D6.6 Project Quality Plan final revision

WP6

Lead Partner: TNO

Partner Contributors: EURAC, IMEC, SUPSI

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Document history

Version	Date	Comments
V0.1	2025-02-20	First draft version, based on current PQP
V1.0	2025-03-14	Final version for check by Gen.Ass.

Description of the deliverable content and purpose

The deliverable D6.6 of the Project Quality Plan is described in the Grant Agreement as follows:

Deliverable D6.6 – Project Quality Plan final revision

Deliverable Number	D6.6	**Lead Beneficiary**	1 - TNO
Deliverable Name	Project Quality Plan final revision		
Type	R — Document, report	**Dissemination Level**	PU - Public
Due Date (month)	27	**Work Package No**	WP6

Description
Project Quality Plan, final revision. Task 6.1.

Reference material

The first version of this Project Quality Plan has been written by reading a number of other Horizon 2020 or Horizon Europe projects as inspiration. In random order:

- GASVESSEL (GA nr. 723030)
- www.paris-reinforce.eu
- DeepCube (GA nr. 101004188)
- BIPVBOOST (only index is public available)
- HyUSPRe (GA nr. 101006632)
- RECODE

For the first revised version some small adjustments were made based on situations occurred during the daily project execution. For example, the reviewing procedure as described in Chapter 3.2.1.4 can sometimes not be used. In case of the Cost model, review according to the predefined focus areas wasn't possible. In those cases (and a few other cases), an e-mail with specific comments from the reviewers better serves the quality of the Deliverable.

In this final version an extra deliverable has been added to the review scheme (D2.9) and we added a couple of reviews not determined before. In addition other minor changes have been made.

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Abbreviations and Acronyms

[CA] Consortium Agreement
[CINEA] European Climate, Infrastructure and Environment Executive Agency
[CO] Coordinator
[DMP] Data Management Plan
[DoA] Description of Action
[DSSA] Data and Sample Sharing Agreement
[EC] European Commission
[ECA] European Court of Auditors
[EPPO] European Public Prosecutor's Office
[EU] European Union
[FAIR] Findable Accessible Interoperable Reusable
[GA] Grant Agreement
[Gen.As] General Assembly
[IB] Industrial Board
[IP] Intellectual Property
[IPV] Integrated PhotoVoltaic
[KOM] Kick-Off Meeting
[KPI] Key Performance Indicator
[M] Project Month
[MC] Mass Customization
[MoM] Minutes of the Meeting
[NDA] Non-Disclosure Agreement
[OLAF] Anti-Fraud Office
[PM] Project Manager
[PO] Project Officer
[PQP] Project Quality Plan
[SC] Steering Committee
[SHE] Safety, Health & Environment
[WP] Work Package
[WPL] Work Package Leader

1 Introduction

1.1 Purpose of the Project Quality Plan

This document contains practical guidelines for the technical coordination of the MC2.0 project. Among others, it contains:

- Details on project management organization.
- Quality procedure split into internal and external procedures.
- The definition of the rules for preparing the deliverables and the means of verification.
- Some general remarks on communication and dissemination. Details of those are published in a separate communication and a separate dissemination plan.
- Some general remarks on data and sample sharing. Details are published in a separate Data Management plan.
- KPI's as basis for the project General Assembly to oversee project developments and provide directions to the project.

The PQP is also used by the task coordinators to evaluate the content of the technical deliverables and to ensure the technical quality of the project outcomes.

Please note that this PQP does not replace provisions in both the Grant Agreement (GA) and Consortium Agreement (CA). The PQP explains the processes and requirements of the MC2.0-project in a more understandable language. Therefore, the PQP can be considered as a practical 'handbook' for all MC2.0-partners. Due to the fact that this PQP is public available, in some paragraphs sensitive information is not included. In those situations a reference is made to the sensitive document that is only available for MC2.0-partners. The processes described in the PQP are implemented in the daily work of the consortium. Required templates for reports, presentations, etc… are available on the project document system (software package SharePoint).

This PQP should be regarded as a living document that will be improved and updated whenever necessary.

The Project Manager (PM) is responsible to regularly check procedures in this handbook and adapt those if necessary.

2 Project management and organization

The organisational structure of the consortium comprises the following Consortium Bodies:

The General Assembly (Gen.As) as the ultimate decision-making body of the consortium.

The Steering Committee (SC) as the daily management body for the execution of the Project, which shall report to and be accountable to the General Assembly.

The Coordinator (CO) as the legal entity acting as the intermediary between the Parties and the Granting Authority. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the Grant Agreement (GA) and this Consortium Agreement (CA). The Project Manager (PM) is appointed by the Coordinator.

2.1 Project management structure

General Assembly
The Gen.As consists of one representative of each MC2.0 project partner (hereinafter General Assembly Member). Each General Assembly Member shall be deemed to be duly authorized to deliberate, negotiate and decide on all matters listed in Section 6.3.1.2. of the CA.

On the internal project SharePoint site there's a list with Gen.As. members.

The following decisions shall be taken by the Gen.As:

Content, finances and intellectual property rights:

- Proposals for changes to Annexes 1 and 2 of the GA to be agreed by the European Climate, Infrastructure and Environment Executive Agency (CINEA)
- Changes to the Description of Action (DoA), more generally known as project plan
- Approval of modifications or withdrawal of Background in attachment 1 of the CA: Background included
- Additions to Attachment 3 of the CA: list of third parties for simplified transfer
- Additions to Attachment 4 of the CA: identified entities under the same control

Evolution of the consortium:

- Entry of new project partners and approval of the settlement on the conditions of the accession of such a new party
- withdrawal of a project partner and the approval of the settlement on the conditions of the withdrawal
- identification of a breach by a project partner of its obligations under the CA or GA
- declaration of a project partner to be a defaulting project partner
- remedies to be performed by a defaulting project partner
- termination of a defaulting project partner's participation in the project and measures relating thereto
- proposal to CINEA for a change of the coordinator
- proposal to CINEA for suspension of all or part of the project
- proposal to CINEA for termination of the project and the CA

Appointments:

- Appointment of Industrial Board Members

Steering Committee (SC)

As defined in the CA, the SC shall:

- Prepare the meetings, propose decisions and prepare the agenda of the Gen.As according to Section 6.2.2 of the CA
- Seek a consensus among the project partners
- Be responsible for the proper execution and implementation of the decisions of the Gen.As
- Monitor the effective and efficient implementation of the project
- Collect information on the progress of the project, examine that information to assess the compliance of the project with the DoA and, if necessary, propose modifications of the DoA to the Gen.As
- Support the coordinator in preparing meetings with CINEA and in preparing related data and deliverables
- Prepare the content and timing of press releases and joint publications by the project partners or proposed by CINEA in respect of the procedures of the GA Article 17 Section "Communication, Dissemination, Exploitation & Dissemination" and Annex 5.

In the case of abolished tasks as a result of a decision of the Gen.As, the SC shall advise the Gen.As on ways to rearrange tasks and budgets of the project partners concerned. Such rearrangement shall take into consideration any prior legitimate commitments which cannot be cancelled.

In addition to the tasks as defined in the CA, the SC also serves as Ethical Committee. Ethical issues will be handled by the SC. Agenda point for the Ethics Committee will be put on the agenda of the regular SC-meetings.

Coordinator

The coordinator, TNO, is the intermediary between the project partners and CINEA and shall perform all tasks assigned to it as described in the GA and CA. The coordinator is represented by the Project Manager (PM).

In particular, the coordinator shall be responsible for:

- Monitoring compliance by the project partners with their obligations under the CA and GA
- Keeping the address list of Gen.As members and other contact persons updated and available
- Collecting, reviewing to verify consistency and submitting reports, other deliverables (including financial statements and related certifications) and specific requested documents to CINEA
- Transmitting documents and information connected with the project to any other parties concerned
- Administering the financial contribution of CINEA and fulfilling the financial tasks described in Section 7.2 of the CA
- Providing, upon request, the project partners with official copies or originals of documents that are in the sole possession of the coordinator when such copies or originals are necessary for the project partners to present claims.

Project Manager (PM)
All communication with CINEA, and in particular with the Project Officer (PO), will be coordinated and executed by the Project Manager. The Project Manager is the primary contact and as such the single point of contact for the PO.

Work Package Leader (WPL)
The Work Package Leader shall have the following functions:

- Coordinating the progress of the technical work under the Work Package (WP)
- Defining and updating the detailed work breakdown for the WP activities
- Communicating any plans, deliverables, documents and information connected with the WP between its members and, if relevant, to the SC
- Delivery of WP contributions to progress reports and other project documentation
- Following up decisions made by Consortium Bodies insofar as they affect the WP
- Advising the coordinator of any discrepancy with the DoA, including any delay in performance or delivery, and proposing an update of the DoA, including possible exchange of tasks and related budgets between the project partners in the WP
- Alerting the SC and the coordinator in case of breach of responsibilities of any project partner under said WP and preparing a proposal of remedies to the SC.

Project partners
The MC2.0 consortium consists of the following partners. By project partners, we refer to the beneficiaries and associated partners. More details per partner are available on our project website www.mc2dot0.eu.

Associated partners

The Associated partners take part in the efficient implementation of the project, and shall cooperate, perform and fulfil, promptly and on time, all tasks allocated to them as detailed in Annex 1 of the GA.

In addition, the Associated Partners commit especially to the following Articles of the Grant Agreement as if they were beneficiaries under the Grant Agreement and regulated regulations of Annex 5:

- Article 11 Proper implementation of the action
- Article 12 Conflict of interests
- Article 13 Confidentiality and security
- Article 14 Ethics and values
- Article 17.2 Visibility - European flag and funding statement
- Article 18 Specific rules for carrying out the action
- Article 19 General information obligations
- Article 20 Record-keeping

The Associated Partners support the other project partners regarding their dissemination and Open Science obligations and commit to contribute to the technical and continuous reporting during and after the implementation of the project.

Furthermore, the Associated Partners explicitly agree to cooperate with and grant access to bodies according to Article 25 of the Grant Agreement (the Granting Authority, the European Anti-Fraud Office (OLAF), the European Public Prosecutor's Office (EPPO), the European Court of Auditors (ECA))

Industrial Board (IB)

An Industrial Board (IB) has been appointed and is steered by the Gen.As. The role of the IB is as described in the DoA. In contrary to the DoA, the meeting frequency of the IB is higher and once per quarter. The coordinator ensures that a Non-Disclosure Agreement (NDA) is executed between all project partners and each IB member. Its terms aren't less stringent than those stipulated in the CA.
By way of exception to Section 6.4.4 of the CA, the project partners gave mandate the coordinator to execute, in their name and on their behalf, a non-disclosure agreement (NDA) with each member of the IB, in order to protect confidential information.

The list below shows the Industrial Board members at this moment:

- Christof Erban from European standard EN 50583 "photovoltaics in buildings"
- Bjoern Rau from BIPV Alliance (DE)
- Ruud Derks from BIPV-Nederland (NL)
- Simon Boddaert from CSTB (FR)
- Goele Kerckhofs from Embuild Limburg (BE)
- Bauke Geuzebroek from Knauf (DE)
- Daniel Elber from Manni Group (IT)
- Juras Ulbikas from MetSolar (LTH)
- Piero Bernabe from Progress Facades (IT)
- Steven Lannoo from Netwerk Architecten Vlaanderen (BE)
- John Relou from Rockpanel (NL)
- Frédéric Clauss from Solaxess (CH)
- Stefan Dewallef from SolTech (BE)
- Adrian Berger from Swiss Association of Architects and Engineers, SIA (CH)
- Frederik Gort from Swiss Solar Association (CH)
- Hubert Fechner from Technology Platform PV, TPPV (AT)
- Wolfgang Passlack from Unilin (NL)
- Frank Huijnen from Yparex (NL)

2.2 Risk management process

In the Grant Agreement, the DoA contains a table of Critical Risks. This table acts as a first starting point for a complete Risk management implementation. The table identifies 7 (numbered) risks with a short description and proposed mitigating measure.

Building on that table we composed a risk register with added details about:

- the category of the risk aspect, which can be:
  - Contract and Procurement
  - Customer and Stakeholders
  - Finance
  - Resources and Team
  - Schedule
  - Scope and Results
  - Safety, Health & Environment (SHE) and Compliance
  - Other Risks
- also added will be a best educated guess about the probability (from 0% to 100%) for the risk to occur.
- and the best educated guess about the impact of the risk.
- in case the impact can be expressed in Euros, than the risk score is the mathematical multiplication of probability and impact. Please note some impacts are expressed in potential delay in the project time schedule. In that case a quantitative risk score in Euros does not apply. Also for risks in which the impact cannot be expressed financially, it will not be possible to have a risk score in Euros. For those risks there will be a qualitative description of the risk score.
- Risk status:
  - Open (default at entry of the risk register)
  - In case of a closed risk there are two options:
    - The risk is no longer present due to changes in the project
    - The event described has actually become true (the risk has materialized) in which case e.g. there could be a project delay that can no longer be prevented. Or there is a financial loss (cost overrun) for a project partner; in case the amount of this loss is known, it will be added in the risk register.

This risk register is updated by WP6 at least every half a year in preparation of each Gen.As meeting. Moreover the SC can request to update the risk register in case of an urgent event in the project. The Gen.As. will be informed about the risk register. It is possible that the Gen.As would like to have a more elaborate discussion on specific risks. In that case either this discussion takes place in the Gen.As, or the PM will plan an additional meeting after the Gen.As with the involved partners allowing more time of in-depth discussions.

The risk register is stored at the project SharePoint under the folder WP6.1 Project Management, and hence visible for any project partner at any time.

2.3 Ethics

The MC2.0 Ethical Committee consists of the SC members. Ethical issues are handled by the SC and agenda points for the Ethical Committee will be put on the agenda of the regular SC-meetings.

During the project proposal phase, an ethics self-assessment was performed. The general outcome of that assessment is listed here:

- Part of the project activities will be performed in the non-EU country Switzerland. The following three associated Swiss parties are involved in the MC2.0 project: SUPSI, IWIN and Ernst Schweizer. The activities of the Swiss partners do not raise potential ethics issues.
- The project (including the activities of the Swiss partners) does not involve any resources such as animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples, etc.
- In the project (including the activities of the Swiss partners) no import from non-EU countries has been planned and no export to non-EU countries have been planned.
- In WP2, work will be done at the premises of TNO, PCCL, AMAT, Roartis, Glass-to-Power, Sunplugged, IWIN, BMI Monier and Ernst Schweizer that may involve the use of substances that require controlled disposal, and equipment that require adequate safety measurements. The partners as mentioned have the necessary safety procedures in place and a prevention officer appointed, in order to be compliant with the legal requirements on SHE.

In addition to this, the project partners will take all measures to promote equal opportunities between men and women during the project execution. They aim, to the extent possible, for a gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level.

The project partners will carry out the MC2.0 project in compliance with:

- ethical principles (including the highest standards of research integrity)
- applicable EU, international and national law, including the EU Charter of Fundamental Rights and the European Convention for the Protection of Human Rights and Fundamental Freedoms and its Supplementary Protocols.

The project partners must pay particular attention to the principle of proportionality, the right to privacy, the right to the protection of personal data, the right to the physical and mental integrity of persons, the right to non-discrimination, the need to ensure protection of the environment and high levels of human health protection.

The project partners must ensure that the project activities have an exclusive focus on civil applications.

The project partners ensure compliance with the following principles:

- reliability in ensuring the quality of research reflected in the design, the methodology, the analysis and the use of resources
- honesty in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair and unbiased way
- respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment
- accountability for the research from idea to publication, for its management and organization, for training, supervision and mentoring, and for its wider impacts and means that beneficiaries must ensure that persons carrying out research tasks follow the good research practices including

ensuring, where possible, openness, reproducibility and traceability and refrain from the research integrity violations described in the European Code of Conduct for Research Integrity.

Activities raising ethical issues must comply with the additional requirements formulated by the ethics panel (including after checks, reviews or audits; Article 25 of the GA).

Before starting an action task raising ethical issues, the project partners must have obtained all approvals or other mandatory documents needed for implementing the task, notably from any (national or local) ethics committee or other bodies such as data protection authorities.

The documents must be kept on file and be submitted upon request by the coordinator to CINEA. If they are not in English, they must be submitted together with an English summary, which shows that the documents cover the action tasks in question and includes the conclusions of the committee or authority concerned (if any).

2.4 Structure of the technical work

The project duration of the MC2.0 project is 38 months (3 years and 2 month). The project work plan is divided into 6 work packages (WP):

WP1 Design

This WP deals with the optimization of the designs of the carrier Integrated PhotoVoltaic (IPV) components in the project and the design of the semi-fabricates supporting the IPV products, in such a way that optimum alignment is achieved on cost, on design for manufacturing and on design for circularity.

WP2 Flexible automated manufacturing at pilot line level

This is the central WP of the project in which all activities on pilot production, equipment development, process development, quality control, Industry 4.0 principles and reliability of products, will be executed.

WP3 Economy and Market

This WP deals with the cost calculation model, the demonstration of the cost breakthrough for IPV products achieved by the project, the business case analysis and the market introduction strategy.

WP4 Renovation wave aspects

This WP deals with how the MC2.0 connects to the enormous challenge of renovating the building stock in Europe. It addresses the change in supply chain cooperation needed and how to deal with the challenge of certification in the mass customization era.

WP5 Sustainability

This WP deals with the aspects of sustainability: environmental impact, resource efficiency and circularity. The WP develops assessment methods for IPV products and quantifies demonstrated improvements.

WP6 Coordination, dissemination and exploitation

This WP will implement effective administrative and technical management procedures to implement the project and its successful execution. This WP will also guarantee an effective communication and dissemination of the project, as well as the proper use and exploitation of project results.

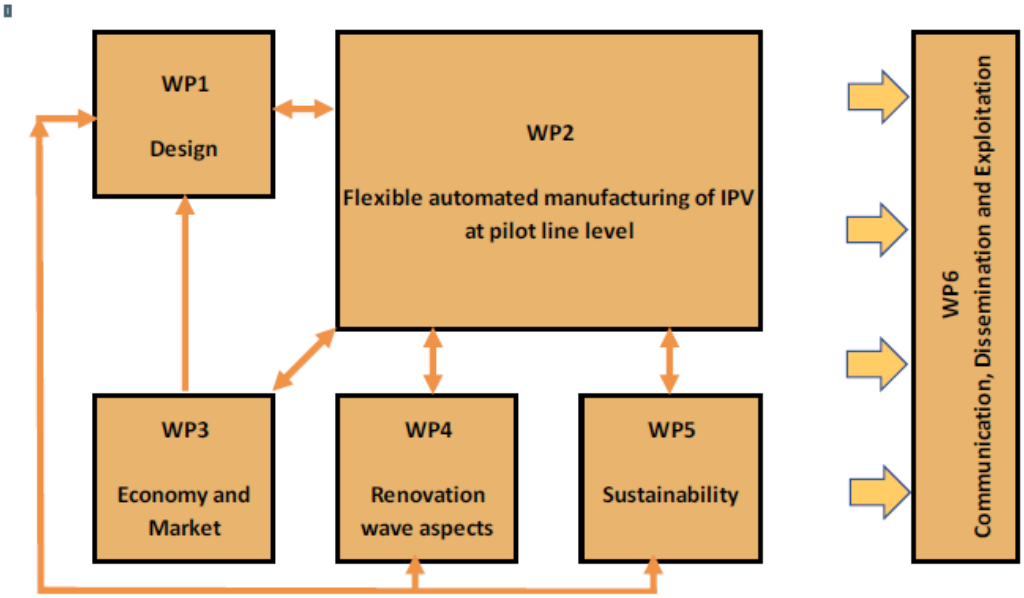

Figure 1: Schematic presentation of the main interaction between the work packages.

3 Quality procedures

3.1 Internal meeting structure

To ensure the alignment between the different WP's and to guard the quality of the project outcome, meetings at different levels have been defined. The following paragraphs show the meeting frequency and specific guidelines per meeting type.

3.1.1 General Assembly meetings

The Gen.As meets at least 6 times during the MC2.0 project. Additional Gen.As meetings, also ad-hoc for example if important decisions need to be taken at Gen.As level, may be scheduled on request.

Information about the frequency of, invitation to and agenda of Gen.As meetings are summarized in Table 1.

Minutes, including decisions and actions are shared with the Gen. As members.

Table 1: General Assembly meetings

	Ordinary	Extraordinary
Convening	CA: At least once a year -> decided during KOM: each ½ year.	At any time upon written request of the Steering Committee or 1/3 of the Members of the Gen.As
Notice of the meeting to GA members	45 calendar days	15 calendar days
Sending agenda	21 calendar days	10 calendar days
Adding agenda items	14 calendar days	7 calendar days
Minutes of Meeting (MoM)	To be prepared by the chairperson of the Gen.As. Draft MoM to be sent within 10 calendar days to all members	
Acceptance of MoM	Within 15 calendar days from sending the MoM if no Gen.As member has sent an objection to the chairperson	
Voting rules	Decisions shall be taken by a majority of 2/3 of the votes cast. Other provisions apply according to CA, paragraph 6.2.3	
Veto rights	Possible by members which can show that its own work, time for performance, costs, liabilities, IP rights or any other legitimate interests would be affected. Other provisions apply according to CA, paragraph 6.2.4	

3.1.2 SC meetings

The Steering Committee consists of the Work Package leaders (WPL's) and a representative from PCCL. The SC meets at least every quarter. As the draft agenda for the Gen.As meetings will be prepared by the SC, the SC meetings are planned at least 21 days before each Gen.As meetings.

The SC members are listed in Table 2. To ensure the alignment between the different WP's the SC members are always involved in checking the deliverable reports.

Table 2: Steering Committee members

Work Package	Partner
WP1	TNO
WP2	TNO
WP3	SUPSI
WP4	IMEC
WP5	EURAC
WP6	TNO
	PCCL

Table 3: Steering Committee meetings

	Ordinary	Extraordinary
Convening	At least quarterly	At any time upon request of any Member of the Steering Committee
Notice of the meeting to SC members	14 calendar days	7 calendar days
Sending agenda	7 calendar days	
Adding agenda items	2 calendar days	
Minutes of Meeting (MoM)	Minutes of Steering Committee meetings, once accepted, shall be sent by the Project Manager to the General Assembly Members for information.	

3.1.3 Work Package (WP) and technical meetings

For meetings within the WP, the WPL's have full responsibility and freedom to arrange a meeting when they regard it necessary. In addition technical meetings should be organized and can be initiated by every Gen.As. member.

During the kick-off meeting (KOM) parallel workshops per WP were organized with the aim to define an action plan for the first 8 months of the project. During these sessions, the partners involved also agreed on the meeting frequency and meeting series were planned soon afterwards.

Meeting starting frequency per WP:

- WP1: not applicable. WP1 has been completed.
- WP2: monthly (on top of this, within WP2, the 7 subtasks meet with varying frequency)
- WP3: bi-monthly
- WP4: monthly
- WP5: quarterly
- WP6: each three weeks

The PM is invited for all these WP meetings. All the research institutes are present in all WP's and secure in this way the interface between the WP's.

The meeting notes and supporting documents of each WP are stored on SharePoint under External Audience. The consortium members can access each WP folder in this external audience environment of the SharePoint site.

3.2 Quality and peer review of deliverables and non-deliverables

Reviews are the key elements in the quality assurance of a research project like MC2.0. For the review process there is a distinction between review of deliverables and the review of other material to be published (non-deliverables).

Note that most deliverables are labelled 'public' and will be made publicly available via the project website, the EC CORDIS website or other media. Thorough reviews therefore, are crucial to guarantee deliverables or other publications of highest possible quality.

3.2.1 Deliverables

For deliverables, a good planning is possible since a global description of the content, the submission date and the beneficiaries working on and being responsible for it are set out in the DoA. The review will be done in four stages:

- Structure review
- Content review
- GA check
- Final edit by the PM

3.2.1.1 Responsibilities

The WPL is finally responsible that all deliverables of its WP are delivered on time to CINEA i.e., uploaded to the Participants Portal. The upload will be done by the PM.

All deliverables will be checked by the SC members to ensure alignment between the WP's. In addition the WPL appoints 1 extra reviewer from an industrial partner (hence explicit not from a research institute) per deliverable. This reviewer will review the complete draft of the deliverable (Content review 3.2.1.4).

Reviewers should not be co-authors of the deliverable or have been otherwise substantially contributing to the deliverable. The WPL may also be a reviewer of a deliverable of his/her WP, if he/she was not involved in the research part or writing of the deliverable.

Each deliverable has a lead author who coordinates and is responsible for the writing process and the content. While responsible project partners for each deliverable are defined in the DoA, the lead author in person should be appointed as early as possible but no later than 8 weeks before the submission date.

The PM is doing the final edit of the deliverable before submission and is responsible that all deliverables will be submitted in the same MC2.0 format agreed to by the project partners.

Table 4: Deliverable review overview

WP	Deliverable	Lead author	Due date	Reviewing Company
1	D1.1	IMEC	30-04-2023	*Already uploaded*
1	D1.2	IMEC	30-06-2023	*Already uploaded*
1	D1.3	TNO	30-06-2023	*Already uploaded*
1	D1.4	TNO	31-08-2023	*Already uploaded*
2	D2.1	Duflex	31-12-2025	EURAC
2	D2.2	TNO	31-10-2024	ENF
2	D2.3	TNO	31-12-2025	PCCL
2	D2.4	VDL	31-12-2025	DUF
2	D2.5	IMEC	30-06-2025	TNO
2	D2.6	Vitronic	31-12-2025	MAAN
2	D2.7	TNO	30-06-2025	AMAT
2	D2.8	SUPSI	31-12-2025	IMEC
2	D2.9	TNO	31-03-2025	AMAT
3	D3.1	TNO	31-12-2023	*Already uploaded*
3	D3.2	TNO	31-06-2024	*Already uploaded*
3	D3.3	SUPSI	31-12-2023	*Already uploaded*
3	D3.4	EURAC	30-06-2025	SUPSI
3	D3.5	SUPSI	31-12-2025	G2P
4	D4.1	EURAC	30-06-2024	*Already uploaded*
4	D4.2	SUPSI	31-12-2025	I40MC
4	D4.3	IMEC	31-12-2024	IWIN
4	D4.4	EURAC	30-06-2025	ENF
4	D4.5	FOCC	31-12-2025	MAAN
5	D5.1	EURAC	31-12-2024	TNO
5	D5.2	EURAC	31-12-2025	SUPSI
5	D5.3	EURAC	31-12-2025	PCCL
5	D5.4	TNO	31-12-2025	EURAC
6	D6.1	TNO	31-01-2023	*Already uploaded*
6	D6.2 (public final report)	TNO	28-02-2026	IMEC

6	D6.3 (conf. annex final report)	TNO	28-02-2026	PCCL
6	D6.4	TNO	31-03-2023	*Already uploaded*
6	D6.5	TNO	31-03-2024	G2P
6	D6.6	TNO	31-03-2025	SUNP
6	D6.7	TNO	30-06-2023	*Already uploaded*
6	D6.8	TNO	30-06-2023	*Already uploaded*
6	D6.9	TNO	30-06-2024	*Already uploaded*
6	D6.10	TNO	30-06-2025	IWIN
6	D6.11	TNO	31-12-2023	*Already uploaded*
6	D6.12	TNO	31-12-2024	*Already uploaded*
6	D6.13	TNO	31-12-2025	ROA
6	D6.14	TNO	31-03-2023	*Already uploaded*
6	D6.15	TNO	31-03-2024	*Already uploaded*
6	D6.16	TNO	31-03-2025	LEV
6	D6.17	TNO	31-12-2025	BHG
6	D6.18	SUPSI	28-02-2025	SUNP

3.2.1.2 Timeline

Deliverable preparation should start at least 8 weeks before the submission date. This allows for sufficient time to prepare, write, review and finalize the deliverable.

Note: Delivery dates are mentioned in the GA and indicated as months after the start date. Delivery dates indicate the submission dates to the Participants Portal and not the submission of a draft version to the WPL or PM. As an example: with a starting date of MC2.0 on 1 Jan. 2023, a delivery date M3 means that the deliverable must be uploaded to the Participants Portal no later than 31 March 2023.

The timeline for deliverables is schematically shown in Figure 2.

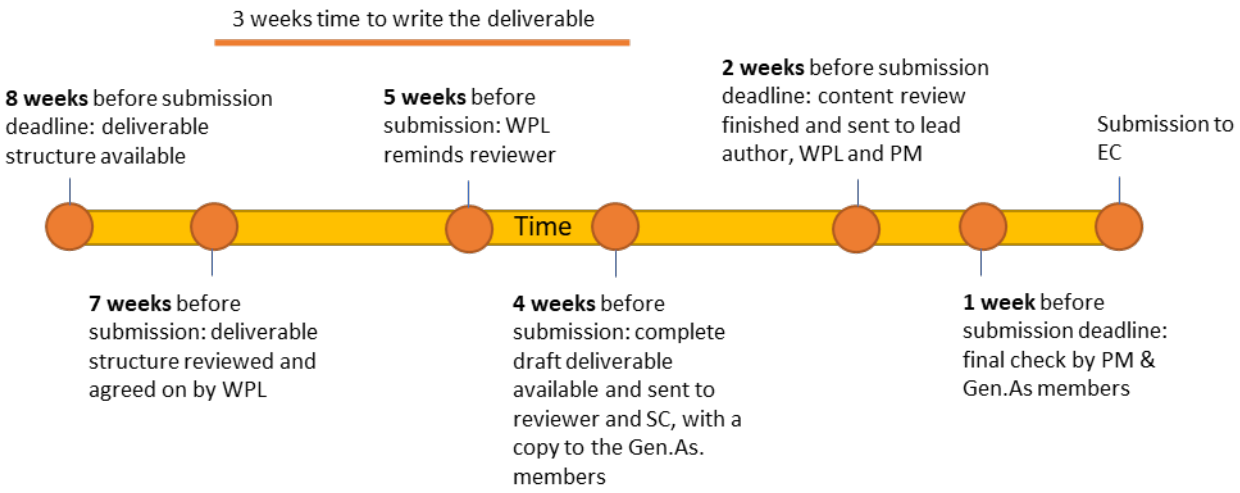

Figure 2: Timeline for the deliverable review process. SC: Steering Committee, PM: Project Manager

3.2.1.3 Structure description and review

The structure description of the deliverable is provided by the lead author and should be available at least 8 weeks before the submission date given in the GA. The structure description is a short, bullet-wise description of the structure and content of the deliverable to be written. It consists of at least two levels in the table of contents: chapters and sections.

The section description should contain:

- a bullet-wise description of the content (a couple of lines at maximum)
- the responsible partner/person for generating the content/section,
- and the expected number of pages as an indicator for the level of detail.

The structure description is checked (reviewed) by the WPL and starts as soon as the structure description has been prepared by the lead author, but not later than 8 weeks before the submission date of the deliverable. Comments by the WP leader on the structure description are to be submitted to the lead author no later than 7 weeks before the submission date.

3.2.1.4 Content review

The input to the content review is the full deliverable text including all supporting sections like references, list of abbreviations and annexes.

The WPL sends the deliverable draft to the already appointed reviewers, which are the SC-members and the extra industry reviewer as defined in Table 4. All communication should also be sent in copy to the PM.

The content review starts at the latest 4 weeks before the submission date. Review comments are submitted to the lead author at least 2 weeks before the submission date. The lead author should consider review contents and modify the manuscript accordingly. The final draft should be ready and send to the PM at the latest 1 week before submission to the EC.

In general, the content review should address the following four main attention areas. The bullet points per attention area serve as examples to support the reviewer. The lead author, WP lead or reviewer may modify or add more relevant points to the lists. The reviewing comments shall be sent by e-mail to the lead author, WPL and PM, and will be saved on the internal project SharePoint

DoA coverage

- Is the scope and the content of the deliverable consistent with the intention of the deliverable as stated in the DoA?
- In case of deviations, are they fully and plausibly motivated?
- Is the relation to other MC2.0 work/deliverables clear? Deliverables are rarely produced in isolation. A deliverable provides input to other work, or builds on earlier work and deliverables or will be input for following work.

Target audience

- Is the target audience clear?
- In case of multiple target groups, is it clear what parts of the deliverable are intended for which audience?
- Do the management summary, introduction and conclusions/recommendations match the level and language of the target audience? The detailed content might be too detailed for all target groups, but not the sections mentioned above.

Language and structure

- Is the language used proper international English? In case of doubt, consult a native English speaker.
- Is the text well-structured, e.g. using lists and tables where appropriate?
- Do chapters have a short introduction or purpose and short conclusions or recommendations at the end?
- Are illustrations and diagrams used to support the text where appropriate? Are illustrations in sufficient quality?
- If illustrations are taken from external sources, is the attribution correct/complete? Is material from external sources permitted to use free or is permission for re-use necessary. To be checked for each illustration separately in the copyright rules of the source.
- Are references to literature included, completely cited and appropriate for the topic and length of the deliverable?

Technical content

- Is the introduction clearly describing the topic? Are research questions and hypotheses clearly formulated?
- Are used methods and background well described? Would third parties be able to repeat the study?
- Are study results clearly described and well supported by illustrations?
- Are the conclusions fully supported by the preceding chapters?
- Is the deliverable title appropriate?

3.2.1.5 Gen.As check

The Gen.As members receive the deliverable at least 4 weeks before the submission date. They check if the deliverable does not disclose commercially sensitive information of their organization. If the deliverable contains material from non-project partners / third parties / affiliates that is made available via their organization, the Gen.As member checks that the deliverable respects the confidentiality agreements made by their organization with the non-project partners / third parties / affiliates.

Note: the Gen.As check is not a classical review. It is an 'additional check' if confidential material is about to be disclosed and this was not noted by authors and reviewers.

The submission to the Gen.As members for the Gen.As check is done by the PM. Gen.As members are requested to do the 'Gen.As check' within a week before the deadline of submission.

3.2.1.6 Final edit by Project Manager

Before submission to the Participants Portal, the PM does a final check on layout and formatting which should be in consistence with the agreed MC2.0 visual identity.

Deliverables are uploaded to the Participant Portal and submitted by the Project Manager.

3.2.2 Non-deliverables

A detailed communication plan as described in D6.15 has been published in M15.

A detailed dissemination plan as described in D6.12 has been published in M24.

The most important principles regarding communication and dissemination are described in this paragraph.

For non-deliverables, such as publications, conference contributions and other dissemination material, a prior notification should be sent to the PM and other partners involved at least 45 calendar days before the dissemination, as mentioned in paragraph 8.4.2.1 of the CA. However, as decided during the Gen.As. of 24-25 January 2024, this timeline doesn't count for submission of abstracts for which no new results will be published.

In those cases, the author adds the planned publication to the dissemination action plan on SharePoint and also notifies the PM by e-mail. The dissemination action plan is available to all consortium members. After acceptance of the abstract the author notifies the Gen.As. 45 days before the submission date.

Thereafter, any objection to this planned dissemination activity should be notified in writing at least 30 calendar days after the prior notification. This should include sufficient information on the reasons why the dissemination could be harmful to the other partner(s). This period of 45 days might sound like a rather long period, however it allows for a well-planned discussion between the partner(s) proposing a dissemination and the partner(s) that are objecting (if needed together with the PM). The preferred outcome of that discussion would be a publication that is adjusted in such a way that all partners can agree with it.

In general, all MC2.0 related material that will be published should be reviewed beforehand and should comply with Article 17 'Communication, Dissemination and Visibility' and Annex 5 of the GA. All publications should:

- display of the European flag (emblem)
- be accompanied by the funding statement:

  "Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them."
- In addition to this, all MC2.0 communication and dissemination material should contain the logo of the Swiss funding agency

3.3 Progress report procedures

3.3.1 Deliverables

Deliverables are introduced already with respect to the review process in 3.2.1. A complete overview of these is given in the same paragraph.

3.3.2 Periodic report (M18)

This is the first formal reporting moment. A progress report of the first half of the project has been submitted in the Participants Portal of Horizon Europe. Each partner delivered its update (technical and financial) themselves in this portal. The PM gives support where needed, and oversees a smooth procedure.

Following the submission of the periodic report, a project review meeting with CINEA was scheduled for month 21.

3.3.3 Final report (M36)

At the end of the project a formal Project Final Report (D6.2) is produced. The PM will be responsible and main author. However extensive input from all project partners is needed to compose a high quality final report. This final report will be public available. Sensitive information will be written down in the Appendix to the Final Report (D6.3) which will be shared only between the project partners.

A final project review meeting with CINEA will be planned for M38.

3.3.4 Internal progress reports

Given the complexity of the project and the rather large number of project partners, it has been decided to add internal progress reports on top of the two formal reporting moments (M18 and M36). The heartbeat of this project internal reporting will be each half year:

- Technical progress:
  - Each half year: project internal, PM provided a template
- Financial progress (regular):
  - Each half year: project internal, PM provided a template
  - M18 and M36: submitting in the Participants Portal

3.4 Internal Information sharing

3.4.1 SharePoint

The MS SharePoint software is available for all MC2.0 project partners. Please note for all project partners:

- Each project partner has reading and writing rights on all files
- Please watch out to not delete work of others
- Autosave is default ON for PowerPoints, Excel, and Word files. So, in case you accidently press button during viewing, these will be auto updated in the document!
- For each document on the SharePoint a version history is stored with a rather good retention scheme. This means that if you detect problems with the current version, it is advisable to take action between a couple of days, and consider reverting back to an earlier version.
- All deleted items (also in case by accident) are stored in a ‘Recycle Bin’ for 90 days.

Structure / Subfolders

- Deliverables:
  - Deliverables_drafts: in this folder all versions during the review process are stored. The PM will contact the first author or WPL when in doubt which version is finally the version that needs to be check by the Gen.As.
  - Deliverables_submitted: in this folder the exact final version of the deliverable (.pdf) that has been submitted in het Participants portal will be stored for further reference and usage among project partners.
- General_Assemblies:
  - 2023_01_15_KickOff_Eindhoven: all documents regarding the KoM are stored here.
  - 2023_06_05_GenAs_M6_Teams: all documents regarding the M6 Gen.As will be stored here.
- Date_GenAs_Mx_locations: etc…
- …
- Grant_Agreement_and_Consortium_Agreement: like the name suggests, the GA and CA are stored here.
- WPx_Name_of_Workpackage_Leader: use this folder to work together within your WP. The WPL is advised to build a logical folder structure within this folder for his/her WP. That can be e.g. a structure based on Tasks x.y or Objectives x.y. Final versions of deliverables for sharing with reviewers should be transferred to the folder Deliverables_drafts.

3.4.2 Reference documents, templates and guides

The following documents are available for project partners:

- Deliverable reporting template (in Word); see SharePoint (and layout of this PQP) under folder WP6_Coordination_TNO
- Technical reporting template (in Word); see SharePoint under folder WP6_Coordination_TNO
- Financial reporting template (in Excel); see SharePoint under folder Financial reporting
- Presentation template (in PowerPoint); see SharePoint under folder WP6_Coordination_TNO
- Poster template; see SharePoint under folder WP6_Coordination_TNO
- Risk register (Excel workbook); see SharePoint under folder WP6_Coordination_TNO\WP6_1_ProjectManagement
- Deliverable review checklist; see 3.2.1.4 of this PQP
- Deliverable reviewers overview; Table 4 in this PQP
- List of General Assembly members; see SharePoint under folder General Assemblies

Regarding communication and dissemination, more reference documents are available, and referred to from the Communication Plan and the Dissemination Plan. See SharePoint under folder Dissemination_Publication.

Regarding data and sample management, more reference documents are available, and referred to from the Data Management Plan. See SharePoint under folder DataManagementPlan.

4 Data (and samples) Management

A detailed Data Management Plan (DMP) was composed (D6.7) at M6 and became available for all MC2.0-project partners. It deals with both data and sample sharing amongst the beneficiaries.

4.1 General note for dealing with samples and data

In general the DMP lists all existing data that will be used by project, and the reason for doing so. It mentions these aspects of the data:

- the type and format
- relation to the objectives of the project
- expected size
- origin of the data
- to whom this data might be useful, outside the project

4.2 FAIR-principle

More in detail the so-called FAIR-principle will be used, which is an acronym for the following four principles Findable, Accessible, Interoperable and Reusable. For FAIR-data the following will be taken into consideration:

- F: Data should have an identifier (some kind of unique code)
- F: Rich metadata makes it easier to understand e.g. (i) where the data was created (ii) by who/which partner (iii) clear keywords included
- A: A good (trustworthy) place to store the data will be searched, this is the repository
- A: The repository-service should guarantee in some way that our data can be found easily based on the metadata (and identifier)
- A: Data will be shared as much as possible openly. However, it is almost certain that some data will be too sensitive to put public available. In that case a motivation is provided under which restrictions the data could be provided, or why the specific data cannot be shared at all outside the project consortium.
- A: A clarification is given how data is available after the project duration; and for how many years after project closure.
- I: An explanation will be provided in case very specific standards, formats, methodologies (or even vocabulary) is used in the data or metadata. For a quite high-tech project like MC2.0 the usage of these is very probable. Therefore we will do our best to give additional explanatory texts in such situations.
- I: In case data is referring to data used from previous research or other sources outside the project, it should also be clear that this data actually can be found. We will double-check on potential

'broken links' to website (or other repositories) that might have changed their name or login procedures during the project duration.

- R: Re-using data meaningful means that documentation will be provided about e.g. standards of measurement, data filtering, definition of variables and units used. Some of this should already be clear from the meta-data.
- R: In which way could our data be re-used in the most optimal way? This deals with communicating (advertising) the availability of not only knowledge from the project but also the data and metadata.

4.3 Data and Sample sharing between partners

On top of the data and metadata for sharing outside the project, there is also data and samples that will be shared between the MC2.0 project partners. A template for this so-called Data and Sample Sharing Agreement (DSSA) is available at the project SharePoint.

The DSSA contains at first the names of the partners involved in the sharing, and the date on which the agreement will be signed. Contact details of the Data (or Sample) provider are given in the next section. Also the contact details of the Data (or Sample) receiver are specified; this can be more persons from multiple project partners. Thereafter, the WPx (or specific Task x.y) is ticked, multiple ticks are possible.

Thereafter, in case of data, the type of this data is specified. It contains metadata and more elaborate descriptive texts if necessary to understand the data. Moreover, the confidentiality level of the data is provided. Data format and location of the data (URL or server name) is specified.

In case of samples, the sample is described. The metadata and more elaborate descriptive text about the sample is provided.

Regardless whether data or samples are shared, the final chapter of the template specifies the objective of the sharing from both the view point of the receiver(s) and the provided. The receiver writes down what he/she likes to achieve with the data or sample(s). The provider writes down what he/she like to achieve in line to which objective of the DoA (e.g. mentioning/referring once more to specific WPx and/or Tx.y). In case the data or sample(s) needs to be disseminated outside the project by the receiver, this has to be mentioned by the provider.

The Data and Sample Sharing Agreement (DSSA) is finally signed by provider and receiver(s).

5 Key Performance Indicators (KPIs)

The goal of the Key Performance Indicators (KPIs) is described clearly by the GA: KPIs should be the basis for the Gen.As to oversee project developments and provide directions for the project.

Given this goal the following KPI's are defined:

- Number of Deliverables Achieved (%): The ratio between delayed deliverables and total deliverables uploaded so far. The objective of this KPI is quite clear: this ratio should be as low as possible. On the one side a 0% will be hard to achieve, a 30% becomes an issue for the project to be professional.
- Quality of Deliverables ():It has been decided by the Gen.As. not to use a number or percentage to quantify the quality of the deliverables, as in practice this approach didn't work. To guarantee the best possible quality, we actively follow the steps in the reviewing scheme in Chapter 3 of this PQP. In addition to this, the reviewing comments are stored on the project SharePoint. Next to an appointed reviewer, all deliverables are also shared with the consortium members for review.
- Number of Dissemination Activities (%): The ratio between realized dissemination activities (like publication) and planned dissemination activities according to the GA. We strive for 100%. In case the number falls down to less than 50%, the SC should warn the Gen.As that more attention must be given to dissemination activities.
- Number of Communication Activities (%): The ratio between realized communication activities (e.g. news items from project partners) and planned communication activities according to the GA. We strive for 100%. In case the number falls down to less than 50%, the SC should warn the Gen.As that more attention must be given to communication activities.
- Number of website visits (%): The ratio between actual and planned website views. We strive for 100%. In case this KPI falls down to less than 30%, priority should be given to a better exposure of the website. At this moment the number of website visits improved, but are still lacking behind. To improve the number of visits, we added video's on the MC pilot line and try to actively link news items on LinkedIn with our website. Next to that, we publish public deliverables on the website, keep the content up-to-date and add links to our website on other project communication items (e.g. leaflets, banners, booth at BAU).