



D6.1

Project Quality Plan

Project number:	760150
Project acronym:	EPIC
Project title:	EPIC: Enabling Practical Wireless Tb/s Communications with Next Generation Channel Coding
Start date of the project:	1 st September, 2017
Duration:	36 months
Programme:	H2020-ICT-2016-2

Deliverable type:	Report
Deliverable reference number:	ICT-760150 / D6.1 / 1.0
Work package contributing to the deliverable:	WP6
Due date:	November 2017 – M03
Actual submission date:	21 st November 2017

Responsible organisation:	TEC
Editor:	Bianca Michal
Dissemination level:	PU
Revision:	1.0

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



The EPIC project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 760150.

Editor

Bianca MICHAL (TEC)

Contributors (ordered according to beneficiary numbers)

Martina TRUSKALLER, Marion HABERNIG (TEC)

Reviewer

Onur SAHIN (IDCC)

Disclaimer

The information in this document is provided “as is”, and no guarantee or warranty is given that the information is fit for any particular purpose. The content of this document reflects only the author’s view – the European Commission is not responsible for any use that may be made of the information it contains. The users use the information at their sole risk and liability.

Executive Summary

This Project Quality Plan shows how quality aspects are taken into account in a variety of processes and activities within the EPIC 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, such as project policies including meetings, deliverables and the publication process of scientific papers, are established and explained in this document.
- Quality Assurance involves the establishment of Interim Management Reports, clear responsibilities and regular, clearly guided telephone conferences. A well-defined internal review process further supports the Quality Assurance of deliverables.
- Quality Control focuses on feedback through internal processes (internal review process) and external advices (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.

Contents

Chapter 1	Introduction	1
Chapter 2	Getting on Board	2
2.1	Project Structure	2
2.2	Steps towards Participation.....	4
Chapter 3	Quality Management Strategy	6
3.1	Quality Planning	6
3.1.1	Visual Identity	6
3.1.2	Project Policies	6
3.1.2.1	<i>Meetings</i>	6
3.1.2.2	Deliverables	7
3.1.2.3	Policy for publishing scientific papers	7
3.2	Quality Assurance	8
3.2.1	Interim Management Reports (IMR).....	8
3.2.2	Responsibilities & Internal Review	10
3.2.3	Telephone conferences & Meetings.....	11
3.3	Quality Control	11
3.3.1	Advisory Board	11
3.3.2	Internal Review Process	12
3.3.3	Risk Management.....	14
Chapter 4	Summary and Conclusion	15
Chapter 5	List of Abbreviations.....	16

List of Figures

Figure 1: EPIC Project Bodies.....	3
Figure 2: Extract of IMR I, Chapter 2.....	9
Figure 3: Extract of IMR II, Chapter 3.....	9
Figure 4: Internal Review Process	12
Figure 5: Internal Review Form	13

List of Tables

Table 1: EPIC Mailing Lists	4
Table 2: Deliverable and Milestones Overview.....	10

Chapter 1 Introduction

The Project Quality Plan is an essential part of the EPIC project management. Its purpose is to describe how quality will be managed throughout the project-lifecycle. 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 EPIC 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 EPIC project is described within Chapter 2.

The overall **Quality Management Strategy** of EPIC 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. It defines who is responsible for what and which documents compliance with EC guidelines. A corporate visual identity represents the project internally, in partners' organisations as well as externally. In order to communicate adequately within the project also to project external persons, several tools are established and introduced in this chapter. Clearly defined project policies in terms of policies for deliverable naming, meetings, scientific publications or the procedure of internal deliverable review, 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) but also face-2-face meetings. These activities within EPIC are summarized in section 3.2.

- **Quality Control**

Quality Control will be actively performed by all partners, e.g. by acting as an internal reviewer of deliverables. 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 goal of the following chapters is to give an overall explanation of how great quality can be assured.

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 most important information at a glance. Therefore this chapter will introduce shortly the main elements of the EPIC project in terms of participants, WPs and responsibilities.

2.1 Project Structure

EPIC is a research project with 6 Work Packages (WPs) and 8 partners, coordinated by TEC. Our university partner TUKL acts as the technical leader and will be responsible for the innovation management and scientific coordination of the project.

- 1) **TEC** - Technikon Forschungs- und Planungsgesellschaft mbH (AT)
- 2) **IDCC** – Interdigital Europe Ltd. (UK)
- 3) **IMEC** – Interuniversitair Micro-Electronica Centrum (BE)
- 4) **POL** – Polaran Ltd. (TR)
- 5) **TUKL** – Technische Universität Kaiserslautern (DE)
- 6) **EAB** – Ericsson AB (SE)
- 7) **TB** – Institut Mines-Télécom, IMT Atlantique (FR)
- 8) **CRE** – Creonic GmbH (DE)

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

The defined EPIC project bodies, the decision making process as well as the responsibilities were bindingly described in the Consortium Agreement and 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):

“The General Assembly shall consist of one representative of each Party (hereinafter General Assembly Member). Each General Assembly Member is authorised to deliberate and decide on all matters listed in Section 6.3.1.2. of this CA. The Coordinator shall chair all meetings of the General Assembly, unless decided otherwise in a meeting of the General Assembly. The Parties agree to abide by all decisions of the General Assembly. This does not prevent the Parties to submit a dispute to resolution in accordance with the provisions of Settlement of disputes in Section 11.8 of the Consortium Agreement. The General Assembly shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein. In addition, all proposals made by the Executive Board shall also be considered and decided upon by the General Assembly”

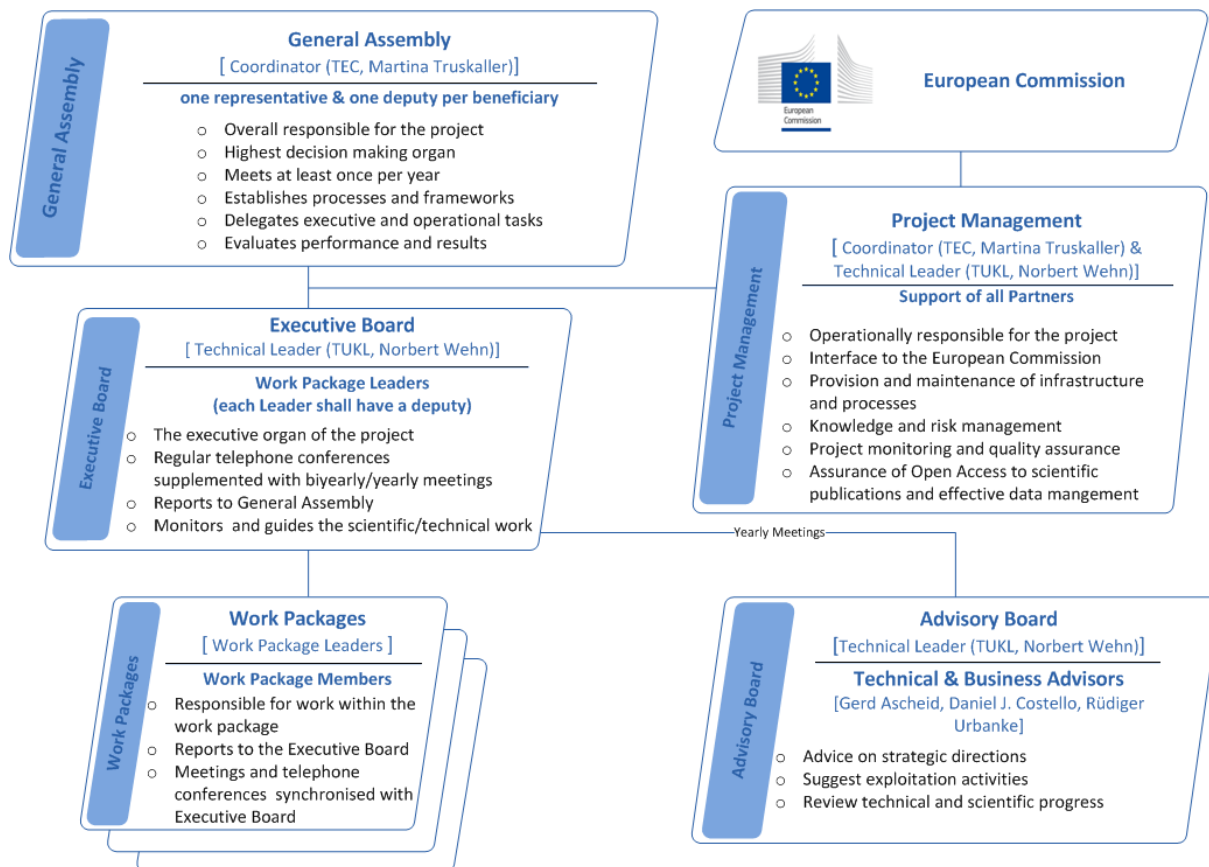


Figure 1: EPIC Project Bodies

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

- **TEC** (Martina TRUSKALLER, deputy: Marion HABERNIG)
- **IDCC** (Onur SAHIN, deputy: Sungkwon HONG)
- **IMEC** (André BOURDOUX, deputy: Meng LI)
- **POL** (Erdal ARIKAN, deputy: Orhan ARIKAN)
- **TUKL** (Norbert WEHN, deputy: Claus KESTEL)
- **EAB** (Thomas UNSHELM, deputy: Hugo TULLBERG)
- **TB** (Catherine DOUILLARD, deputy: Charbel ABDEL NOUR)
- **CRE** (Timo LEHNIGK, deputy: Matthias ALLES)

The **Executive Board** (EB) is the assembly of all work package leaders and is chaired by the technical leader, Norbert Wehn from TUKL. It was established within the proposal and therefore included into the Consortium Agreement (see CA 6.3.2):

*“The **Executive Board** shall prepare the meetings, propose decisions and prepare the agenda of the General Assembly according to Section 6.3.1.2 of the Consortium Agreement. The Executive Board shall be responsible for the proper execution and implementation of the decisions of the General Assembly. The Executive Board shall monitor the effective and efficient implementation of the Project. In addition, the Executive Board shall collect information at least every 6 months on the progress of the Project, examine that information to assess the compliance of the Project with the Consortium Plan and, if necessary, propose modifications of the Consortium Plan to the General Assembly.”*

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

- WP1: **EAB** (Leefke GROSJEAN, deputy: Hugo TULLBERG)
- WP2: **TUKL** (Norbert WEHN, deputy: Claus KESTEL)
- WP3: **TB** (Catherine DOUILLARD, deputy: Charbel ABDEL NOUR)
- WP4: **IMEC** (Meng LI, deputy: André BOURDOUX)
- WP5: **IDCC** (Onur SAHIN, deputy: Sungkwon HONG)
- WP6: **TEC** (Marion HABERNIG, deputy: Martina TRUSKALLER)

2.2 Steps towards Participation

1) Initial registration

New participants in the project need to contact the coordinator Technikon (coordination@epic-h2020.eu) in order to receive access to the EPIC subversion server (SVN), website and Mattermost.

2) Contact details and mailing list

All contact details will be added to the EPIC 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
epic@lists.technikon.com	All personnel actively involved in the project
epic-ga@lists.technikon.com	General Assembly members and deputies
epic-technical@lists.technikon.com	For all technical correspondence in WP1-WP6 and EB member discussions
epic-financial@lists.technikon.com	Personnel responsible for financial questions and tasks, e.g. financial reporting
epic-publication@lists.technikon.com	Partners will be informed about Publication & Notices at least 45 days before publication according to Article 29.1 GA
epic-svnlog@lists.technikon.com	E-mail notification on SVN commits

Table 1: EPIC Mailing Lists

Further details are described in Deliverable D5.1 – *“Internal and external IT communication infrastructure and project website”*.

3) Project handbook

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

- the *EPIC infrastructure* (SVN, public website, calendar, Mattermost chat tool, 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 and 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. In general, TEC will be the main responsible partner for updating the project handbook. Modifications and updates will be performed whenever necessary, e.g. if there are changes to the mailing lists or if the project structure or the General Assembly / Executive Board composition changes. In any case, partners are always invited to propose updates if required.

4) Introduction to partners and start

Once being familiar with the project policies and the IT tools, newcomers 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.

Chapter 3 Quality Management Strategy

Quality is the degree to which the project results fulfil the project's requirements. In order to fulfil and exceed the project requirements, a Quality Management Strategy has been defined within the EPIC 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 with certain guidelines.

3.1.1 Visual Identity

The creation of a corporate visual identity plays a significant role in the way the EPIC 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. In the following, we briefly list the actions that were taken in order to create a visual identity of the project. A detailed presentation of the materials and activities can be found in D5.1 "Internal and external IT communication infrastructure and project website" and also in D5.2 "Dissemination and communication kit".

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 if feasible 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, the consortium prefers 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. In this case the partners pay separately their conference fees (room fee including coffee and lunch breaks).

The following bullet points should be helpful **for hosting 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 approx. 2 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, when the agenda is being prepared.)

- Are there any costs for the conference room/ day/ person? (coffee break, lunch)?
- Are there any other expenses for the participants?

Infrastructure/Equipment:

- Internet connection
- Projector in each meeting room
- Flip chart 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**:

- ***EPIC-[Dx.x]-[Short Name]-[Level of Dissemination]-[Due-Month]***

Nature of Deliverables - used in EPIC:

- “R” (Document, report)
- “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.

Also exist, but not planned to be used in EPIC:

- “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.

As deliverables are the most important outcome of the project, excellent quality needs to be ensured. Therefore, an internal review process has been defined, which is described in detail in section 3.3.2.

3.1.2.3 Policy for publishing scientific papers

Prior written notice of the final version of any planned publication shall be given to the other parties concerned **at least 45 days** before the publication in accordance with the CA (8.4.1). 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 written notice. If no objection is made within the time limit stated, the publication is permitted.

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 EPIC 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.

In addition, in order to comply with GA Article 29.2, to provide open access to scientific publications, these papers will be uploaded partners' repositories.

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 760150”.

or

“The EPIC project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 760150”.

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.

As prior notice needs to be given 45 days before the publication, all partners have sufficient time to review the planned publication. This additional review process further contributes to high quality publications.

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 performed effectively to reach the targeted outcome. This involves the establishment of Interim Management Reports, clear responsibilities and regular, clearly guided telephone conferences and face-to-face meetings.

3.2.1 Interim Management Reports (IMR)

The basic idea of internal “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. It is an efficient tool to provide the coordinator a good understanding of the status and progress of the work and to detect any possible delays or deviations well in advance.

Furthermore, the cumulative report serves as the main basis for the creation of the mandatory *periodic reports (after RP1 and RP2)*.

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 “Explanation of the work carried out by the beneficiaries and overview of the progress including deviations” asks for partner information regarding the work performed within the respective quarter. This helps the coordinator to monitor partner activities and the progress made within the last quarter. It further asks the WP leader 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. It was also 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.

WP1 – B5G Wireless Tb/s Use-cases, Requirements and Roadmap [M01-M36]	
Overview on Tasks in WP1: Task 1.1 B5G Wireless Tb/s use-cases enabled by Tb/s communication (M01-M04; Task Lead: EAB) Task 1.2 B5G Wireless Tb/s FEC Performance Requirements and Gap Analysis (M01-M06; Task Lead: IMEC) Task 1.3 The Fundamental Research to Initial Technology Roadmap (M30-M36; Task Lead: EAB) – <i>not yet started</i>	
<i>Explain the work carried out in WP1 during the reporting period for your beneficiary!</i> <fill in>	
<i>Explain the reasons for deviations from the DoA, the consequences and the proposed corrective actions. Include explanations for tasks not fully implemented, critical objectives not fully achieved and/or not being on schedule. Explain also the impact on other WP/tasks on the available resources and the planning.</i> <fill in if applicable>	

Figure 2: Extract of IMR I, Chapter 2

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

The third chapter of the IMR focuses on the use of efforts. A dedicated table where partners fill in rough estimates of their efforts each quarter provides a good comparison of “plan” vs. “is” person months. 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.

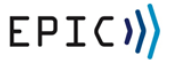
WP	Planned (according to DoA)	Actual Expenditure								Remaining resources
		M01-M03	M04-M06	M07-M09	M10-M12	M13-M15	M16-M18	Total (M01-M18)	Total in %	
WP1		<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>			
WP2		<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>			
WP4		<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>			
WP5		<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>			
WP6		<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>	<fill_in>			
Total										

Figure 3: Extract of IMR II, Chapter 3

This well-thought-out IMR concept will support the quality assurance within the EPIC 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 18 months of the project 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.



EPIC Deliverables and Milestone Status Overview

The EDITOR of this overview is the COORDINATOR, if you want to perform any updates please send an email request to coordination@epic-h2020.

Nr.	Dissemination Level	Type	EPIC - Deliverables and Milestones	Lead beneficiary	Editor name	WP	Del. Month	Review Start	Deadline	Shift request date	upcoming DEADLINES	Name of Reviewer 1
MS1		M	Successful project start	TUKL		WP1, WP2, WP3, WP4, WP5, WP6	M01	10.09.2017	30.09.2017		Deadline this month	
D5.1	PU	D	Internal and external IT communication infrastructure and project website	TEC	Martina TRUSKALLER	WP5	M03	07.11.2017	30.11.2017		Deadline in 2 months	Onur SAHIN
D6.1	PU	R	Project quality plan	TEC	Martina TRUSKALLER	WP6	M03	07.11.2017	30.11.2017		Deadline in 2 months	Onur SAHIN
D1.1	CO	R	B5G Wireless Tb/s Use-Cases and System KPI Requirements	EAB	Leefke GROSJEAN	WP1	M04	07.12.2017	31.12.2017			
D1.2	PU	R	B5G Wireless Tb/s FEC KPI Requirements and Technology Gap Analysis	IMEC	Meng LI	WP1	M06	05.02.2018	28.02.2018			
D5.2	PU	R	Communication and Dissemination Plan	TB	Catherine DOUILLARD	WP5	M06	05.02.2018	28.02.2018			
MS2		M	B5G wireless Tb/s use-cases and FEC KPI parameter set are finalized. SoA FEC gap analysis is successfully carried out.	EAB		WP1	M06	05.02.2018	28.02.2018			
D3.1	CO	R	Report on link level simulation methodology for the evaluation and comparison of the FEC codes	POL		WP3	M07	07.03.2018	31.03.2018			
D2.1	CO	R	First Design Report	TB		WP2	M09	07.05.2018	30.05.2018			
D5.4	PU	R	Communication and Dissemination Report V1	CRE		WP5	M12	07.08.2018	31.08.2018			
D5.9	CO	R	Intermediate Standardization Plan	IDCC		WP5	M12	07.08.2018	31.08.2018			
D6.2	PU	R	Risk Assessment Plan	TEC		WP6	M12	07.08.2018	31.08.2018			
D3.2	CO	R	Preliminary internal report on link-level simulation performance results	TB		WP3	M16	07.01.2018	31.01.2018			
D2.2	CO	R	Second Design Report	TUKL		WP2	M18	05.02.2019	28.02.2019			
D4.1	CO	R	Architecture refinement and optimization report	IMEC		WP4	M18	05.02.2019	28.02.2019			
D5.7	CO	R	Intermediate Exploitation Plan	CRE		WP5	M18	05.02.2019	28.02.2019			
MS3		M	WP2 develops the architectural templates of the best performing codes designed in WP2 in collaboration with WP4.	TUKL		WP2, WP4	M18	05.02.2019	28.02.2019			

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 EPIC consortium established regular telcos and video-telcos (e.g. monthly Technical Progress telcos requesting WP status reports and several WP-internal/ cross-WP meetings and telcos). Currently, TEC provides their telco system for regular Technical Progress telcos as well as for WP related 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. **These telcos will take place every 1st Tuesday of the month.**

To ensure the project success it is necessary to implement an efficient meeting structure. At the beginning of the EPIC project, the Kick-off meeting took place together with the first General Assembly meeting on 6th and 7th of September 2017 in Kaiserslautern. The different expectations and schedules were discussed in order to make a definitive plan about the further work plan and required actions.

We plan two Executive Board meetings per year which will be combined with the General Assembly meetings at the end of each project period (Q4: planned venue is at 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.

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 EPIC 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: it is taken into account from internal as well as from external advisors and therefore positively influences the work towards project objectives. Risk Management is an integral element of quality control as the proactive notice of deviations from the DoA allows the consortium to control the consequences or even transform those consequences to opportunities.

3.3.1 Advisory Board

An Advisory Board ("AB") will be steered by the Executive Board. This additional body, consisting of selected European organisations not directly involved in the Action as partners, supports and advises the Parties with experience and know-how throughout the Action duration. Their valuable feedback to the technical process of the Action brings many benefits for the Action. Members of the AB will provide an external unprejudiced view without receiving funding from the Funding Authority (only minor effort and travel costs will be reimbursed). The AB will advise on strategic directions of the Action in terms of detailed technical goals and impact, comment on economic feasibility and achieved or missed targets and influence EPIC long-term targets set. To achieve high quality results within the Action, a strong cooperation with the AB members will actively be pursued and facilitated by frequent interaction in the form of face-to-face meetings, conference calls and feedback rounds. Gerd ASCHEID (RWTH AACHEN University) Daniel J. COSTELLO, Jr. (University of Notre Dame) and Ruediger URBANKE (Ecole Polytechnique Fédérale de Lausanne) stated their interests to guide, support and provide feedback to the EPIC consortium with advice and expertise throughout the project duration.

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.

The technical lead is the chair of the AB and is in charge of preparing the implementation of the AB's suggestions.

If confidential information will be provided to the AB members, the Coordinator will ensure that a non-disclosure agreement (NDA) is executed between the consortium and each AB member.

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 it to the European Commission. The review process is shown and explained below.

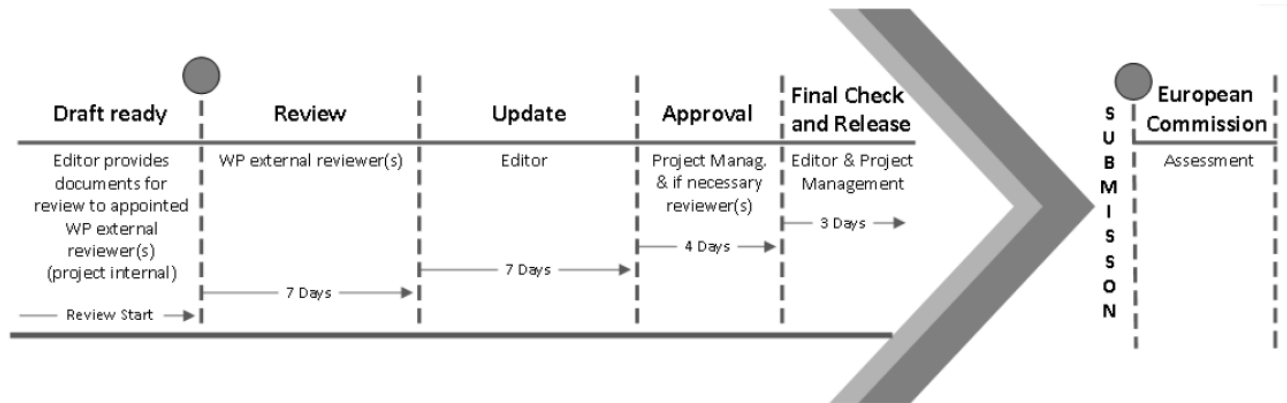


Figure 4: Internal Review Process

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 = 7 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:

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 (e.g. required information, structure, etc.) 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 the editor of this Deliverable in a clearly structured form and helps the editor to address all comments. Afterwards a screenshot of the internal review form in EPIC is presented:

Review Form
for the Internal Reviewer
EPIC deliverable:

* Type of comments: M = Major comment, m = minor comment, a = advice			
Date of Internal Review: 	Internal Reviewer: 		
All information in this deliverable is considered to be confidential and must be treated accordingly. The reviewer confirms that he is aware of the level of confidentiality and the underlying Consortium Agreement. <input type="checkbox"/>			
		Answer Comments	Type*
1. Is the deliverable in accordance with			
i. the Description of Action? https://epic.technikon.com/02-Legal-Documents/02-DoA/EPIC-760150-DoA.pdf	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
ii. the international State-of-the-Art?	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
2. Does the Deliverable include			
i. a clear structure (e.g. appropriate, understandable presentation of the work performed)	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
ii. a sufficient and meaningful executive summary	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
iii. an appropriate introduction	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
iv. a meaningful summary & conclusion	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
3. Is the quality of the deliverable such			
i. that it can be sent to the EC?	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
ii. that it needs further editing or the content needs to be improved?	<input type="checkbox"/> Yes <input type="checkbox"/> No	 	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a

Figure 5: 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 must be first a discussion between the involved authors to update the Deliverable according to the received comments. Secondly, the author either adds text to comments how they were addressed or adds additional comments on its own. (*Update = 7 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 = 4 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 = 3 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 EPIC 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 as 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 high/low impact
	high	high probability of occurrence and high impact

The risks will be monitored on a regular basis and an updated risk table will be provided within the Periodic Reports. Further, a detailed classification and evaluation will be provided within D6.2 “*Risk Assessment Plan*” in M12. The Risk Assessment Plan will show how potential risks are assessed and mitigated in order to avoid any negative influence on the EPIC project objectives.

In addition to the above-mentioned tools and procedures, the project partners’ and the coordinator’s profound experience with H2020 projects implicates a high level of competence, expert knowledge, skills and qualifications, which further increases the quality of the project work. Furthermore, besides these hard skills, also soft skills, such as motivation, team spirit, and interpersonal interaction contribute to high quality project performance.

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 EPIC 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 effectiveness 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 project management team (Coordinator and Technical Lead) monitors that the above-described processes are fulfilled. In case of any deviations to the planned work the management team is in charge of taking necessary mitigation measures. The plan is effective throughout the lifetime of the project, but is open to revision if necessary. As described in section 2.1, 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	Translation
CA	<i>Consortium Agreement</i>
CPA	<i>Critical Path Analysis</i>
DoA	<i>Description of Action (Annex 1 of the Grant Agreement)</i>
EB	<i>Executive Board</i>
EC	<i>European Commission</i>
GA	<i>Grant Agreement</i>
H2020	<i>Horizon 2020</i>
ICT	<i>Information and Communication Technologies</i>
IMR	<i>Interim Management Report</i>
NDA	<i>Non Disclosure Agreement</i>
PM	<i>Person Month</i>
PR	<i>Periodic Report</i>
RTD	<i>Research and Technical Development</i>
RP	<i>Reporting Period</i>
SME	<i>Small and Medium-sized Enterprise</i>
SVN	<i>Subversion server</i>
Telco(s)	<i>Telephone Conference(s)</i>
WP	<i>Work Package</i>