate negative consequences in WPY, in which the risk should be managed, this risk can be considered as external to WPY. As a consequence, both internal and external risks should be identified, tracked and monitored throughout the project's lifetime in order to avoid any compromise to i4Q's solutions in the long run.

This identification of risks will be performed through self-assessment and will follow two main approaches:

- "**top-down**" approach: the Project Coordinator and Technical Manager will review the potential risks that may arise in each plenary/technical meeting and/or deliverable review and will propose ways to mitigate their negative impact;
- "**bottom-up**" approach: a risk inventory per WP has been created in order for all partners to keep track of the risks they can identify within their WP, report them and propose mitigation measures. These risks are to be timely communicated to the WP leader and if they cannot be handled within this level, to be communicated to the Project Coordinator and the Technical Manager for further assistance and consultation.

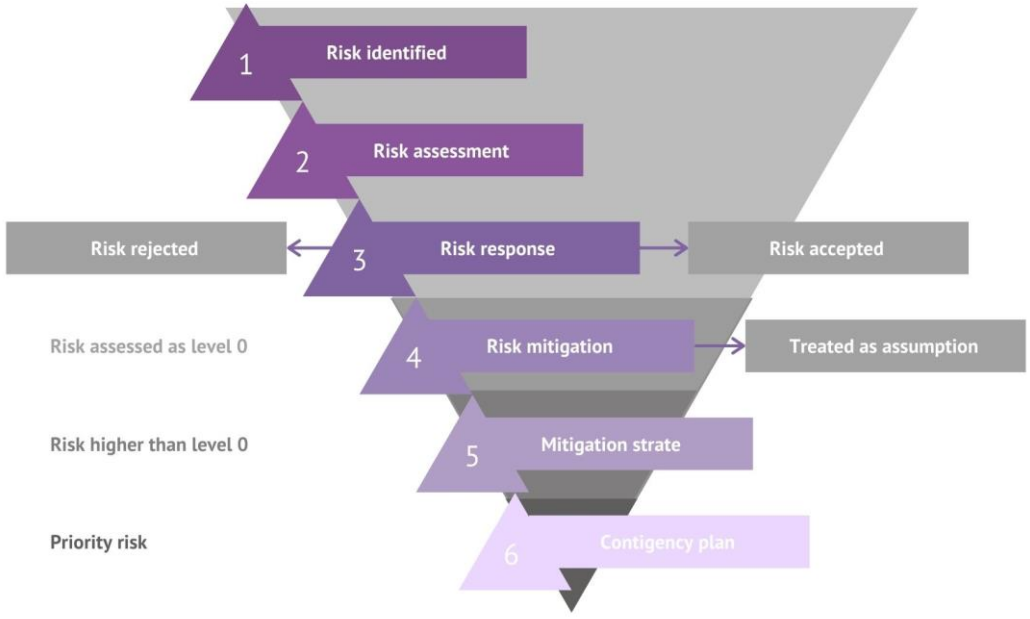


Figure 37. Risk Identification Process

The created risk inventory quantifies the identified risks in two dimensions as depicted in ***Table 8*** below: likelihood (i.e., how likely is this risk to occur) and impact (i.e., the effect that is going to have on i4Q), each of which could be rated on scale from 1 to 3. The larger the number is, the larger the impact or likelihood is.

Likelihood / Impact	Low	Medium	High
Low	0	1	2
Medium	1	1	2
High	2	2	3

Table 8. Risk management matrix

8.2 Risk inventory

As mentioned above, a risk inventory per WP has been created in the project's main management tool (SharePoint) with the following information:

- **WP**: which WP is affected by the identified risk.
- **Description**: description of the risk identified and if it affects any other activities within the project other than the ones in the indicated WP.
- **Likelihood**: the likelihood of this risk occurring based on the partners experience so far within and outside the project:
    - Low: it is estimated that this risk is unlikely to take place but should be reported in order to be considered.
    - Medium: it is estimated that this risk has descent likelihood to occur; therefore, it should be reported.
    - High: it is estimated that this risk is most likely to take place; therefore, it should be reported and kept on the involved partners highest priority.
- **Impact**: the impact that this risk will have on this and/or other WPs:
    - Low: this risk will have minor negative consequences on this WP and will not affect other WPs' activities.
    - Medium: this risk might have some negative consequences on this WP that could hinder its progress and might also affect other WPs' activities.
    - High: this risk will have major consequences on this WP and should be dealt with immediately; this risk could also have a great impact on other WPs as well that could hinder their progress.
- **Mitigation measures**: measures proposed by the partner that has identified this risk in order to successfully tackle it. These measures will be discussed in WP and plenary meetings in order to decide upon their adoption or alteration.

8.3 Corrective action procedure

The procedure for corrective actions will be applied to all i4Q's items (i.e., software, hardware, reports). In case some of them do not comply with the set quality plan, the following procedure

should be followed in order to correct any non-conformities that might have arisen through the production of i4Q's prototypes. The procedure is described below.

- Activity
    - The Internal Reviewer or the Quality Assurance Manager can detect non-conformity as a result of an activity that is under review.
- Identification of non-conformity
    - If a non-conformity is detected, the reviewer identifies it as such: by indicating its origin (Internal review, Formal Review, Technical Review or Software Testing) and by describing it.
    - Once the identification is fulfilled, the reviewer communicates it to the WP Leader the deliverable/result belongs to.
- Evaluation
    - The WP Leader evaluates if the non-conformity affects only his/her WP or additional ones as well.
    - If the scope of the non-conformity is beyond his/her WP, other involved partners will be notified by the WP leader and the following step will be followed. Otherwise, it will be dealt with by the WP Leader.
- Corrective Action
    - Identification – specification of all the items affected by the non-conformity and description of the corrective action proposed for its solution.
    - Resolution – as soon as the corrective action is described, a decision will be taken on its execution (or not). Depending on the scope of the non-conformity, the decision can be responsibility of Quality Assurance Manager, the Technical Manager or the Project Coordinator.

9. Conclusion

In deliverable D9.1 the Project Handbook was presented in detail. The Project Handbook aims to serve as reference point for all i4Q partners in order to explain the daily project's operations, the way of collaborating, the tools that will be used during the project's development lifecycle, as well as other relevant matters that guarantee an efficient and successful cooperation among the i4Q Consortium members and the successful progress of the project. Besides, this deliverable offers an overall reference point for i4Q personnel and serves as an entry point for a new employee, working on the project. Here the guidelines for efficient collaboration and integration of the developers across the i4Q consortium are being set. Tools, procedures, criteria for the evaluation process, as well as the evaluation of project results are defined.

More specifically, Section 2 of this deliverable included the executive summary of the project. The project overview was presented in Section 3, including basic information about the project, the project's aims and objectives, the structure of the project, as well as the i4Q consortium, its roles and management structure and finally the contractual documents. Section 4 addressed the tools that will be used in i4Q project, the Doku.wiki, the SharePoint and the Google Calendar. Communication, such as mailing lists, online meeting platforms, external communication and dissemination were explained in Section 5. Furthermore, in Section 6 the reporting of the project, e.g., internal reporting, financial details, technical reports, and finally periodic reports were explained in detail. The document continued with deliverables and project results in Section 7, risk management in Section 8 and finally with conclusions in Section 9.

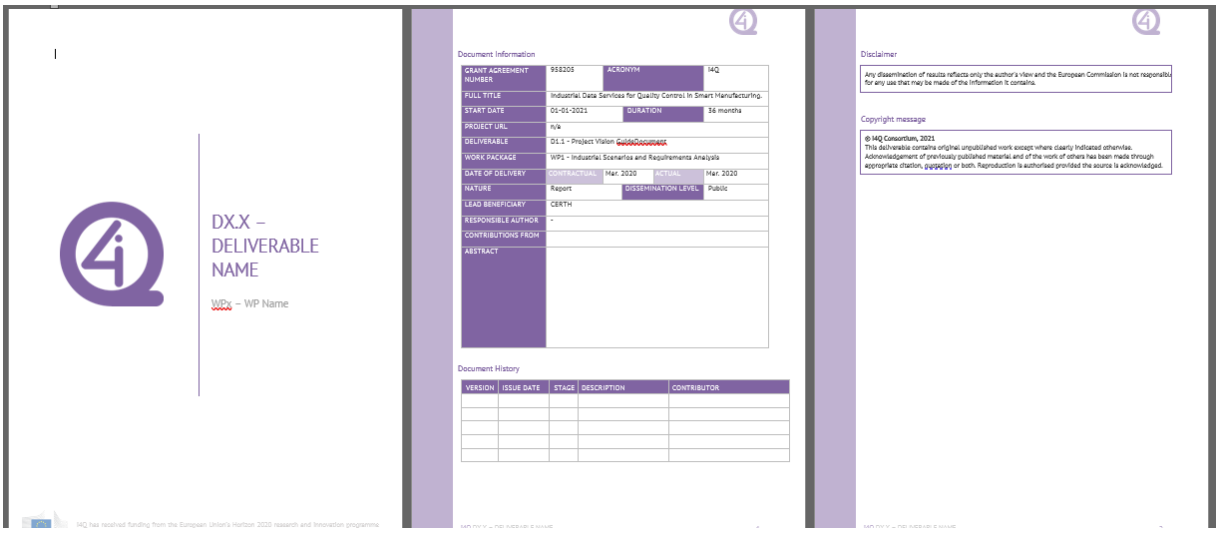
To summarize, the i4Q Project started on January 2021 and will end on December 2023. 24 partners are participated, from 11 European countries, with project co-ordinator Stefanos Vrochidis from CERTH. It will provide a complete suite of 22 solutions consisting of sustainable IoT-based Reliable Industrial Data Services (RIDS) that will be able to manage the huge amount of industrial data coming from cost-effective, smart, and small size interconnected factory devices for supporting manufacturing online monitoring and control. It will be able to guarantee the reliability of this data with functions grouped into five basic capabilities around the data cycle: (i) sensing, (ii) communication, (iii) computing infrastructure, (iv) storage, and (v) analysis and optimisation.

The project is split into 10 different work packages (WP) and 119 deliverables, where all partners have a role in their execution. Apart from the leadership of certain WPs, some partners have a horizontal role in other WPs in order to assist the involved partners with the proper execution of their tasks. i4Q's management structure has been based on the partners' extensive previous experience in other relevant European Union (EU) funded projects, in combination with the exploration on i4Q's specific needs.

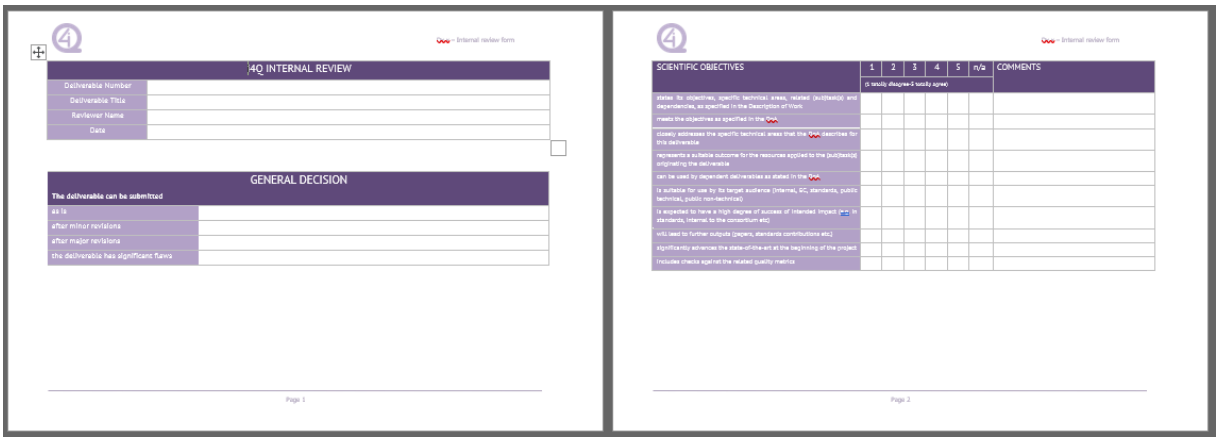
The way of operation among all partners is based on two contractual agreements: the Grant Agreement and the Consortium Agreement, which have to be methodically followed. Each one of them describes how certain matters should be executed and handled during the project's lifetime. Both of these documents apply to all partners and must be respected by all involved parties.

Appendix I – Templates

Deliverables

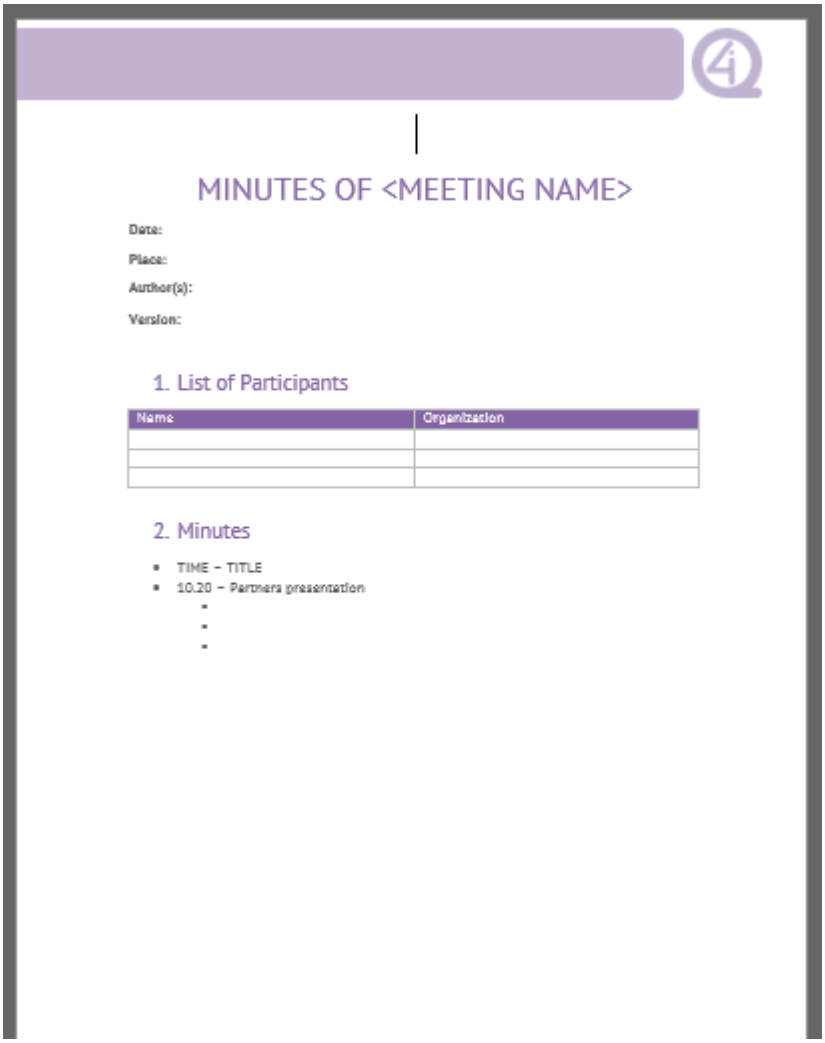


Internal review form for deliverable



Presentation

Minutes of meeting



MINUTES OF <MEETING NAME>

Date:

Place:

Author(s):

Version:

1. List of Participants

Name	Organization

2. Minutes

- TIME – TITLE
- 10.20 – Partners presentation
  -
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