Mobile and wireless communications Enablers for the Twenty-twenty Information Society-II

Deliverable/Report D8.2
Project quality assurance plan

Version: v2.0

2016-12-01

http://www.5g-ppp.eu/

Deliverable D8.2
Project quality assurance plan

Grant Agreement Number:	671680
Project Name:	Mobile and wireless communications Enablers for the Twenty-twenty Information Society-II
Project Acronym:	METIS-II
Project Website:	https://metis-ii.5g-ppp.eu/
Document Number:	METIS-II/D8.2
Document Title:	Project quality assurance plan
Version:	v2.0
Delivery Date:	2016-12-01
Editor(s):	Olav Queseth, Ericsson
Authors:	Olav Queseth, Ericsson
Keywords:	Quality Assurance, Management
Status:	Final
Dissemination level:	Public

Abstract

This deliverable outlines the structures, processes and responsibilities in the METIS-II project that has been put in place to ensure sufficient quality of the project output.

Revision History

Revision	Date	Description
1.0	2015-07-31	First version
2.0	2016-12-01	Updated following P1 review to include sections 3.3, 3.4 and updates to 6.3

Contents

1 Introduction

1.1 Objective of the document

The main objective of this report is to give a overview of the project structure and explain the mechanisms set up within METIS-II in order to secure the quality of the results delivered.

1.2 Structure of the document

This deliverable consists of eight sections. Section 1 presents general introduction to the document and gives its outline. Section 2 presents different roles assigned within the project based on the project structure and responsibilities related to it. Section 3 presents project quality assurance and risk management plans. Section 4 describes IT tools employed within the project to facilitate its operation. Section 5 covers procedures for document handling within the project and presents templates developed for different document types. Section 6 is devoted to the project reporting.

2 Roles and Responsibilities

The organization of the project is outlined in Figure 2-1 below.

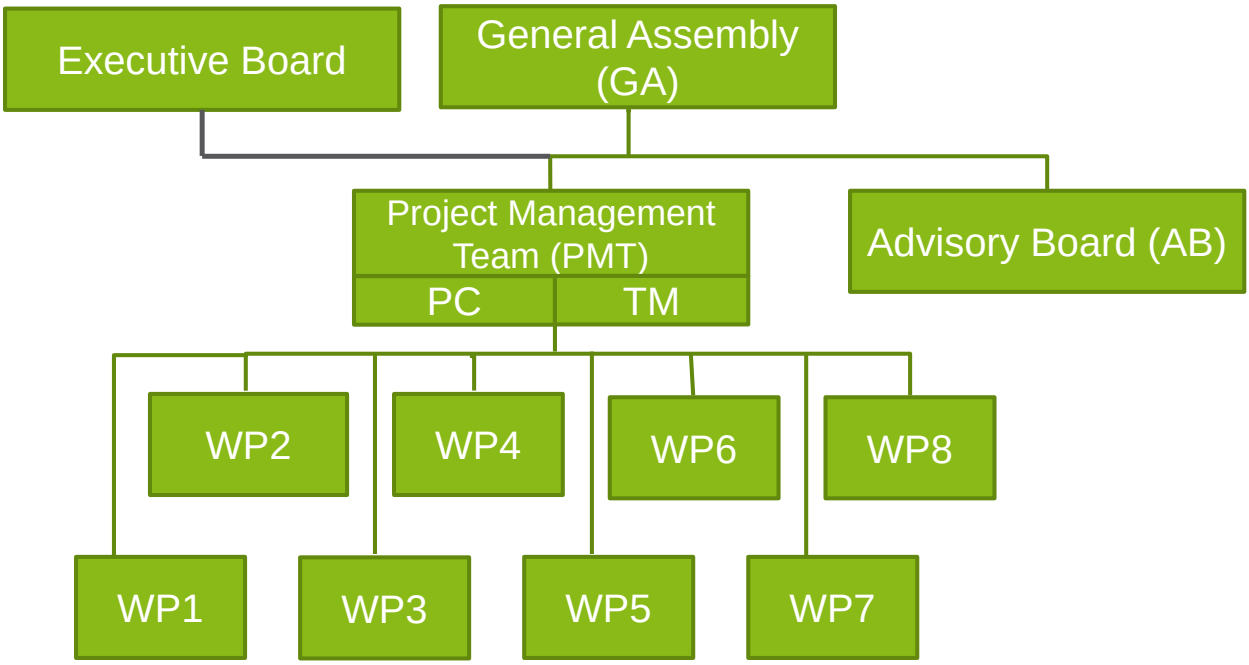

Figure 2-1 Structure of the METIS-II Project

2.1 EU Commission

The EU Commission is represented by the Project Officer from the DG CONNECT. All the communication regarding any project related matters is to be done with the EU Commission via the Project Officer.

2.2 5G-PPP

The METIS-II project coordinates with other 5G-PPP projects by arranging targeted workshops and meetings. The project also participates in the steering board and technology board as well as working groups.

2.3 General Assembly

The General Assembly (GA) constitutes one representative from each consortium member. It is the highest decision making body in the project. The GA is responsible for the overall direction of the project. Responsibilities include for example decisions on changes to the action plan or changes to the consortium setup.

The responsibilities of the GA is outlined section 6.3.1 of the Consortium Agreement.

The members of the GA are listed in Confluence on the contacts page on:
https://www.metis2020.com/confluence/display/MII/Contacts

2.4 Executive Board

The Executive Board is responsible for managing the project, based on the decisions of the General Assembly, and for making proposals to the General Assembly.

The responsibilities of the Executive Board are outlined in section 6.3.2 of the Consortium Agreement.

The members of the Executive Board are listed in Confluence on:
https://www.metis2020.com/confluence/display/MII/Board

2.5 Advisory Board

The Advisory Board (AB) is responsible for providing guidance to the project on direction and content of the major tasks and deliverables in the project. The advisory board consists of companies and organisations that are not part of the consortium, but that can provide input on relevant requirements and solutions in different industry sectors and research areas.

The members of the Executive Board are listed in Confluence on:
https://www.metis2020.com/confluence/display/MII/Advisory+Board

2.6 Project Management Team (PMT)

The Project Management Team (PMT) carries out the day-to-day operations of the project. The PMT consists of the work package leaders (WPL), the project coordinator (PC) and technical manager (TM).

The responsibilities of the PMT are to:

- Implement the project's overall direction and scope, based on the project objectives and GA decisions
- Plan the overall technical activities
- Plan and execute meetings and workshops with the advisory board (AB). Inform the AB about major achievements in the project.
- Plan and execute project-wide physical meetings where work packages can meet and discuss questions related to the WP as well as resolving any cross-WP issues.
- Ensure that the work of the work packages is in line with the project plan
- Review the overall progress of the project, including the achievements of the milestones, in accordance to the project plan
- Review the overall achievements and major deliverables, prior to submission to the Commission
- Propose appropriate actions in case of deviations from the project plan for the WPs
- Get early warning of potential future problems, and initiate actions to address them in a timely manner

- Appoint task leaders if necessary.

The members of the PMT are listed in Confluence on
https://www.metis2020.com/confluence/display/MII/PMT

2.7 Workpackages

The technical work in the project is carried out in the Work Packages (WPs). The Work Package Leader (WPL) is responsible for managing the daily technical and administrative work of a work package. In the descriptions of the work packages the work is further divided into tasks as a tool to help structure the work.

The main responsibilities of a WPL are to:

- Plan and organise the work package activities
- Coordinate the technical work, and monitor the progress of the work package
- Plan, coordinate, and harmonise deliverable content
- Ensure that the work package objectives and targets are met
- Report technical progress to the project coordinator in regular reports
- Organise and chair work package meetings, and implement decisions
- Contribute to audits and final reports
- Support WP2 on the overall system design

3 Quality Assurance and Risk Management

3.1 Quality Assurance Plan

The purpose of the Quality Assurance Plan (QAP) is to ensure sufficient quality of the project deliverables and the project meets its objectives.

The QAP is reviewed after year 1 in conjunction with the periodic reporting and on a need basis.

3.1.1 Roles

The project will produce deliverables of varying character. These are listed in Table 3-1 below together with the entity responsible for the quality of these deliverables.

Table 3-1 Project deliverable quality responsibilities

Type of deliverable	Quality responsible
Dissemination and Impact related, e.g. external presentations, leaflets etc.	Project Management Team (PMT) as well as WP7
Deliverables and Reports	Project Management Team (PMT)
Visualisation tools	WP7

It should be noted that the project Board decides under which authority any product of the project falls. The project Board is responsible at the top level for deliverables quality control.

3.1.2 Tools

To facilitate the project to attain sufficient quality of deliverables and reports the following tools are used:

- Templates and guidelines for writing the deliverables. These facilitate a common style and improved readability.
- Collaboration IT tools describes in section 4.
- A review process described in section 5.

To help ensure the quality of the visualization tools deliverables the following tools are used:

- Code repositories

3.2 Risk Handling

A Risk Register has been set up in Confluence at:
https://www.metis2020.com/confluence/display/MII/Risk+Register .

A risk followup will be done at the end of each quarter and the results will be reported in the QMR and if necessary suitable risk mitigation will be initiated. The risks identified at the project start are listed in Table 3-2 below:

Table 3-2 Risks identified at project start.

Description of risk	Work package(s) involved	Proposed risk-mitigation measures
Partner leaving consortium/ reducing effort	All	In the areas of critical importance to the outcome of the project there are at least two partners able to carry out the tasks. Workload would need to be shifted in the project.
Projects in the 5GPPP family will not have the coverage and topics as expected	WPs 3-6	Reasonable assumptions will have to be made about technology instead of relying on input. In some cases the necessary input may be available from individual partners.
Topics investigated in METIS-II being addressed in standardization bodiesand work in standards body progressing more rapidly	WPs 3-6	The technical work packages should reshape their focus based on inputs from standardization bodies in order to remain relevant to the horizon 2020 5G access design.
Regulatory bodies deviate heavily from the expected working process.	WP 3	Adapt to the new process. Initiate relationships with new actors.
System design complexity underestimated	WP 2	Re-focus efforts to concentrate on a narrower scope for the system design.
The computational requirements too high to allow interactive visualisation.	WP 7	Rely on pre-calculated scenarios for visualisations/demos.
Deliverables plan and quality issues	All	Update detailed work plan if needed. Use external reviewers (from the Advisory Board) for public deliverables., and check the quality for all deliverables by PMT

Not clear vision of the project or perceived differently by WPs or participants	All	Break-down the project vision to each WP “instance” and re-compose. The TM and the WP2 Leader will continuously monitor that all WPs are well inline.
Technical work differs from project objectives	WPs 1-6	This will be avoided by checking progress across milestones, reviewing of all activities by the TM and WP leaders and through regular consultation with the advisory board.
Motivation, collaboration, responsiveness	All	PM and TM will continuously monitor partners’ contributions according to their assigned tasks. Any deviation will be evaluated by the PMT; any delays will be treated by shifting resources from less-critical tasks.To achieve the projects’ main objectives this means shifting resources between partners will be also possible.
Issues in dissemination activities	WP 7	Already workshops and open e-consultations have been defined. These will be adapated if necessary according to the progress of other 5G-PPP projects and the timeplan of standardization organizations. WP7 leader will circulate as soon as possible call for papers from high quality conferences and journals. Dissemination to standardization and regulation activities may be undertaken by more than one partners.
Non-realistic or obsolete expectations of outcomes related to specific approaches, partners work mismatch, insufficient alignment	WPs 2-6	Re-evaluation of use-case scenarios produced in WP1, internal cross-WP workshops to clearly indicate use cases and their KPIs, and the evaluation framework joint technical interactions (cross WP); identification and adoption of the most promising approaches; refinement of tasks.
Issues related to the overall specification of the METIS-II architecture	WPs 2-6	Cross work package activities will take place to sort out “compatibility” issues.
Fail to impact standardization	WPs 2-6	Analyze standardization scope for the pre-identified WGs and agree on the links to the project. Form small teams for each WG targeted and elaborate on networking activities in conjunction to joint project contributions and joint meetings participation. Continuous evaluation and re-plan if needed or assign more resources.

Technical solutions cannot meet the KPIs imposed by the use cases	WPs 2-6	If possible, relaxing the KPIs may be considered, strictly in the sense that not all requirements have to be fulfilled at the same time by the METIS-II system

3.3 IPR management

Each partner continuously monitors the progress in the project and identifies ideas that are suitable for protecting mainly as patents, but possibly also as design patterns etc. Each partner already has a well-defined process for applying for protection of ideas and managing IPRs in general.

The consortium agreement (CA) states in detail how ownership of the IPRs in the project should be handled, how they may be transferred and what rights partners have visavi each other for accessing and licensing them.

A list of the IPRs generated in the project will be created at the project end for the final report

3.4 Data management

The project does not generate data in context meant with research data in general. The project does not undertake extensive measurement campaigns. Nor does it conduct experiments where each outcome takes considerable effort to generate, e.g. there are chemical experiments where each sample requires expensive reagents or medical experiments where each patient takes days to treat.

The results in the project are generated by numerical experiments (simulations) and can be regenerated when needed using the documented assumptions and the simulation tools.

The project has opted out of the data management pilot.

4 IT Tools

In order to improve the flow of information within and from the project as well as maintaining a common repository of information a number of tools are used.

4.1 External Project Web site

The project website is used for disseminating and promoting the METIS-II results and outcomes. It is also used for promoting events and to share information with other 5G-PPP projects. The web-page is accessible at: https://metis-ii.5g-ppp.eu/

The web-site contains the following main sections:

- "News & Events" features the latest updates related to the project, press releases, and articles and list of past and future events;
- "About METIS-II" is structured in such a way that it provides a brief overview and basic information about the METIS-II project;
- "Documents" web page is dedicated to all documentation produced during the lifetime of the project which includes various presentations, a list of deliverables and scientific publications submitted by the project partners;
- "Contact us" provides contact information of the Project Coordinator for those who are interested to inquire about METIS-II. There is also an optional fill-in form.
- "Gallery" contains photos from events and meetings of the project.

The web-site is implemented using Wordpress. When the project is concluded the web-pages will be archived, the entire site will be converted to static HTML. The archived copy will then be available on the web for at least 5 years.

4.2 Social Networks

The METIS-II project reuses the METIS twitter channel at: (https://twitter.com/metis2020). The channel is used at regular intervals and the following events are always mentioned:

- Release of public deliverables and reports
- Release of press releases
- When METIS-II-All meetings are held. Once two weeks prior to the event and once during the event.
- When workshops, and 5G-PPP workshops are held

The same events are also notified on LinkedIn.

4.3 Collaboration tools

The collaboration tools facilitate sharing information and for collaborating in the project.

4.3.1 Confluence

Confluence [https://www.atlassian.com/software/confluence] allows sharing and collaborating on documents and wiki pages inside the project. Since all information is stored in the same place it is possible to ensure that all members in the project have access to the most updated information. Confluence also provides a version tracking system to simplify keeping track of updates.

All project members get an individual account to ensure that changes and updates can easily be tracked.

At the end of the project all content will be packaged into a static copy. This will be made available for download for all the project partners for a reasonable time. One copy will be stored by the coordinator for archival purposes for at least 5 years.

4.3.2 Mail lists

Mailing lists in the project are used for sharing information which is temporary in nature. This may for example be ongoing discussions on technical topics, calls for meetings etc.

The following mailing lists have been set up in the project:

Table 4-1 METIS-II Project mailing lists

Listname	Email address	Purpose
METIS-II-ALL	metis-ii-all@verkstad.net	For general matter and communication for the whole project consortium
METIS-II-Board	metis-ii-board@verkstad.net	For Board specific matters
METIS-II-GA	metis-ii-ga@verkstad.net	For GA specific matters
METIS-II-PMT	metis-ii-pmt@verkstad.net	For Project Management Team (PMT) specific matters
METIS-II-Reporting	metis-ii-reporting@verkstad.net	For reporting (quarterly, monthly) matters
METIS-II-WP1	metis-ii-wp1@verkstad.net	For WP1 specific matters
METIS-II-WP2	metis-ii-wp2@verkstad.net	For WP2 specific matters
METIS-II-WP3	metis-ii-wp3@verkstad.net	For WP3 specific matters
METIS-II-WP4	metis-ii-wp4@verkstad.net	For WP4 specific matters
METIS-II-WP5	metis-ii-wp5@verkstad.net	For WP5 specific matters
METIS-II-WP6	metis-ii-wp6@verkstad.net	For WP6 specific matters
METIS-II-WP7	metis-ii-wp7@verkstad.net	For WP7 specific matters

An archive is kept for all mailing lists. These are available at:
https://mail.verkstad.net/mailman/private/<name of mail list>

4.4 E-Meeting tools

4.4.1 WebEx

In order to support and facilitate interaction during the teleconferences and meetings two Cisco WebEx licenses were purchased. Each one provides the possibility for up to 40 people's usage simultaneously per one meeting.

WebEx gives a possibility to share documents and presenter's desk top during conferences and makes it easier for attendees to participate and follow. In order to make the booking of the tool smooth a special email group and address were set up for the work package leaders.

The tool also allows for a host of the meeting to book in the WebEx calendar time and date of the meeting in order to avoid double booking and secure availability.

4.4.2 Phone bridges

The audio-conference is provided by Ericsson teleconference services. There are phone bridges created for each WP and for PMT. Each phone bridge has a facility of hosting up to 40 persons. Participation is secured with a special moderator and participant's code. A phone bridge could be used at any time; no particular booking for usage of the phone bridge is needed.

Participant codes, moderator codes and further information is available in Confluence at:
https://www.metis2020.com/confluence/display/MII/Collaboration+tools

4.4.3 Other tools

Other E-Meeting tools may also be used on a need and availability basis.

5 Document Handling

5.1 Templates

In order to simplify the writing process and ensure a common look and feel for the documents produced by the project a set of templates are provided. Templates are stored on a common page in Confluence for easy access at: https://www.metis2020.com/confluence/display/MII/Templates+and+Logo The following templates are available:

- For Deliverables and Reports https://www.metis2020.com/confluence/download/attachments/9668324/Template%20METIS-II_Dx.x_Vx.x.dotx?api=v2
- For Presentations https://www.metis2020.com/confluence/download/attachments/9668324/METIS-II_PPT_Wide_template.potx?api=v2
- For Monthly Reporting by partners: https://www.metis2020.com/confluence/download/attachments/9667567/Template%20METIS-II_rep_mon_yearmonth_partner.docx?api=v2
- For Quarterly reporting: https://www.metis2020.com/confluence/download/attachments/9667569/Template%20METIS-II_QMR.dotx?api=v2

5.2 Naming of files and version handling

The filenames should be unified in the project.

- Deliverables should be have the filename: **METIS-II_DX.Y_vN.M.docx** where **DX.Y** denotes the deliverable number and **vN.M** is the version number as described below.
- Reports should be named as deliverables but with **DX.Y** replaced by **RX.Y**.
- Per-Parner monthly reports should be named **METIS-II_rep_mon_YYYYMM_name.docx** where **YYYYMM** is the year and month and name is the acronym of the partner (e.g. **METIS-II_rep_mon_201507_ERI.docx**).

- For journals, articles, standard contributions the naming would be as follows: **<Event>_<yyyy>_<Aut>_<Words>**

  - **Event** – abbreviation of an event name such as a magazine, journal, conference e.g. VTC. 3GPP etc.
  - **yyyy** - Year of the publication e.g. If the article was published in 2011 then indicate 2011

- **Aut**- First three letters of the last name of the author in case of several authors to the paper indicate only the last name of the first one and append the rest with “etal” e.g. if the author is Tom Smith the abbreviation would be Smi. In case of several authors e.g. Tom Smith and Robert Brown the abbreviation would be Smi_etal
- **Words** – use the two meaningful words from the title of the publication indicating what the publication is about but not longer than ten letters if it is longer, shorten it to 8 letters e.g. if the full title of publication is “System Performance of MIMO in WCDMA” the first meaningful word would be “MIMO_WCDMA”

The version number is indicated in a document filename with ”vN.M”. E.g. “METIS-II_D8.2_v0.1.docx”

- All versions before the document is submitted to the EC should start with N=0, e.g. “v0.1”.
- Versions submitted to the EU commission should end with 0, i.e the first version submitted should be v1.0 the next v2.0 etc.
- The minor number (M) should start at 1 and be increases ad needed, e.g. when a new version is sent for review etc.

5.3 Reference style

Use alpha style for bibliography quotation where we differentiate between the following cases:

- a paper with one author (e.g. a paper from Smith in 1992) should appear in the text using the first three letters of the author's name and the last two digit of the year, keeping only the first letter in capital, (e.g. [Smi92]).
- a paper with two or three authors, only the first letter of each author is used, together with the year, so a reference to Smith and Jones (1987) becomes [SJ87].
- a paper with more than three authors, e.g. (Li, Jones, Nee, and Smith in 1995) then only the first three authors are considered and a "+" is appended, as in [LJN+95].
- cite a project publication e.g. WINNER documents are labelled as follows: WINNER I public deliverables: [WINYY-Dxxx], where “xxx” is a deliverable number without any dots, e.g. [WINYY-D210] is deliverable D2.10 from WINNER I published in year YY.
- for WINNER II and WINNER+ internal reports and deliverables, same as above using WIN2 and WIN+ instead of WIN.
- cite a standardisation or regulatory documents, e.g. to IEEE, 3GPP or ETSI standardisation documents, should be labelled similarly to WINNER documents, e.g. [3GPPYY-36913].
- if the same authors or organizations has more than one publication in the same year e.g. if Smith and Jones have two publications in 1987 (or there are different Smith and Jones constellations) these may be numbered [SJ87a] and [SJ87b] respectively.

Do not use Word cross-references for bibliography citations, since they are hard to repair for editors if they get broken and changed in an error message during the merge of different contributions.

Some reference examples are given below

[3GPP13-36888] 3GPP TR 36.888, “Study on provision of low-cost Machine-Type Communications (MTC) User Equipments (UEs) based on LTE (Release 12)”, June 2013.

[FU98] G. D. Forney and G. Ungerboeck, “Modulation and coding for linear Gaussian channels”, IEEE Transactions on Information Theory, vol. 44, no. 6, pp. 2384-2415, October 1998.

[MET13-D11] ICT-317669 METIS, Deliverable 1.1 Version 1 “Scenarios, requirements and KPIs for 5G mobile and wireless system”, April 2013.

[Maz75] J. E. Mazo, “Faster-than-Nyquist signaling”, Bell System Technical Journal, vol. 54, no. 8, pp. 1451-1462, October 1975.

[PWH13] K. Pentikousis, Y. Wang and W. Hu, “Mobileflow: Toward software-defined mobile networks”, IEEE Communications Magazine, vol. 51, no. 7, pp. 44-53, July 2013.

[TAZ+13] A. Tzanakaki, M. P. Anastasopoulos, G. S. Zervas, B. R. Rofoee, R. Nejabati and D. Simeonidou, “Virtualization of heterogeneous wireless-optical network and IT infrastructures in support of cloud and mobile cloud services”. IEEE Communications Magazine, vol. 51, no. 8, pp. 155-161, August 2013.

5.4 Review and approval

5.4.1 Deliverables and reports

The delivery date is denoted in the project proposal by “Month N”, e.g. M13. This corresponds to the last day of that month. The delivery date is denoted by “D” in the table and figure below.

Table 5-1 Timeline and responsibilities for Deliverables and Reports

Time	Action and responsible
D-30 (or earlier)	WP leader: Assign editor and lead beneficiary. WP leader: Designate reviewers. WP leader: Make the deliverable available to the reviewers along with review instructions. WP leader: Inform the consortium (metis-ii-all@verkstad.net) that the deliverable is ready and available for review.
D-14 (or earlier)	Reviewers: Make review comments available in Confluence PMT: Make review comments available in Confluence
D-5 (or earlier)	Editor: Address the review comments and update document Editor: Inform PMT (metis-ii-pmt@verkstad.net) that the deliverable is available
D-0	PMT: Approve the deliverable

	Project Coordinator: Submit deliverable to EU
D+7	Project Coordinator: Make deliverable available at the public website (if the deliverable is public)

The review process is very similar for both Reports and Deliverables. The difference is in who should review the document. For Deliverables the document is reviewed by "external" reviewers, .i.e. persons not working in the METIS-II project and who are still working at one of the partner organisations. For Reports the reviewers are "internal", i.e. working in the METIS-II, but not directly involved in the production of the document.

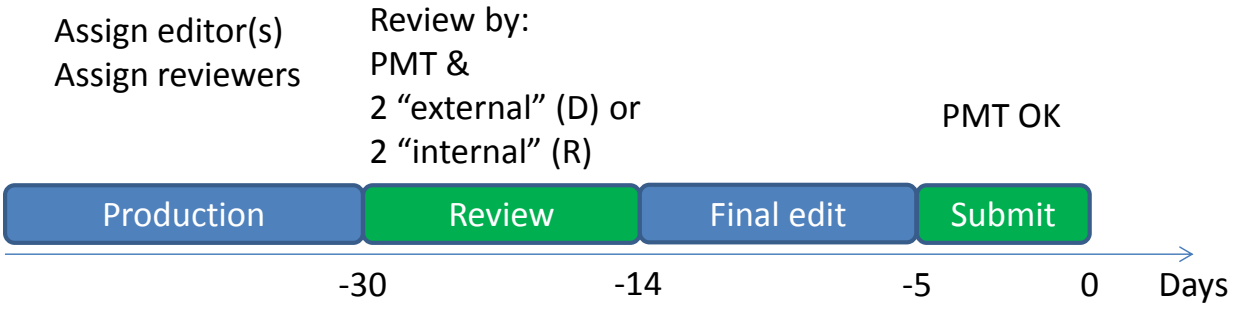

Figure 5-1 Process for review and approval of Deliverables and Reports

5.4.2 Publications (conference and journal papers)

The agreement on dissemination of results in the form of papers is covered in the Consortium Agreement in section .8.4.1 [CA]. The consortium agreement is available in confluence on: https://www.metis2020.com/confluence/display/MII/Project+Proposal+and+Grant+Agreement. The relevant text is:

> *Prior written notice of the final version of any planned publication shall be given to the other Parties at least forty-five (45) days before the planned publication submission date. Any objection to the planned publication shall be made in writing to all Parties within thirty (30) days after receipt of the written notice. If no objection is made within the time limit stated above, the publication is permitted.*

An example of the timing for conferences and journals is given in the figure below:

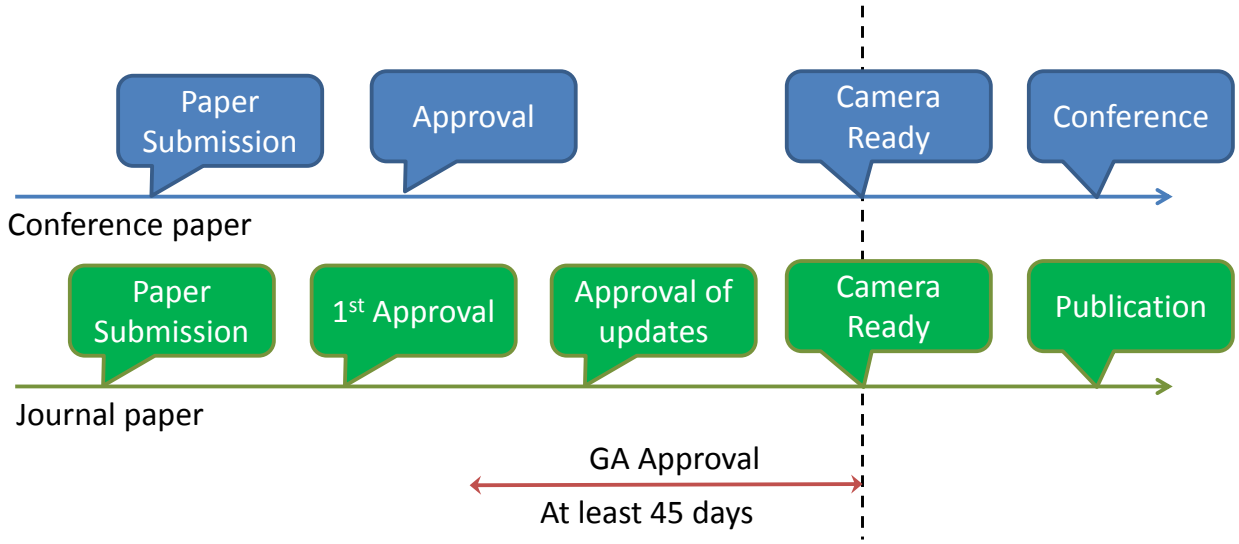

Figure 5-2 Example of conference and journal paper timings

The approval process is summarized in the table below:

S-45 (or earlier)	Authors: Send the paper to metis-ii-ga@verkstad.net for approval. NOTE: Attach the paper to the mail Authors: Make paper available in Confluence
S-15	Objecting partner (if applicable): Return comments to authors and Project coordinator. Project coordinator informs consortium. The acceptable reasons for objecting are listed in the Consortium Agreement (CA).
S-0	Submission date

The submission date is the date when the camera ready paper is submitted.

If possible the GA approval process should be started in conjunction with the 1st approval of the paper to avoid overusing the approval process.

Please note in case the partner is uncertain about a potential conflict of interest it is advised to initiate the approval procedure before the paper is submitted for publication.

5.4.3 Standards and Regulatory contributions

Submission to standards bodies is covered in the Consortium Agreement in section 8.5. The relevant text is:

> *A copy of each proposed contribution of Results to a meeting of such approved standard's organisation, (a "Scheduled Meeting"), for the purpose of incorporation in a standard, shall be distributed in detail and in writing to the Parties, by the Party proposing to submit the contribution, no later than 60 days prior to the date of the meeting ("Review Period").*

> *Any Party may submit a written objection, to such contribution to the Party proposing the standard's contribution and to the Executive Board, within a period of thirty (30) days, (hereinafter referred to as the "Objection Period") after receipt of a copy of the proposed contribution on either or both of the following grounds:*

The approval process is summarized in the table below:

S-60	Authors: Send the paper to metis-ii-ga@verkstad.net for approval. Authors: Make paper available in Confluence
S-15	Objecting partner (if applicable): Return comments to authors and METIS-II Board (metis-ii-board@verkstad.net). Project coordinator informs consortium. The acceptable reasons for objecting are listed in the Consortium Agreement (CA).
S-0	Submission

The submission date is the deadline for submission to the Standards or Regulatory body.

5.5 Acknowledgements

5.5.1 Conferences, Workshops or Journals

All presentations from METIS to a conference or a workshop should have one of the following acknowledgements.

The default acknowledgement is the following:

> *This work has been performed in the framework of the H2020 project METIS-II co-funded by the EU. The authors would like to acknowledge the contributions of their colleagues from <list of partners>. This information reflects the consortium's view, but the consortium is not liable for any use that may be made of any of the information contained therein.*

For a shorter version "from <list of partners>" may be removed.

If approval in the GA or a timely submission to the GA cannot be reached, but the publication is accepted for publication according to the confidentiality rules in the consortium agreement, the following acknowledgement above should be modified so that the sentence:

> *"This information reflects the consortium's view, but the consortium is not liable for any use that may be made of any of the information contained therein."*

Is replaced by

> *"The views expressed are those of the authors and do not necessarily represent the project. The consortium is not liable for any use that may be made of any of the information contained therein."*

If only part of the authors is working in METIS, the following acknowledgement should be used instead:

> *Part of this work has been performed in the framework of the H2020 project METIS-II co-funded by the EU. <names of the authors who have been working in METIS> would like to acknowledge the contributions of their colleagues from METIS-II although the views expressed are those of the authors and do not necessarily represent the views of the METIS-II project.*

For a shorter version "<names of the authors who have been working in METIS>" may be replaced with "authors".

Disclaimer for liability of a partner, if needed:

> *The information in this document is provided as is, and no guaranty or warranty is given that the information is fit for any particular purpose. The user uses the information at its sole risk and liability.*

5.5.2 Standards

If all partners support a contribution or submission to a standards and regulatory body the following acknowledgement should be used:

> *This work has been performed in the framework of the H2020 project METIS-II co-funded by the EU. The organisations on the source list would like to acknowledge the contributions of their colleagues in the project.*

If only a subset of the partners support the contribution the following acknowledgement should be used:

> *This work has been performed in the framework of the H2020 project METIS-II co-funded by the EU. The organisations on the source list would like to acknowledge the contributions of their colleagues to the project, although the views expressed in this contribution are those of the authors and do not necessarily represent the project.*

In case the content of a METIS-II contribution has been used as a basis for documents that will be forwarded to another body, e.g. in the form of an LS, the participants should try to get the following acknowledgement into the forwarded document.

> *Part of the content in this document has been based on work currently underway in the H2020 project METIS-II co-funded by the EU.*

5.6 Copyright

To avoid any copyright issues it is advised to use self-produced figures/illustrations.

For any image or illustration included in a METIS-II publication (Deliverable, Report, Paper, Presentation etc.) which has not been self-produced a permission has to be obtained and a a copyright notice for each image/illustration should be included in publication e.g. “The image is reproduced from <source> with the permission of <copyright owner>.

6 Reporting

The project reporting consists mainly of the project internal reports and deliverables, together with the monthly partner reports, the quarterly management reports, the periodic reports and the project final report. The project internal reports and deliverables will be distributed to the EU Commission according to the agreed deliverable time plan.

6.1 Monthly reporting

Monthly partner reports (summarising a partner's technical contribution in all the WPs the partner is contributing to) shall be delivered by each partner to the Coordinator no later than three working days after the end of each calendar month.

The purpose of this monthly report is to provide an overview of the progress of work towards the objectives of the project, including achievements and attainment of any milestones and deliverables identified in Annex I. This report should include the differences between work expected to be carried out in accordance with Annex I and that actually carried out.

Monthly Partner Report consists of two parts that should be filled in:

1. Summary of activities and progress of work (per Task),
2. Issues and Risks.

There is a template available to ensure consistent look and feel of all monthly reports and to simplify the compilation. The template is available in Confluence at: https://www.metis2020.com/confluence/download/attachments/9667567/Template%20METIS-II_rep_mon_yearmonth_partner.docx?version=1&modificationDate=1438092239069&api=v2

6.2 Quarterly reporting

Quarterly management reports (QMRs) shall be delivered by the Project Coordinator to the European Commission no later than 15 working days after the end of each quarter as agreed with the Project Officer. It should cover the following aspects:

- Technical progress and achievements of the work towards the objectives of the project. The progress is reported per WP and on project level.
- Project status, where the following aspects are presented:
  - Work started in the previous reporting period
  - Work completed in the previous reporting period, describing major achievements
  - Work delayed for reasons internal to the project, and remedial actions to be taken
  - Status of deliverables

- Resources used, and in particular the amount of person-months spent, as well as the amount of investments, and other expenses during the reporting period. This shall include:
  - Absolute values for the reported period
  - Aggregated values (actual versus planned)

6.3 Periodical reporting

6.3.1 Reporting after P1

At the end of P1 a periodic report will be produced containing a technical report consisting of a structured part (Part A) and the core part of the report (Part B). In addition to the technical report the periodic report also contains a financial report.

Part A consists of a number of tables containing: A summary, Deliverables, Milestones, Critical implementation risks and mitigation measures, Dissemination & exploitation of results, Impact on SMEs, Gender issues. The Part B contains a detailed achievement of the project during the period. The financial report contains the financial statements and resource use from the partners. For further details on the periodic report please consult the H2020 participant portal.

6.3.2 Reporting after P2 (project end)

At the end of the project a **periodic report** will be produced with the same content as for P1 (but where the content reflects P2 obviously).

At the end of the project a **final report** will also be produced containing the certificates of financial statement (CFS) for the partners. The final report will also contain a technical part describing the project results, conclusions and the exploitation and expected impact of the project. For further details on the periodic and final report please consult the H2020 participant portal.

Finally, the **deliverable** “D8.3 - METIS-II final project report” will be produced describing the outcomes of the project in a format suitable for general dissemination.

In these three reports there is clearly a large overlap in the area of technical contents and the outcomes of the project. To ease the reporting process, the technical parts of the final report will be written first and then the content reused for the periodic report and for deliverable D8.3.