



DELIVERABLE REPORT D3.2

DELIVERABLE

SUBMISSION DATE	NAME OF THE DELIVERABLE	WORK PACKAGE
29.3.2018	Initial Quality Management Plan	WP3
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Public	Božena Čechalová (BUT)	BUT

PROJECT DETAILS

PROJECT ACRONYM	PETER	GRANT AGREEMENT	767227
CALL IDENTIFIER	H2020-FETOPEN-1-2016-2017	PROJECT DURATION	1.1.2018 – 31.12.2020
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CONSORTIUM PARTNERS	Brno University of Technology	COUNTRY	Czech Republic
	Universität Stuttgart		Germany
	CIC nanoGUNE		Spain
	Thomas Keating Ltd.		United Kingdom

QUALITY CONTROL ASSESSMENT SHEET

VERSION	DATE	DESCRIPTION	NAME
v0.1	13.2.2018	First draft	Božena Čechalová
v0.2	6. 3. 2018	Review first draft	BUT project team
v0.3	23. 3. 2018	Review second draft	Joris van Slageren
v0.4	27. 3. 2018	Review second draft	Monika Goikotxea Larruskain
v0.5	28. 3. 2018	Final draft and quality check	Božena Čechalová
v1.0	29. 3. 2018	Submission to the EC	Božena Čechalová

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ACKNOWLEDGEMENT

This document is a deliverable of the PETER project, which has received funding from the European Union’s Horizon 2020 Programme under Grant Agreement (GA) #767227.

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LIST OF ABBREVIATIONS

BUT	Brno University of Technology
EPR	Electron Paramagnetic Resonance
MS	Milestone
NGU	CIC NanoGUNE
PETER	Plasmon Enhanced Terahertz Electron Paramagnetic Resonance
PM	Project Manager
PS	Plasmonic structures
PSC	Project Steering Committee
QMP	Quality Management Plan
TK	Thomas Keating Ltd.
THz	Terahertz
USTUTT	University of Stuttgart
WP	Work Package

1. INTRODUCTION

The Quality Management of the PETER project falls under the umbrella of the Work Package 3 “Management, Communication, Dissemination and Exploitation” and it consist in part of the task T3.1 (Management).

The specific objectives of the task T3.1 are:

- Quality management
 - Defining and updating the Quality Management Plan (QMP)
 - Introducing formal processes for the project life-cycle, its evaluation and control according to the quality standards
- Risk management – identification, evaluation and management of problems and risks to secure a timely execution of the project
- Coordination and day-to-day management
- Organisation of meetings (kick-off, mid-term, and final)

The workload within this task is distributed over the whole duration of the project (M1–M36).

The quality management is ensured by the Project Coordinator, who is supported mainly by the Project Manager and WP leaders. The continuous assessment and subsequently the earliest possible identification of any problems and delays are crucial for the application of appropriate measures.

The Project Coordinator or the Steering Committee (if appropriate to the nature of such a problem) determines the corresponding action. Work Package (WP) Leaders are responsible to implement such actions and recommendations. The quality-check procedure is described in the following chapters.

Together with the quality assessment the risk assessment will be continuously conducted during the whole project duration to be sure the consortium will be able to fulfil the project goals on time and on budget.

The risk management process consists of the following steps:

- Risk identification and characterization
- Risk evaluation (qualitative and quantitative)
- Risk prioritization
- Risk response planning – mitigation strategies and contingency planning
- Risk controlling, monitoring and reporting

The outcomes of the risk management will be part of Periodic Activity and Management Reports. The Project Manager is responsible for risk analysis.

2. QUALITY MANAGEMENT PLAN

2.1 Purpose

The quality management plan is the document setting out the quality assurance procedures for the PETER project. It aims to deliver clarification and guidance to procedures and standards to be used in all major activities set in the project. This QMP will also include a model for the Risk Management framework to be used by the Project Manager to identify risks and to create a relevant contingency plan.

The current QMP is applicable to all activities related to the project. Hence, compliance of its execution is **mandatory for all partners involved**.

The PETER quality principles are as follows:

- To implement and maintain a quality system;
- To communicate to all involved their responsibilities regarding quality;
- To ensure that all deliverables comply with grant agreement;
- To ensure that all processes relevant to the project are organized and monitored at a high level of effectiveness and quality.

2.2 Structure

The PETER QMP includes the following sections:

- Quality Control Activities - outlines the quality planning defining the outputs required by the project and the management structure already drafted in the project proposal.

- Quality Assurance Activities - provides description of the tools used for collaboration in the project, the procedures defined to ensure the quality of the project's output and the Risk Management procedures.

3. QUALITY CONTROL ACTIVITIES

3.1 Responsibilities

The project management structure of PETER focuses on the coordination of resources and mechanisms to ensure efficient progress of all technical, administrative and financial matters and to achieve milestones and expected outcomes. The straightforward goal of the three-year project is the building of a functional prototype (plasmon-enhanced EPR with imaging mode). The relatively limited number of project partners (4) and scope of the project activities allow for a simple project management structure, which is comprised of 3 levels – **strategic, executive and functional**. The respective levels are described as follows:

The **strategic level** of the project is provided by the **Project Steering Committee** (PSC). It consists of key senior representatives of the partner institutions and is chaired by the Project Coordinator (PC).

Institution (project partner)	Representative in the PSC
BUT	Tomáš Šikola (chairman)
USTUTT	Joris van Slageren
NGU	Rainer Hillebrand
TK	Richard Wylde

PSC is responsible for strategic decisions on the Project and Exploitation strategies in order to guarantee their mutual consistency, monitoring of project progress, achievements and costs, defining the necessary contingency plans, and solving conflicts on strategic issues and medium-long term objectives.

The **executive level** is represented by:

(a) **the Project Coordinator** Tomáš Šikola (BUT), who is responsible for monitoring the overall progress of the project. He follows the project throughout its whole lifecycle, on a day-to-day basis.

(b) **The Project Manager** Božena Čechalová (BUT), who supports the coordinator and WP leaders with administrative assistance, preparation of the consortium agreement, preparation of deliverables, timely reporting, budget follow-up, organizations of project meetings, etc. The PM is responsible for financial tasks and Project Financial Reports. The PM is the sole interface between the European Commission and the consortium and the contact point for communication within the project consortium.

The **functional level** is provided by **Work-package Leaders** (WPL) nominated for each work package. WPL's tasks are to control the progress of the scheduled work within the work-package in terms of technical achievement, planned deliverables and expenses. WPLs nominate task leaders within their appointed work package and organise work meetings according to actual needs of the project.

Work Package (number and title)	Work Package leader
WP1 – Plasmon enhanced THz EPR spectroscopy	Rainer Hillebrand (NGU)
WP2 – Plasmon enhanced THz EPR microscopy	Joris van Slageren (USTUTT)
WP3 – Management, Communication, Dissemination and Exploitation	Božena Čechalová (BUT)

3.2 Milestones

One of the key indicators of the project meeting its quality requirements is the meeting of milestones. Any change in the Milestone plan has to be pre-negotiated and approved by the EC. The PETER project includes the following milestone plan:

Milestone number	Title	Due month	Means of verification
MS1	PS fabrication technology adopted	18	Technology validated
MS2	Optimized PE THz EPR spectroscopy	27	Proof of principle study
MS3	SPM unit for PE THz EPR microscopy	18	A prototype running
MS4	Platform for PE THz EPR microscopy	26	A prototype running
MS5	PE THz EPR microscopy proved	36	Proof of principle study
MS6	Kick-off steering meeting	2	Event organised
MS7	First progress steering meeting	12	Event organised
MS8	Second progress steering meeting	24	Event organised
MS9	Final steering meeting	36	Event organised
MS10	Summer school	10	Event organised
MS11	Workshop for scientific community 1	18	Event organised
MS12	Workshop for scientific community 2	30	Event organised
MS13	Workshop for industrial partners	32	Event organised
MS14	Concept of PS	6	Meeting minutes
MS15	Specifications of PE EPR microscope	6	Meeting minutes

3.3 Review process

The PETER project set up ensures the clear ownership and review process of all deliverables requiring reviewing. As stated above, each WP Leader is responsible for the quality assurance of the respective deliverables. The deliverables (reports, meeting minutes) are reviewed according to the following workflow:



The deliverables are assessed using the following indicators:

Quality indicator	Reference
The contents are in accordance with the objectives stated in the PETER Description of Action	PETER Description of Action (Annex 1 of the Grant Agreement)
The deliverable offers complete documentation on the work done in the corresponding WP/task	Project meeting minutes
The deliverable content is consistent with other related deliverables	Consistency check
The deliverable is compliant with the templates and guidelines as stated within the QMP	Initial Quality Management Plan and its updates
The deliverable is clear and legible	Language and syntax review; formatting guidelines

3.4 Use of templates

The PETER Data Management Plan (D3.4) defines the storage and access to project related templates. Templates are used to optimize the project execution efficiency and to ensure the homogeneous quality standards across the project for various deliverables and for various contributors.

Templates are available for:

- Deliverables Reports
- Project Logo (the logotype and its usage is detailed in the Project Visual Identity Report (D3.1))

4. QUALITY ASSURANCE ACTIVITIES

4.1 Communication within the Project Consortium

The management structure discussed in the previous section ensures aggregation of work packages to a higher, more strategic, point of view such that the dependencies between work packages can successfully be met and take place in an efficient communication manner. The internal communication strategy is intended to ensure a constant and effective exchange and share of information between the people involved in the project.

The internal communication between the participants involved in the project plans to use the most suitable tools for the given context. Apart from the daily communication in the form of e-mails, Skype conferences and phone calls, the following tools are predicted to be more in use:

Project Repository:

A set of repositories is set up for sharing files, like templates, images and other sort of documents mainly to be used for the communication actions.

- The templates and dissemination materials repository – intranet section of the project website (managed by WP3 leader Božena Čechalová)
- The project data and documents repository – cloud storage system with multiple user accounts (administered by the appointed Project Data Manager for each institution)

Meetings:

- Progress review meetings of the Steering Committee take place annually and are organized by the Project Coordinator and Project Manager.
- Meetings of the Work Package Leaders with contributors to the deliverables take place upon any request of the involved parties and are organized by the Work Package Leaders.

Document standards and guidelines:

The objective is to formalize a set of uniform rules for coding any document, which are issued in relation with the PETER project. All involved in the project follow these rules with a special focus on the Work Package Leaders responsible for preparing the deliverables. The compliance reduces the workload of the reviewers and facilitate the overall understanding of the work produced. The document standards and conventions are defined in the Data Management Plan (D3.4).

4.2 Risk Management

The structure of management tasks and organization of the project have been carefully considered, thereby mitigating foreseen risks. Furthermore, any possible risks occurring during the project lifetime are identified, evaluated and mitigated as part of the Risk assessment, which is carried out by the Project Manager.

The PM is responsible of keeping a continuously updated Risk log, using the following template based on the standard H2020 Project Participant Portal risk evaluation interface:

Risk	Proposed mitigation measures	Reference reporting period	State-of-the-play risk materialised	State-of-the-play mitigation applied	Comments

5. CONCLUSION

This deliverable report sets out the quality assurance procedures for the deliverables and communication activities in the frame of the PETER project during its three-year action. The first and foremost goal of this action is to produce a working prototype of a Plasmon Enhanced THz EPR microscope.

We envision that the methodology planned to achieve the required quality standards within the PETER project may need an update. In that case, an Updated Quality Management Plan (D3.6) will be prepared for the half-time of the project (M18).