



Partitioning And Transmuter Research Initiative in a Collaborative Innovation Action

PATRICIA

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Research and Innovation Action

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D13.1 Project quality plan including measures of success

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DOCUMENT SUMMARY

This deliverable addresses the quality aspects in various processes and activities within the PATRICIA Project. The document also lays down the measures put in place for a successful completion of the project goals and objectives.

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DOCUMENT APPROVAL

The author, WP Leader and Coordinator acknowledge and accept delivery of the work completed for this deliverable.

Date	Author, WP Leader, Coordinator	Organisation
02/09/2022	Paul Schuurmans 	SCK CEN

DISTRIBUTION LIST

Project Officer Renata Bachorczyk-Nagy	EC	Copy on PATRICIA SharePoint
PATRICIA Beneficiaries	PATRICIA Consortium	

Contents

1. Introduction	4
1.1. Scope	4
1.2. Measures of success	4
1.3. Application	4
1.4. Revisions	4
2. Project organisation	4
2.1. Project structure	4
2.2. External interactions	6
2.3. Contact information	7
2.3.1. Mailing lists	7
2.3.2. Project Office mailbox	7
2.3.3. Participation	7
2.3.4. Member contact information	8
2.3.5. Project website	8
3. Project documentation	8
3.1. Contractual reports process: deliverables, milestones, technical reports	8
3.2. Non-contractual reports: supporting documents	10
3.3. Project Meetings	10
3.4. Progress Activity Reports and Financial Reports	10
4. Identification of documents	11
4.1. Deliverables	11
4.2. Milestones	11
4.3. Technical Reports	11
4.4. Other	11
4.5. Meeting minutes	11
5. Dissemination: rules for publications	12
6. Quality Management Strategy	13
7. Conclusion	13

1. Introduction

1.1. Scope

This Project Quality Plan sets out the relevant quality standards and procedures that will be implemented and maintained throughout the entire project lifecycle. They are to be used as a 'modus-operandi' by all partners, herewith ensuring a uniform approach in project organization, document publication, contact information and quality management strategy.

1.2. Measures of success

The overall Project Quality Plan focuses on procedures and processes and defines who is responsible for what. To guarantee an efficient communication, various tools are set up. Also, clearly defined policies with regard to meetings, deliverable naming, scientific publications and deliverable work/review flow has been established.

1.3. Application

The requirements set out in this Project Quality Plan apply to all beneficiaries in PATRICIA.

1.4. Revisions

This PQP is drawn up at the start of the project, however it is open to revision. Requests for revisions or additions must be sent to the Coordinator and the Project Office, who is responsible for updating the PQP and distribution to the consortium members. Revisions of the Project Quality Plan become valid from the date of issue.

2. Project organisation

This chapter addresses the PATRICIA project in terms of project bodies, its responsibilities and an access plan towards participation.

2.1. Project structure

PATRICIA is a research project in which 15 Work Packages are involved; 12 technical Work Packages, 1 WP dealing with knowledge management, education and training, 1 WP taking up the project management and 1 WP addressing the ethics requirements.

The Consortium counts 25 partners and 1 International partner and is coordinated by SCK CEN.

The management structure consists of the following components:

- a Governing Board (GOV), which is the ultimate decision making body;
- a Technical Coordination Board (TCB), which is responsible for the technical part of the project;
- an International Advisory Group (IAG), set up for consultation on scientific and technical matters;
- finally, a project coordinator (PCO), acting as single point of contact with the Commission.

The decision-making power is split between the project bodies (shown in Figure 1). These are elaborately described in the Consortium Agreement and in the Grant Agreement.

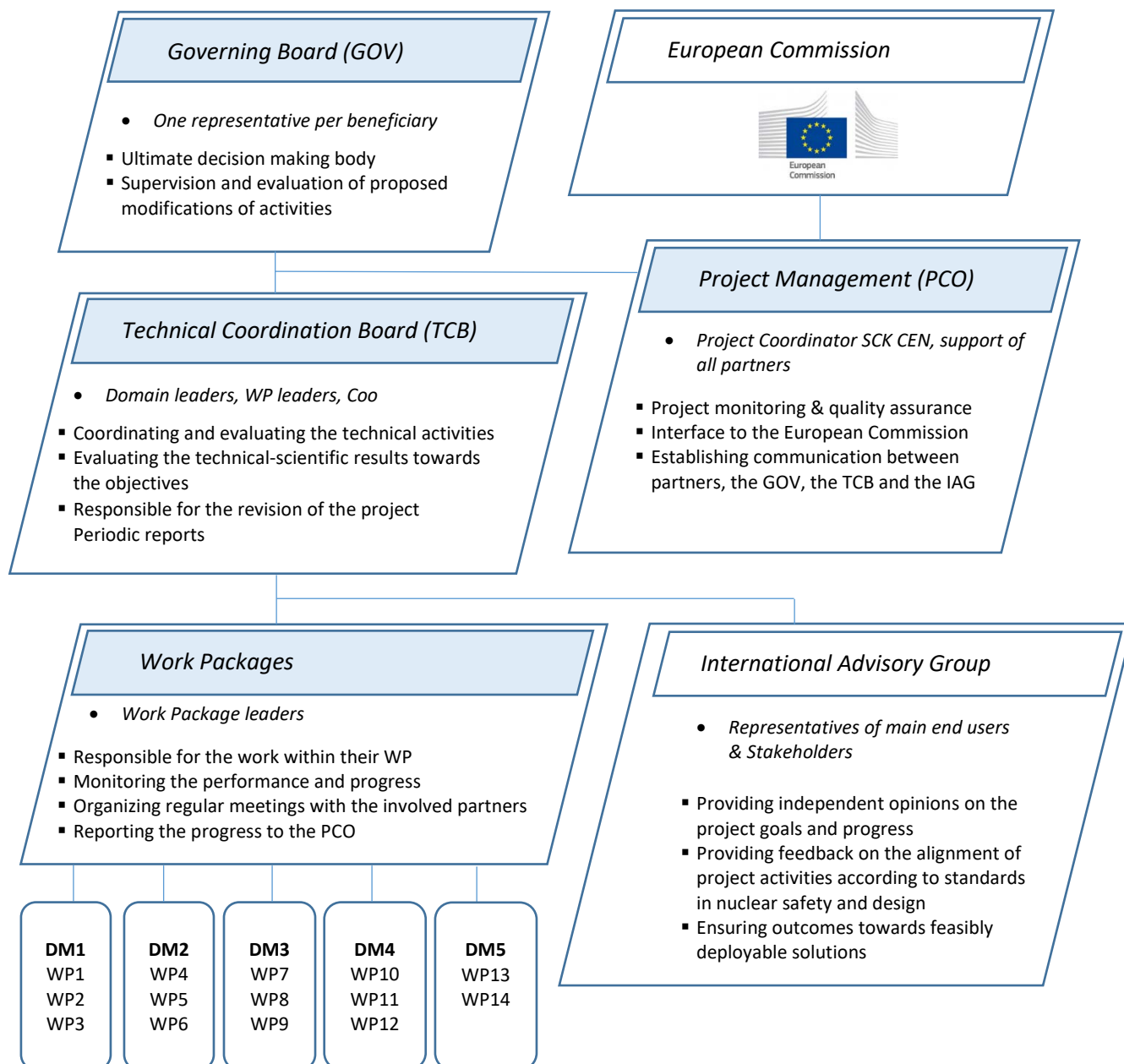


Figure 1: **PATRICIA Description of project bodies**

The **Governing Board (GOV)** is the **assembly of all participating partners** and is the **ultimate decision-making body of the project**. It is composed of a representative of each involved institution and serves as the supervising body for the project execution. The chair-person will be elected by the GOV by a simple majority from the partners represented by the consortium at the kick-off meeting. The Governing Board will meet at every general meeting or more often if needed.

The Governing Board is responsible for the supervision and evaluation of any proposed indispensable modification of the activities in progress, the approval of budget related issues, the approval of the periodic reporting to the EC and the resolution of any other issue that may arise during the course of the project.

On the 1st Governing Board meeting on October 27, 2020, Dr Walter Tromm (KIT) is appointed as Governing Board chairman.

A list of the Governing Board members (Annex to Deliverable 13.1) is available - for the PATRICIA team members - on the PATRICIA's SharePoint.

The **Technical Coordination Board** (TCB) is responsible for the [coordination of the technical activities and their integration](#). The TCB is also responsible for [reporting technical problems](#) and for [indicating adequate strategies for solution](#). Its task is to submit the proposed solution to the GOV for approval. In particular, the TCB is responsible for:

- the evaluation of the progress of the technical activities;
- the evaluation of the technical-scientific results achieved in relation to the objectives of the program;
- the revision of the project periodic reports.

The TCB is assembled of the Work Package leaders, the Domain leaders and the Coordinator who chairs the TCB.

Every single Work Package is led by a **Work Package Leader** (WPL) who monitors the performance and progress of the WP with regard to the overall work plan, organizes regular feedback with the involved partners, reports the progress to the PCO and contributes to the technical periodic reports as requested by the PCO.

The **Project Coordinator** (PCO) is responsible for the overall management of the project, pursuant to the terms of the grant agreement. The PCO will act as single point of contact between the European Commission and the consortium.

The PCO is supported by the **Project Office** who coordinates administrative operations of the project.

The **IAG** (International Advisory Group) is a consulting body that involves representatives of the main end users and stakeholders of the project.

The group gathers experts from:

- the design teams proposed host sites of the two reactor developments in the heavy liquid metal track of the SET plan (MYRRHA and ALFRED);
- international fora and projects involving Partitioning and Transmutation (SNETP, ESNII, GIF, TEF-T (Japan), IPPE (Russia));
- representatives of Test reactors as users of the outcomes of the project.

The objectives of the Advisory Group are to:

- provide independent opinions on the project goals objectives and progress;
- provide a feedback on the alignment of the project activities with the international best practices and standards in nuclear safety and design;
- improve the tight interaction of the project with the end users to ensure outcomes towards feasibly deployable solutions.

The members of the Advisory Group will be involved in exchanges of information with the representatives of the Technical Coordination Board (needs-based) and will be invited to attend the General Meetings (held every 18 months). Moreover, they will be invited to yield support for the effort to propose safety standards and approaches for HLM cooled reactors in accordance with the EU safety directive. Each member of the Advisory Group may be asked to enter into a Non-Disclosure Agreement, prior to the active involvement in the activities related to the project.

2.2. External interactions

The PATRICIA project will maintain close interactions on several levels. The most important of these are the connections to related EU projects and relevant international organisations such as IAEA, OECD, GIF and SNETP.

There is a synergy between H2020 PASCAL (GA 945341) and the PATRICIA project. The PASCAL project contributes significantly to the advancement of the safety research on innovative heavy liquid metal cooled reactors, with the ambition to generate evidence that is ready-for-use in the discussions between the ALFRED and MYRRHA designers and the respective safety authorities in the pre-licensing phase. Since both projects have started almost simultaneously, it facilitates to hold joint technical meetings. In a similar way, the work on portioning in WP1-3 is closely related to the activities of the ongoing GENIORS (GEN IV Integrated Oxide fuels recycling strategies) project (GA 755171). Relationships with projects are maintained by direct networking since many partners of PATRICIA are also involved in PASCAL, GENIORS or both.

The same strategy is used for other international organisations. The Euratom representatives of LFR systems in GIV are part of PATRICIA and a direct connection with the IAEA fast reactor community is made via various representations in working groups and the presence of IAEA in the IAG. Similarly, various researchers from the PATRICIA project are active contributors to, or are chairing different expert groups that operate within the “WPFC” (working party on the fuel cycle) that is embedded in OECD’s Nuclear Energy Agency.

2.3. Contact information

2.3.1. Mailing lists

The Project Office has drawn up PATRICIA contact lists, serving as tools for efficient project communication.

All mailing lists are available on the SharePoint: *Documents* → *Contact information*

PATRICIA GOVERNING BOARD	Governing Board members mailing list
PATRICIA TCB	Technical Coordination Board members mailing list (WP and Domain leaders)
PATRICIA admin contacts	Administrative persons contacts (administrative and/or financial) mailing list
PATRICIA ALL	Gov. Board, TCB, EC Project Officer, Domain Leaders, Work Package leaders and Participants mailing list
PATRICIA Participants	Participants mailing list (GOV and EC project officer excluded)

2.3.2. Project Office mailbox

A project mailbox is created in order to keep the PATRICIA related emails organized but foremost to facilitate the communication between the Project Office and the consortium partners. Once emails reside in the patricia.project@SCKCEN.BE mailbox, they will be dealt with by the project office.

2.3.3. Participation

New participants involved in the PATRICIA project are requested to contact the Project Office, patricia.project@SCKCEN.BE, that will grant them access to the PATRICIA SharePoint and include them in mailing lists.

2.3.4. Member contact information

The “Annex to D13.1 PQP_Contact information” is available on the PATRICIA’s SharePoint. This document contains the email addresses of the PCO, Governing Board members, Domain leaders, WP Leaders and Task Leaders.

2.3.5. Project website

The PATRICIA website is developed by SCK CEN. The website consists of a public area and a secured web platform or ‘SharePoint’ which is a restricted area, only accessible to members of the Consortium and password protected.

<https://patricia-h2020.eu>

<https://extranet.sckcen.be/sites/patriciapartnerarea>

The website will be used as a communication platform to help the Consortium manage and share documents, inform the members of upcoming events, access to public and/or restricted deliverables.

The web platform is maintained by SCK CEN. They are in charge of account creation and access configuration. Requests for new accounts or read/write access rights must be addressed to patricia.project@SCKCEN.BE

3. Project documentation

The PATRICIA project will deliver a number of project documents such as deliverables, milestones, technical reports, non-technical reports, supporting documents, presentations, minutes of meetings and publications.

To guarantee a uniform approach in the documentation, a number of project templates are available in the SharePoint of the PATRICIA project website:

- Deliverables
- Meeting Minutes (Work Package, Tasks)
- Milestones
- Notice of planned dissemination results
- Technical reports
- Presentations
- Non-contractual reports/supporting documents

3.1. Contractual reports process: deliverables, milestones, technical reports

Deliverables and Milestones follow the numbering of the Grant Agreement. They measure performance against expectations and, for the EC, serves to evaluate the progress or completion of the project.

The GA lists the project deliverables and milestones issue dates.

To achieve a conformity in the lay-out of reports, project templates are available in the SharePoint. All documents shall include the Document Control sheet that includes a number of data, such as the name of the author(s), dissemination level and issue date.

Milestones mark key decision points, allowing to assess the progress and tackle possible problems. It can be a deliverable, but also a delivery or a product or service. The ‘milestone template’ therefore is – if not a report – a concise note and delivery date.

All partners shall ensure that complete and correct issues of project documents are made available to the Coordinator. Changes to any issue of documentation will be communicated to the responsible Work Package leader who ensures that the most recent documentation is supplied to the Coordinator who will make the documentation available to all partners through the project website.

Contractual reports, mainly Deliverables and Milestones shall be internally managed as follows:

Step 1: document preparation

This step abides by the principle of subsidiarity described above: each Partner uses its own QA procedure for the elaboration of the document. If more than one organisation contributes to the work leading to the report, all contributors shall be identified and each contribution is issued with its own procedures. The partner responsible for the deliverable is in charge of assembling the different contributions and issuing synthesis.

The author(s) sends an email to the reviewer of the next level that the deliverable is ready for review.

Step 2: review Task Leader

Level of consistency control by the Task Leader: the first review is done by the Task Leader who checks the consistency of the report against the expected outcome and quality.

Step 3: review Work Package Leader

Level of consistency control by the Work Package Leader: the WPL checks the consistency against the expected outcome and the quality of the document.

Step 4: verification and approval Coordinator

Only the coordinator will add his signature to the deliverable. We added the line “*The author(s), WP Leader and Coordinator acknowledge and accept delivery of the work completed for this deliverable*”. For the author(s), it is presumed that the acknowledgement is given by the fact that the deliverable is submitted. The WP Leader gives his approval by sending an email to the Coordinator.

The PCO controls the consistency of the deliverable with the work programme and the formal quality of the report.

If, in any of these steps of the workflow, comments or remarks are done to the report (in track changes), the author reviewer sends a notification of rejection or a notification of approval to the author.

The coordinator must submit the deliverables identified in Annex 1 of the grant agreement, in accordance with the timing and conditions that are set out in it. The PCO needs to be notified of delays.

After final approval, the PCO is responsible for submission of the contractual reports to the EC. The PCO will keep a register of all deliverables.

Further dissemination is ruled by the confidentiality level that is defined for each report.

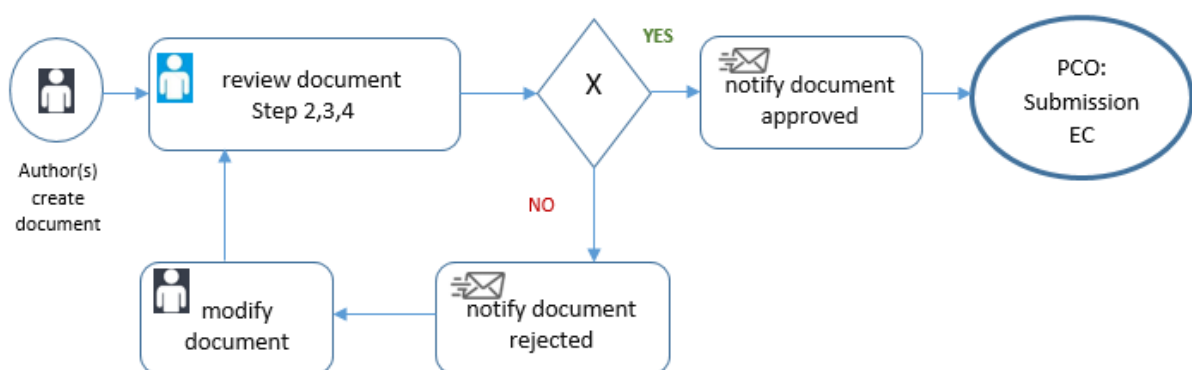


Figure 2: **Review process**

The size of the PDF document is limited to 15 MB.

Draft deliverables can be stored in the appropriate Work Package. Once the final deliverable is ready, it can be stored in the folder: *Documents* → *Deliverables (final)*, *Milestones (final)*. The approver needs to notify the PCO by email that the final deliverable is ready, and if approved by the PCO, ready for submission. The approval is done by means of the 'document approval' on the Document Control Sheet that is included in each Deliverable. The document approval item represents the acknowledgement and acceptance of the deliverable by the author(s), the Work Package Leader and finally, the Coordinator.

Deliverable and milestone templates are available in the SharePoint's specific Work Packages 1 to WP14 and in the folder *Documents* → *Project templates*.

3.2. Non-contractual reports: supporting documents

A non-contractual report template is available on the SharePoint *Documents* → *Project templates*

3.3. Project Meetings

[Governing Board meetings](#) and [Technical Coordination Board meetings](#) will be announced to each member of that consortium body following the rules of the provisions in the Consortium Agreement. For the GOV meeting, the notice should be done 45 calendar days for an ordinary meeting and 15 calendar days for an extraordinary meeting, whereas for the TCB, 15 calendar days for an ordinary meeting and 7 calendar days for an extraordinary meeting apply.

For each meeting, all related documents such as agenda, presentations and meeting minutes will be stored on the SharePoint: *Documents* → *Meetings*

[General Project Review](#), [Periodic meetings](#) and [ad hoc meetings](#) organised by the coordinator, Domain and WP Leaders will also be announced to the involved partners by written notice and announced on the website with detailed information such as agenda, registration details etc.

For each meeting, all related documents such as agenda, presentations and meeting minutes will be stored on the SharePoint: *Documents* → *Meetings*

[Domain, Work Package and Task meetings](#) are to be organized by the Domain Leaders, Work Package Leaders and Task Leaders.

For each meeting, all related documents can be stored on the SharePoint area, all in the appropriate Work Package. *Patricia partner area* → *WP1...WP14*.

Project PowerPoint presentation template and Meeting minutes template are available in the SharePoint folder *Documents* → *Project templates*

3.4. Progress Activity Reports and Financial Reports

Article 20 of the Grant Agreement specifies that the PATRICIA project is broken down in three reporting periods:

RP1: month 1 to month 18	→	01/09/2020 - 28/02/2022
RP2: month 19 to month 36	→	01/03/2022 - 31/08/2023
RP3: month 37 to month 48	→	01/09/2023 - 31/08/2024

At the end of each reporting period, the consortium must report on progress made towards the project objectives and deliverables (technical part) and resources spent (financial part) to the EC.

The PCO will ask the Domain and Work Package leaders for input to the reports. They'll contact the Task leaders for detailed input.

The PCO will check and assemble the contributions into a consolidated report.

Finally, the PCO submits the reports to the EC.

The coordinator submits the technical and financial reports within 60 days after the end of a Reporting Period.

4. Identification of documents

The document types are as follows:

D	Deliverable
MS	Milestone
TR	Technical Report
O	Other
MoM	Minutes of Meeting
PR	Periodic or activity reports

4.1. Deliverables

The identification of deliverables must be consistent with the grant agreement numbering.

They should be named as follows: PATRICIA_945077_Dx.x_concise title

e.g. PATRICIA_945077_D13.1_Project Quality Plan

PATRICIA_945077_D8.1_Report on PIE results

4.2. Milestones

Milestones should include the Milestone numbering corresponding the grant agreement numbering, followed by the Work Package to which the Milestone belongs.

PATRICIA_945077_MSx_WPx_organisation

e.g. PATRICIA_945077_MS15_WP8_RATEN

4.3. Technical Reports

Reports should be named as follows: PATRICIA_945077_TR_WPx_concise title

4.4. Other

Other documents are named as follows: PATRICIA_945077_O_WPx_concise title

4.5. Meeting minutes

Meeting minutes

PATRICIA_MoM_WPx_title_mmmmyyyy

e.g. PATRICIA_MoM_WP13_KoM_Oct2020

PATRICIA_MoM_WP13_TCB-1_Oct2020

5. Dissemination: rules for publications

Some of the classic forms of dissemination are peer reviewed publications and presentations at scientific conferences. The coordinator encourages and endorses the beneficiaries to submit articles to peer-reviewed journals and/or project presentations at conferences. The following procedure applies:

First step: the main author of the publication or communication sends an email to the coordinator and the Project Office and includes the form '**Notice of planned dissemination results**' (Template available on the SharePoint), this form should be sent to the Coordinator and the Project Office 30 days before the planned submission. The form includes a short summary that enables other partners to check that their rights are not affected.

Second step: the coordinator checks the form, sends it to the main contacts of each partner and uploads the form on the SharePoint. Once the file is uploaded, an email is sent to all project participants. This enables everybody to have the information on the planned dissemination before submission. Under no circumstances can a beneficiary publish the contribution of another beneficiary without its approval; the partners must consider the other partner's legitimate interests specified by the CA, article 8.4.

Under "normal circumstances" it is advised to obtain a validation of the Work Package Leader and Coordinator. Each should check at his/her level that the document is appropriate for submission. To obtain this validation, the main author must upload the document on the relevant Work Package SharePoint folder and send an e-mail simultaneously to the Work Package Leader, the Domain Leader, and the Coordinator. No response within 2 weeks means acceptance of the submission. Normal circumstances" exclude cases where a severe external deadline must be respected.

Finally, the author sends the final version of the communication before submission to the project office who check that EU publication rules regarding acknowledgements are followed. In particular

- For articles, the following sentence must be used for acknowledgement of the commission's support: "This project has received funding from the Euratom research and training programme 2019-2020 under grant agreement No 945077".
- For presentations to conferences, it is strongly recommended to use the PATRICIA PowerPoint presentation template (available on SharePoint). The minimum requirement is to use at least the PATRICIA logo. The Euratom logo should be added for acknowledgement of the Euratom support.

To avoid delays, the project office will reply as soon as possible. If no reply is received within 7 days, the communication is considered to be approved.

All partners are requested to use the following format for the document name:

Year of publication-authors-journal/conference

For example: 2021-VanTichelen-Schuermans-name-NURETH19.pdf

After submission of the communication:

- The author informs the project coordinator and the corresponding WP leader, and the WP leader of WP14 "Knowledge management, education, training" when the planned publication has been accepted for publishing.
- All accepted publications and presentations related to PATRICIA, shall be uploaded in the dedicated "Publications" folder of the SharePoint <https://extranet.sckcen.be/sites/patriciapartnerarea>, see folder 'Documents'.

These dissemination measures should however be consistent with the 'Communication and Dissemination Plan' (D14.2)

6. Quality Management Strategy

A Quality Management Strategy is used to define the quality techniques and standards to be applied and the responsibilities for achieving the required quality levels during the project.

7. Conclusion

This Project Quality Plan is set up to guarantee that quality aspects in a variety of processes and activities are established and implemented in the PATRICIA project. The Coordinator and Project Office will monitor these processes. The main goal is to reach a high degree of quality of project deliverables, reports and outputs in general.