D9.1

Project Quality Plan

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Abstract:	This Project Quality Plan shows how quality aspects are taken into account in a variety of processes and activities within the M3TERA project. The interrelated quality processes – planning, assurance and control – were established.
Keywords:	quality planning, quality assurance, quality control, visual identity, project policy

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Disclaimer

Executive Summary

This Project Quality Plan shows how quality aspects are taken into account in a variety of processes and activities within the M3TERA project. The interrelated quality processes – planning, assurance and control – have impact on the project work from its start to its end.

- Quality Planning refers to quality policies like meeting-, deliverable or publication policies, the definition of responsibilities as well as the creation of a corporate visual identity including a project logo, project-like designed templates etc. In order to communicate adequately within the project as well as to project external persons, several tools are established and explained in this document.
- Quality Assurance involves the establishment of Interim Management Reports, clear responsibilities and regular, clearly guided telephone conferences.
- Quality Control focuses on feedback through internal processes (internal review process) as well as external advises (Advisory Board). It further monitors how feedback is implemented and assures the project outcomes through proactive risk management

The plan is effective throughout the lifetime of the project, but is open to revision if necessary. Responsibilities for quality planning, assurance and control are shared between all partners, which allow various views on quality issues in order to reach the optimal outcome.

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Chapter 1 Introduction

The Project Quality Plan is an integral part of the M3TERA project management. Its purpose is to describe how quality will be managed throughout the lifecycle of the project. Quality must always be planned in a project in order to prevent unnecessary rework, as well as waste of cost and time. Quality should also be considered from both, an outcome and process perspective. The processes and activities that produce deliverables need to fulfil certain quality levels in order to reach the expected high-quality outcome. To address all quality requirements and quality assurance mechanisms in the M3TERA project, 'Project Quality Plan' at hand has been developed by the project team. This plan acts as the quality bible for the project and all partners will adhere to the project quality plan.

Each project has its characteristics in terms of partners, WPs etc. and therefore requires a tailor-made quality plan, clear responsibilities and contact persons. This and how to get on board of the M3TERA project is described within Chapter 2.

The overall **Quality Management Strategy** of M3TERA is addressed in Chapter 3. It is divided in three key activities:

- **Quality Planning**

Quality Planning comprises quality policies and procedures relevant to the project for both project deliverables and project processes, defines who is responsible for what, and documents compliance. A corporate visual identity represents the project internally, in partners' organisations as well as externally. In order to communicate adequately within the project as well as to project external persons, several tools are established and explained in this chapter. Clearly defined project policies in terms of policies for Deliverable naming, for meetings or scientific publications etc. give security to the project partners, as they have clear guidance how to deal with upcoming issues.

- **Quality Assurance**

Quality assurance creates and monitors project processes, which need to be performed effectively to reach the targeted outcome. This involves the establishment of Interim Management Reports, clear responsibilities and regular, clearly guided telephone conferences (telcos). These activities within M3TERA are summarized in section 3.2.

- **Quality Control**

Quality Control will be actively performed by all partners. A clear internal review process has been defined before Deliverable Submission to provide feedback to the editor. A proactive risk management has already been mentioned within the DoA. The risk management has been established as planned in order to guarantee the project quality and avoid delays or failures. Feedback on the project progress and outcomes by the Advisory Board will support the quality controlling and guide the project into the right direction. This is described in section 3.3.

The target of the following chapters is to describe how all the mentioned pieces of the puzzle fit and stick together.

Chapter 2 Getting on Board

This chapter gives an introduction to the project characteristics in order to allow new members to get easier on board and find the most important information at a glance. Therefore this chapter will introduce shortly the main elements of the M3TERA project in terms of participants, WPs and responsibilities.

2.1 Project Structure

M3TERA is a research project with 9 Work Packages (WPs) and 7 partners, coordinated by TEC, an industry oriented research SME from Austria. Our industrial partner IFAT will act as the technical leader and KTH will be responsible for the scientific coordination of the project.

1) **TEC** - Technikon Forschungs- und Planungsgesellschaft mbH (AT)
2) **KTH** – Kungliga Tekniska Hoegskolan (SE)
3) **IFAT** – Infineon Technologies Austria AG (AT)
4) **ERICSSON** – Ericsson AB (SE)
5) **ANTERAL** – Anteral SL (ES)
6) **CHALMERS** – Chalmers Tekniska Hoegskola AB (SE)
7) **CSEM** – CSEM Centre Suisse D'Electronique et de microtechnique SA – Recherche et Developpement (CH)

The interaction, responsibilities and decision-making power is clearly divided between the established project bodies as shown in Figure 1. The governing culture of the M3TERA project is based on democracy, co-determination and clear leadership.

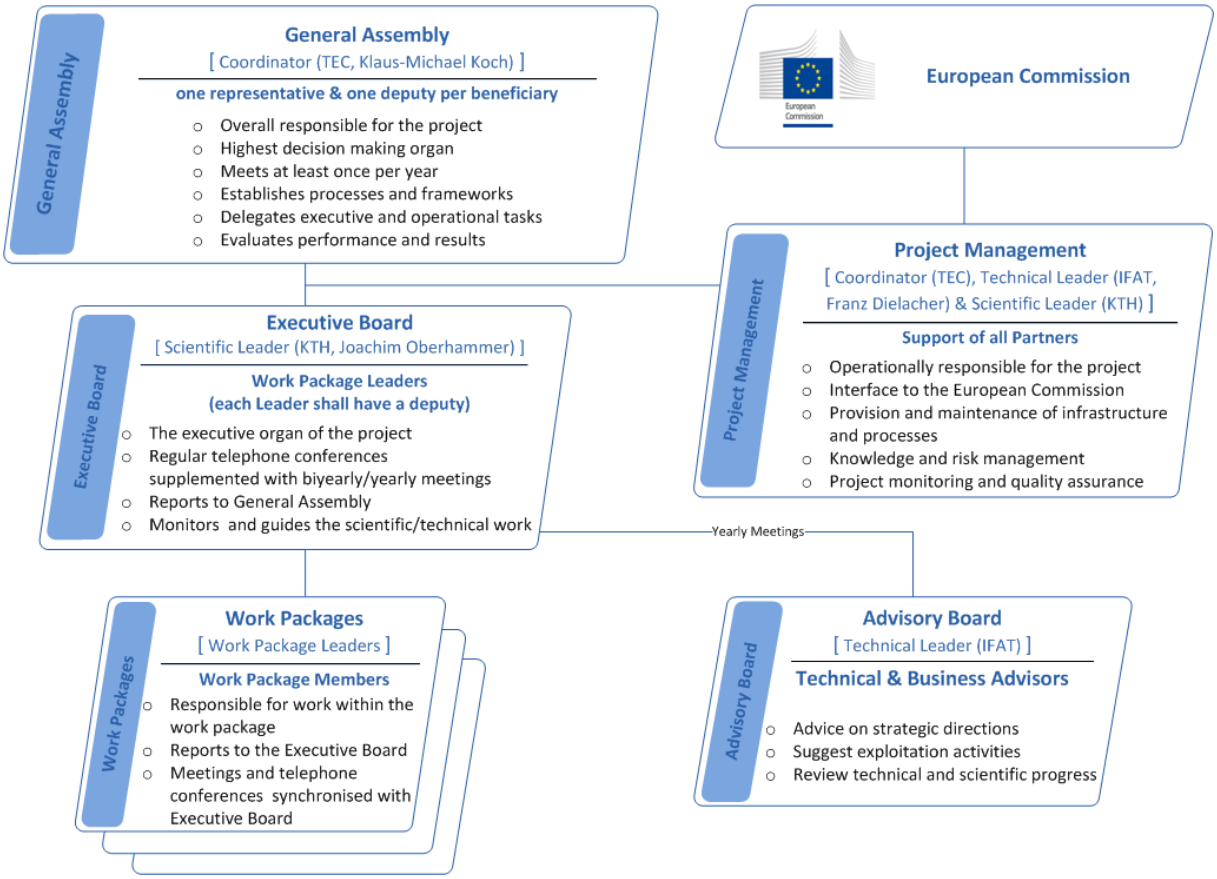

Figure 1: M3TERA project bodies

The defined M3TERA project bodies, the decision making process as well as the responsibilities were bindingly described in the Consortium Agreement as well as in the Grant Agreement.

The **General Assembly** (GA) is the assembly of all partners. It was established within the proposal and therefore included into the Consortium Agreement (see CA 6.3.1):

"It has the power of decision, deals with questions of strategic importance and represents the partners' interests. It decides on major changes to the project's research direction in cooperation with the Commission and is responsible for implementing any changes to the Grant Agreement upon request from the Commission. It also decides on major changes to the project's research direction in cooperation with the Commission and is responsible for implementing any changes to the Grant Agreement upon request from the Commission."

The following representatives and deputies have been defined to present their organization within the M3TERA General Assembly:

- **TEC** (Klaus-Michael KOCH, deputy: Corinna KUDLER)
- **KTH** (Joachim OBERHAMMER, deputy: Umer SHAH)
- **IFAT** (Franz DIELACHER, deputy: Sabine DULLNIG)
- **ERICSSON** (Jonas HANSRYD, deputy: Yinggang LI)
- **ANTERAL** (Asier IBAÑEZ, deputy: Itziar MAESTROJUAN)
- **CHALMERS** (Herbert ZIRAT, deputy: Vessen VASSILEV)
- **CSEM** (John FASEROTU, deputy: Erwan LE ROUX)

The **Executive Board** (EB) is the assembly of all work package leaders. It is chaired by the scientific leader, Joachim Oberhammer from KTH.

According to the Consortium Agreement (see CA 6.3.2) *"the **Executive Board** is responsible for guiding and monitoring the scientific work. The Work Package leaders are the members of the EB and responsible for the coordination of the work carried out as well as for the achievement of the objectives within the WP. The WP leaders report to the Executive Board and are also in charge of the assigned deliverables and of providing the required reporting to ensure efficient overall project monitoring and coordination."*

The following representatives and deputies have been defined for the M3TERA Executive Board:

- WP1: **ERICSSON** (Yinggang LI, deputy: Jonas HANSRYD)
- WP2: **KTH** (Umer SHAH, deputy: Joachim OBERHAMMER)
- WP3: **CHALMERS** (Herbert ZIRATH, deputy: Vessen VASSILEV)
- WP4: **ANTERAL** (Itziar MAESTROJUAN, deputy: Asier IBAÑEZ)
- WP5: **ERICSSON** (Yinggang LI, deputy: Jonas HANSRYD)
- WP6: **CSEM** (John FARSEROTU, deputy: Erwan LE ROUX)
- WP7: **IFAT** (Franz DIELACHER, deputy: Sabine DULLNIG)
- WP8: **TEC** (Klaus-Michael KOCH, deputy: Corinna KUDLER)
- WP9: **TEC** (Corinna KUDLER, deputy: Martina TRUSKALLER)

2.2 Steps towards Participation

1) Initial registration

New participants in the project need to contact the coordinator (coordination@m3tera.eu) in order to receive access to the M3TERA Subversion server (SVN), website and Jabber.

2) Contact details and mailing list

All contact details will be added to the M3TERA contact list and the new participant will be subscribed to relevant mailing lists, as these are central tools for all project internal communication.

Mailing List Name	Members
m3tera@lists.technikon.com	All personnel actively involved in the project
m3tera-financial@lists.technikon.com	Personnel responsible for financial questions and tasks, e.g. financial reporting
m3tera-technical@lists.technikon.com	For all technical correspondence in WP1-WP7 and EB member discussions
m3tera-ga@lists.technikon.com	For General Assembly members and deputies
m3tera-publication@lists.technikon.com	Partners will be informed about Publication & Notices at least 45 days before publication according to Article

Mailing List Name	Members
	29.1 GA
m3tera-svnlog@lists.technikon.com	Email notification on SVN commits

Table 1: M3TERA Mailing Lists

Further details are described in Deliverable D8.1 – "*Internal and External IT Communication Infrastructure and Project Website".*

3) Project handbook

New participants will receive this document (which will be available in the restricted area of the project website), as short introduction to get familiar with:

- the *M3TERA infrastructure* (SVN, public website, calendar, Jabber Server, GoToMeeting)
- the *project structure* (partners, hierarchy of bodies, most important documents at a glance) – see section 2.1
- the *project procedures* (meetings, deliverables, publications)

The project handbook is designed in a way to be easily consulted and it provides quick answers in the project area. It is available as a PDF file on the SVN, the restricted area of the project website and should be a living document. This implies that it will be updated regularly to record and list the lessons learned in order to improve the quality of the project. The partners will be involved in the revision process and informed about handbook modifications.

4) Introduction to partners and start

Once being familiar with the project policies and the IT tools, newbies will find the most relevant documents like the Description of Action (DoA), Grant Agreement (GA) and Consortium Agreement (CA) on our working directory - the SVN.

In order to support a new member's project start, partners will be informed about the participation.

Chapter 3 Quality Management Strategy

Quality is the degree to which the project fulfils its requirements. In order to fulfil and exceed the project requirements, a Quality Management Strategy has been defined within the M3TERA project through three key processes, namely quality planning, quality assurance and quality control. These three processes are connected and interact in order to guarantee efficient and high-quality work.

3.1 Quality Planning

Quality management planning determines quality policies and procedures relevant to the project for both project deliverables and project processes, defines who is responsible for what, and documents compliance.

3.1.1 Visual Identity

The creation of a corporate visual identity plays a significant role in the way the M3TERA project presents itself to both internal and external stakeholders. A corporate visual identity expresses the values and ambitions of our project and its characteristics. Our corporate visual identity provides the project with visibility and "recognisability". It is of vital importance that people know that the organization exists and remember its name and core business at the right time. The following subchapters present the actions that were taken in order to create a visual identity of the project.

3.1.1.1 Logo

For the improvement of its visibility, the M3TERA project has adopted a project logo. The logo is used on all internal templates as well as on external dissemination tools.

Figure 2: M3TERA project logo

3.1.1.2 Templates

Presenting the M3TERA project with a clear design is a claim by the whole consortium. Therefore templates which bear the hallmark of the M3TERA design were created. All templates include the M3TERA logo, colours and the disclaimers.

To ease collaboration, LaTeX and MS Office (Formats: doc, xls, ppt) templates were defined as the standard document format for all administrative and scientific documents.

Templates for Deliverables were designed to ensure not only a common visual standard for M3TERA documents, but also to find a general structure suitable for all Deliverables. In the creation process it was taken into account that the partners include an introduction, summary, and conclusion into the document beside a clearly structured technical input.

3.1.1.3 Leaflet

The official M3TERA leaflet is a four page informative and graphically appealing A4 flyer, highlighting the objectives and the work programme of M3TERA. It is used for distribution at conferences or certain other events in order to provide further visibility to the M3TERA project. TEC was mainly responsible for the content and design of the leaflet and distributed it to all partners after finalisation. An electronic version of the leaflet is available on the M3TERA website, following the link: www.m3tera.eu.

Figure 3: M3TERA leaflet

3.1.1.4 Project website

For greater visibility of the project, a website was launched in month 3. Further details on the website structure, tools etc. can be found in D8.1 – "Internal and External IT Communication Infrastructure and Project Website".

The M3TERA project website is available at the following link: www.m3tera.eu.

3.1.1.5 Social Media

In order to reach a broad target group, *Twitter* and *LinkedIn* are used to raise awareness of project specific news/results/publications and to foster cooperation activities.

LinkedIn is a business-oriented social networking service and allows the formation of interest groups. Within the M3TERA group, called "*H2020 M3TERA friends*", a discussion area, moderated by the group owner will allow interested, connected parties to easily discuss relevant topics. The M3TERA group will also keep their members informed through emails with updates to the group, including most talked about discussions within their professional circles.

Twitter is a micro-blogging social media service. Social media have changed the way people communicate as it is no longer a one-way direction communication. Social media enables its users to share their ideas in an interactive way and to connect each other in networks. Twitter is not only a service that allows users to connect with their "followers" (those who signed up to follow their updates), but it gives users the possibility to interact with each other on the basis of topics and themes they are interested in. The M3TERA project on Twitter, can be followed on "*M3TERA_H2020*".

Because of this option, this platform becomes a very powerful resource for creating impact of the M3TERA project findings:

- Support in reaching out to the media, policy makers and scientific experts in the field of security impact assessment,

- Generally promote knowledge and awareness of project results by tweeting specific content and topics.

Target journalists and bloggers as additional multipliers are available to spread the word about project results, conclusions, next steps, and public deliverables posted on the M3TERA website (www.m3tera.eu).

Figure 4: M3TERA tweets

3.1.2 Project Policies

Internal project guidelines, our so called project policies, were established to organize internal and external processes in terms of meetings, Deliverables and publications, to ensure quality.

3.1.2.1 Meetings

The consortium decided in general, that the hosting partner of a meeting pays for conference facilities, catering and the like, while each partner pays for accommodation and provisions. Usually the host invites for lunch and coffee breaks during the meeting. If possible, the hosting partner invites the partners to one common dinner. The meeting locations have to change regularly in order to achieve a fair distribution of costs. To keep costs down, we prefer to meet at company facilities that can often be used for free.

If that is not possible, the host can also arrange/ask for offers for conference rooms in a hotel. Then the partners pay separately their conference fees (room fee including coffee and lunch breaks).

The following bullet points should be a kind of **checklist for the host of upcoming meetings/workshops.**

Meeting Room(s):

- On the first day we would need one big room for approx. 15-20 people (if every partner shows up with 2-3 persons; a participant list will be created and provides further details).
- For the second day parallel sessions might be suitable. To plan such sessions, one-two rooms (for approx. 10 persons each) would be required. (It will be discussed in advanced how many break-out sessions will be necessary for the dedicated meeting.)
- Are there any costs for the conference room/day/person? (coffee break, lunch)?
- Are there any other expenses?

Infrastructure/Equipment:

- Free WLAN at conference
- Internet connection
- Projector in each room
- Flip charts and pens
- Power plugs for all participants
- Optional: Microphone/Speaker for large rooms

3.1.2.2 Deliverables

Deliverables must be put into the “Deliverables Folder” of the corresponding Work Package on SVN. Please use the following file naming:

- *M3TERA-[Dx.x]-[Level of Dissemination]-[Due-Month]*.

Nature of Deliverables

- „R“ (Document, report)
- „DEM“ (Demonstrator, pilot, prototype)

  Deliverables marked with nature “DEM” will be accompanied by a small written report outlining its structure and purpose in order to justify the achievement of the deliverable.
- „DEC“ (Websites, patent filings, videos, etc.)

  Deliverables marked with nature “DEC” will be accompanied by a small written report outlining its structure and purpose in order to justify the achievement of the deliverable.
- „OTHER“ (Other)

  Deliverables marked with nature “OTHER” will be accompanied by a small written report outlining its structure and purpose in order to justify the achievement of the deliverable.

3.1.2.3 Policy for publishing scientific papers

Prior notice of any planned publication shall be given to the other parties concerned **at least 45 days** before the publication in accordance with the GA Article 29.1.

Any objection to the planned publication shall be made in accordance with the GA in writing to the coordinator and to any party concerned within 30 days after receipt of the notice. If no objection is made within the time limit stated, the publication is permitted. (CA 8.4.1)

The beneficiaries may agree in writing on different time limits to those set above, which may include a deadline for determining the appropriate steps to be taken.

Furthermore, the paper/article, or the link to it will be published on our **official M3TERA project website.** Please inform the coordinator (TEC) as soon as a link or document in pdf format is available. The Commission will then be informed about the scientific publication via our website and also via Twitter.

All publications or any other dissemination relating to foreground that was generated with the assistance of financial support from the Union shall include the following statement (GA 29.4):

*"**This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 644039."***

This work is supported (also) by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 15.0059. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Swiss Government.

Authorship "Rules of Thumb"

A person should be author and the person may veto a publication if

- the person has contributed significant portions of the text, and/or
- the person has contributed at least one significant idea, and/or
- the paper describes an implementation that has been performed by the person.

All other contributors/influencers should be mentioned broadly in the acknowledgements.

3.2 Quality Assurance

The focus of quality assurance is on the creation and monitoring of processes. Quality assurance creates and monitors project processes, which need to be effectively performed to reach the targeted outcome. This involves the establishment of Interim Management Reports, clear responsibilities and regular, clearly guided telephone conferences.

3.2.1 Interim Management Reports (IMR)

The basic idea of Interim Management Reports is to implement a tool, which forces each partner to provide information regarding their ongoing and planned work as well as information on the resources spent. The IMR is planned as a short report on a quarterly basis. The following sections explain the structure and the section targets of the IMR.

While Chapter 1 of the IMR gives a short introduction to the partners, Chapter 2 "Technical progress and achievements of the project" asks for partner information regarding the work performed within this quarter on task level. This helps the coordinator to monitor partner activities and the progress made within the last quarter. It further asks explicitly for the achievements and results per WP, in order to have a clear view on the results and how they

will impact the ongoing work. The section “Planned work for the next quarter” helps the partner to shortly formulate the plans for the next months and allows the coordinator a plan/is comparison in the following month.

WP1 – Application and Technology Specifications [M01-M06]		
T1.1	Assessment of Technical and Economical Application Specifications for Primary Application [M01-M06]	
	Work performed and progress towards objectives	[please report your work here in full sentences]
T1.2	Assessment of Application Specifications for Secondary Applications [M01-M06]	
	Work performed and progress towards objectives	[please report your work here in full sentences]
T1.3	Assessment of Technology Capability of Proposed Heterogeneously-Integrated THz Microsystem [M01-M06]	
	Work performed and progress towards objectives	[please report your work here in full sentences]
Achievements and Results		
[please fill in if already applicable]		
Planned work for the next time period in WP1		
M04-M06 (May-July)	• [please fill in]	

Figure 5: Extract of IMR I, Chapter 1

The IMR gives the coordinator and all partners the position to give information about ongoing work of the overall project, to be up to date and always able to provide a profound answer.

It was of high importance to add a section which gives the partners the opportunity to describe deviations and corrections. This section gives ideas of problems partners have to cope with and that may be related to other deeper problems.

Deviations and corrections:

If applicable, explain the reason for failing to achieve critical objectives/and or not being on schedule and explain the impact on other tasks as well as on available resources and planning. Please also provide a description of the remedial actions taken/planned.

[please report deviations here in full sentences]

Figure 6: Extract of IMR II, Chapter 2

The third chapter of the IMR focuses on the use of effort. In order to get a meaningful comparison of “plan” vs. “is” costs or person months, a information box to remind partner about the most important financial rules was created, which need to be considered according to the EC financial rules. To control the risk of rejection of costs during the financial reporting, with the IMR the coordinator is able to advise partners on the eligibility of costs and activities.

WPs	planned linear effort for M01-M18 (in PM)	Rough estimates of current status of effort (in PM)					
		M01-M03 (Feb-Apr15)	M04-M06 (May-Jul15)	M07-M09 (Aug-Oct15)	M10-M12 (Nov-Jan16)	M13-M15 (Feb-Apr16)	M16-M18 (May-Jul16)
WP1		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP2		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP3		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP4		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP5		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP6		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP7		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP8		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
WP9		[please fill in]	[please fill in in M04-M06]	[please fill in in M07-M09]	[please fill in in M10-M12]	[please fill in in M13-M15]	[please fill in in M16-M18]
TOTAL:							

Figure 7: Extract of IMR III, Chapter 3

This well-thought-out IMR concept will support the quality assurance within the M3TERA project in order to cope with potential risks, leap chances, and monitor the projects process towards objectives.

3.2.2 Responsibilities & Internal Review

Transparency of roles and responsibilities has a big impact on the project success. Uncertainty can dramatically affect individual, organisational as well as the consortium performance. Therefore, as already mentioned in Chapter 2, responsible persons for each organisation and per WP were defined. In a further step responsibilities for Deliverables were defined. The table shown below lists all Deliverables and Milestones due within the first project year and their main benchmarks. While Deliverable leading organisations were already defined within the DoA, the concrete editor responsible for requesting and guiding partner inputs towards a punctual and high-quality submission, were named at the project start. In line with the concluded internal review process (described in section 3.3.2) at least one specific internal reviewer for each Deliverable was defined and clear deadlines for first draft version, the review feedback as well as for the submission were established.

ACR	Type	Nature	M3TERA - Deliverables and Milestones	WHO	Persons	WP	Del. Month	Initial Draft	Review Start	Deadline	upcoming DEADLINES	Name of Reviewer 1	Name of Reviewer 2
MS1	**M**		Successful project kick-off	**TEC**		WP1-WP9	M1	29.01.2015	07.02.2015	28.02.2015	**OKAY**		
D3.1	**D**	**O**	Preliminary PDK	**IFAT**	Franz Dielacher	WP3	M1	29.01.2015	07.02.2015	28.02.2015	**OKAY**	Simon He Zhongxia	
D8.1	**D**	**W**	Internal and External IT Communication Infrastructure and Project Website	**TEC**	Mario Münzer	WP8	M3	31.03.2015	09.04.2015	30.04.2015	**Deadline this month**	Diana Vasilica Pop	
D9.1	**D**	**O**	Project Quality Plan	**TEC**	Corinna Kudler	WP9	M3	31.03.2015	09.04.2015	30.04.2015	**Deadline this month**	Itziar Maestrojuan	
D1.1	**D**	**R**	System Specifications for the Primary and the Secondary Applications	**ERICSSON**	Yinggang Li	WP1	M6	01.07.2015	10.07.2015	31.07.2015		Herbert Zirath	Franz Dielacher
D1.2	**D**	**R**	Assessment of Technology Capability	**KTH**	Joachim Oberhammer	WP1	M6	01.07.2015	10.07.2015	31.07.2015		Yinggang Li	Simon He Zhongxia
MS2	**M**		Final specifications completed	**ERICSSON**		WP1	M6	01.07.2015	10.07.2015	31.07.2015			
D3.2	**D**	**O**	Final PDK	**IFAT**	Franz Dielacher	WP3	M6	01.07.2015	10.07.2015	31.07.2015		Simon He Zhongxia	
D8.2	**D**	**R**	Data Management Plan (DMP	**ERICSSON**	Yinggang Li	WP8	M6	01.07.2015	10.07.2015	31.07.2015		Itziar Maestrojuan	Corinna Kudler
D3.3	**D**	**R**	Report on Overall MMIC Concept	**CHALMERS**	Herbert Zirath	WP3	M7	01.08.2015	10.08.2015	31.08.2015		Yinggang Li	Franz Dielacher
D2.1	**D**	**R**	Draft Version of Report on Overall THz Microsystem and System Packaging Concept	**KTH**	Umer Shah	WP2	M9	01.10.2015	10.10.2015	31.10.2015		Yinggang Li	Franz Dielacher
D4.1	**D**	**R**	Report on Concept and Design of Precision-Machined Horn Antenna For Primary Prototype	**ANTERAL**	Itziar Maestrojuan	WP4	M9	01.10.2015	10.10.2015	31.10.2015		Joachim Oberhammer	
D4.2	**D**	**R**	Report on Concept and Design of Platform-Integrated Near-Field Interfaces for Secondary Prototype	**CSEM**	Alexander	WP4	M9	01.10.2015	10.10.2015	31.10.2015		John Faserotu	IFAT
D5.1	**D**	**R**	Concept Development and the mm-Wave Link Prototype	**ERICSSON**	Yinggang Li	WP5	M9	01.10.2015	10.10.2015	31.10.2015		Herbert Zirath	
D6.1	**D**	**R**	Multi-Use THz Sensor Concepts and Architecture Definition Report	**CSEM**	John Faserotu	WP6	M9	01.10.2015	10.10.2015	31.10.2015		Erwan Le Roux	
D7.1	**D**	**R**	Draft Version of Design Rules for Micro System Platform	**IFAT**	Franz Dielacher	WP7	M9	01.10.2015	10.10.2015	31.10.2015		Joachim Oberhammer	
D8.3	**D**	**R**	Draft Version of Report on Patent Situation and Patent Strategy Plan	**IFAT**	Franz Dielacher	WP8	M9	01.10.2015	10.10.2015	31.10.2015		Yinggang Li	
D9.2	**D**	**R**	Risk Assessment Plan	**TEC**	Corinna Kudler	WP9	M12	01.01.2016	10.01.2016	31.01.2016		Diana Vasilica Pop	

Table 2: Deliverable and Milestones Overview

3.2.3 Telephone conferences & Meetings

Communication is for sure one of the most essential foundations of successful project collaborations. Therefore, the M3TERA consortium established regular telcos and video-telcos (e.g. monthly Executive Board telcos requesting WP status reports and regular WP-internal telcos). The virtual meetings are planned in parallel to the face-to-face meetings. The face-to-face meetings are needed because of the complexity and large number of interfaces to be developed within this project.

To ensure the project success it is necessary to implement an efficient meeting structure. At the beginning of the M3TERA project, the Kick-off meeting took place together with the first General Assembly meeting on 12th and 13th of February 2015 in Villach. The different expectations and schedules were discussed in order to make a definitive plan about the further work plan and required actions.

We plan 2 Executive Board meetings per year which will be combined with the General Assembly meetings at the end of each project period (Q4) (planned venue: at a partner's premises). In addition there will be some WP-internal / cross-WP face-to-face meetings on request but due to experience there will be more telephone conferences instead of physical meetings. The next technical meeting will take place in October 2015 at KTH premises in Stockholm.

At the end of each project period there will be a Review Preparation meeting one day before the official Review meeting takes place (planned venue: EC premises in Brussels, or if applicable partner's premises). At the end of the M3TERA project there will be a Project finalisation meeting. Further it is planned to participate in several workshops and conferences.

3.3 Quality Control

The focus of quality control is on feedback and deviation management in the project. Quality control ensures that feedback, from internal as well as from external advisors, is taken into account and therefore positively influences the work towards project objectives. Risk Management forms a central focus of quality control as the proactive notice of deviations allows the consortium to control the consequences or even transform them and profit from positive effects.

3.3.1 Advisory Board

The consortium will be assisted and advised by an external Advisory Board (AB), consisting of selected persons in the technology and application field of the project. The M3TERA AB members will be chaired by IFAT, will meet once a year and will provide an external unprejudiced view.

AB members will be involved as project internal reviewers, as well as ambassadors and promoters, by suggesting synergies with their own activities and activities of their networks and bodies, and by keeping their networks informed of the project activities and outcomes, thus supporting wider visibility and promoting the project cooperation in the ICT area. They also actively contribute to the project by notifying the project team on the latest scientific and technological evolutions in the ICT area, new initiatives, etc.

Through the integration of an Advisory Board, interim feedback of enormous importance regarding the overall orientation of the project outcome is expected. This supports the path towards objectives and controls the quality of the project work as well as the quality of expected outcomes.

3.3.2 Internal Review Process

To ensure quality of Deliverables an internal review process has been defined. The main goal of this process is to establish internal feedback by partners who did not directly participate as editor to the Deliverable before submitting the Deliverable to the European Commission. The review process is shown and explained below.

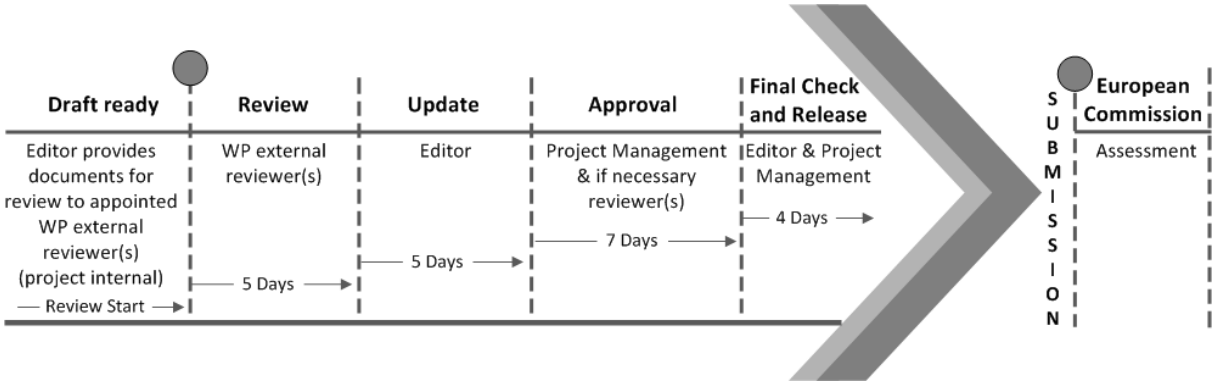

Figure 8: Internal Review Process

Step1 "Review": Partners send the draft to TEC (Project Management) and to an internal reviewer, who was not directly involved in the deliverable work (*Review = 5 days*). The reviewer reads the draft and compares the content against its objective as defined in the work plan. The review result is a draft with mark-up as follows:

LaTeX: For latex, typos and small changes are directly performed on the text. Comments are entered into the text using the comments.sty latex package.

Word: For MS Word, the author protects the draft against changes (always save with "track changes" activated). Typos and small changes are directly entered on the text while using "track changes". Comments are entered into the text as MS Word comments.

The internal reviewer has to fill in an **Internal Review Template**. The internal review form guides the reviewer through specific questions, in order to make sure that the content complies with the quality claims of the EC as well as the project partners. It monitors the structure as well as the compliance with the description in the DoA. This gives feedback to editor of this Deliverable in a clearly structured form and helps the editor to address all comments. Below a screenshot of the internal review form in M3TERA is presented:

Review Form

for the Internal Reviewer

M3TERA deliverable:

* Type of comments: **M** = Major comment, **m** = minor comment, **a** = advice			
Date of Internal Review:	**Internal Reviewer:**		
	Answer	**Comments**	**Type***
1. Is the deliverable in accordance with			
i. the Description of Action? https://m3tera.technikon.com/02-Legal-Documents/03-DoA/M3TERA_644039_DoA.pdf	☐ Yes ☐ No		☐ M ☐ m ☐ a
ii. the international State-of-the-Art?	☐ Yes ☐ No		☐ M ☐ m ☐ a
2. Is the quality of the deliverable such			
i. that it can be sent to the EC?	☐ Yes ☐ No		☐ M ☐ m ☐ a
ii. that it needs further editing?	☐ Yes ☐ No		☐ M ☐ m ☐ a
iii. that the content needs to be improved?	☐ Yes ☐ No		☐ M ☐ m ☐ a
3. Does the Deliverable include			
i. a clear structure (e.g. appropriate, understandable presentation of the work performed)	☐ Yes ☐ No		☐ M ☐ m ☐ a
ii. a sufficient and meaningful executive summary	☐ Yes ☐ No		☐ M ☐ m ☐ a
iii. an appropriate introduction	☐ Yes ☐ No		☐ M ☐ m ☐ a
iv. a meaningful summary & conclusion	☐ Yes ☐ No		☐ M ☐ m ☐ a

Figure 9: Internal Review Form

Step2 "Update": After the review, the editor has to make the necessary changes and updates. For the update it is important that in general, comments are not removed. Instead there should first be a discussion between the involved authors to update the deliverable according to received comments. Secondly, the authors either add text to comments how they were addressed or add additional comments on its own. (*Update = 5 days*).

Step3 "Approval": Send the final version to TEC (Project Management) for the final review. During approval, the reviewer removes all comments that were sufficiently addressed. (*Approval = 7 days*)

Step4 "Release": If there were final changes necessary, the editor has to update the document and send TEC the final version for submission. (*Release = 4 days*) TEC will then submit the final document to the EC.

3.3.3 Risk Management

To guarantee the achievement of the objectives of the M3TERA project, it is essential to identify and understand the significant project risks.

The continuous risk management process is based on the early identification of, and the fast reaction to, events that can negatively affect the outcome of the project. The frequent meetings of the project bodies therefore serve as the main forum for risk identification. The identified risks are then analysed and graded, based on impact and probability of occurrence.

Technical risks were analysed and graded, based on their probability of occurrence in order to answer the governing question: "How big is the risk and what its impact is?" Knowing how a risk impacts the project is important since several risks of the same type can be an indication of a larger problem.

The risks, defined in the DoA, will be graded into low/medium/high risk levels.

	low	Low probability of occurrence and low impact
	medium	Low/high probability of occurrence and low/high impact
	high	High probability of occurrence and high impact

The risks will be monitored on a quarterly basis and an updated risk table will be provided within the Periodic Reports. Further, a detailed classification and evaluation will be provided within D9.2 "*Risk Assessment Plan*" in M12. The Risk Assessment Plan will include a Critical Path Analysis (CPA) of the main project activities, identifying risk points and procedures to deal with them.

Chapter 4 Summary and Conclusion

This Project Quality Plan demonstrates that quality aspects are taken into account in a variety of processes and activities within the M3TERA project. The interrelated quality processes – planning, assurance and control – impact the project work from its start to its end. The project aims at obtaining a high degree of quality, where outcomes are achieved in terms of the affectivity and efficiency of working practices, as well as products, and standards of project Deliverables and outputs. This plan seeks to establish the procedures and standards to be employed in the project, and to allocate responsibility for ensuring that these procedures and standards are followed. The plan is effective throughout the lifetime of the project, but is open to revision if necessary. Responsibilities for quality planning, assurance and control are shared between all partners, which allow various views on quality issues in order to reach the optimal outcome.

Chapter 5 List of Abbreviations

Abbreviation	*Explanation*
CA	***C**onsortium **A**greement*
CPA	**C**ritical **P**ath **A**nalysis
DoA	***D**escription **o**f **A**ction (Annex 1 of the Grant Agreement)*
EB	***E**xecutive **B**oard*
EC	***E**uropean **C**ommission*
GA	***G**rant **A**greement*
H2020	***H**orizon **2020***
ICT	***I**nformation and **C**ommunication **T**echnologies*
IMR	***I**nterim **M**anagement **R**eport*
PM	***P**erson **M**onth*
PR	***P**eriodic **R**eport*
RTD	***R**esearch and **T**echnical **D**evelopment*
SME	***S**mall and **M**edium-sized **E**nterprise*
SVN	***S**ub**v**ersio**n** server*
Telco(s)	***Tel**ephone **Co**nference**(s)***
WP	***W**ork **P**ackage*

Table 3: List of Abbreviations