



EUR Design Assessment Standard Project Manual

October 2020



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1. DEFINITIONS

Assessor

The Assessor refers to the person or persons, including the Chapter Leader, performing the Compliance Assessment of each chapter.

Assessment Sheets

Refers to the documents in which the detailed Compliance Assessments are performed. See §4.2.1 of this Project Manual for more details.

Administration Group (AG)

The Administration Group is a permanent EUR administrative and decision-making structure that concerns both technical and administrative matters. Administration group is formed by a representative from each EUR utility. See §3.4.2.6 and §3.6.4.3 of this Project Manual for more details.

Chapter Assessment

The Compliance Assessment work of one EUR chapter is called Chapter Assessment. See §4.2 of this Project Manual for more details.

Chapter Contact Person

The Chapter Contact Person is a Vendor's agent who is assigned as the contact person responsible for the Vendor's support related to the assessment of an EUR chapter. The Chapter Contact Persons are the Vendor's counterparts of the EUR Chapter Leaders.

Chapter Leader

The Chapter Leader is a person that manages the assessment of a chapter. The Chapter Leader is appointed by the utility responsible for assessing the chapter. See §3.4.2.2 of this Project Manual for more details.

Chapter Reviewer

The Chapter Reviewer is a person that reviews the assessment of one chapter, which is produced by the Chapter Leader. The Chapter Reviewer is appointed by the utility responsible for reviewing the chapter. See §3.4.2.3 of this Project Manual for more details.

Compliance Assessment

The technical assessment of the design towards the EUR document is called the Compliance Assessment. The Compliance Assessment includes also the review and approval of the assessment. See §4.2 and Appendix 6 of this Project Manual for more details.

Coordination Group (CG)

The Coordination Group is set up to manage and administrate mainly the assessment phase and partially also finalisation phase of Design Assessment Project and is composed of representatives from the Sponsors, Supporters and Vendor (see Appendix 1 for the Coordination Group composition for the [project] project). See §3.4.2.1 and §3.6.4.1 of this Project Manual for more details.



Design Assessment Project

The Design Assessment Project is whole period starting from the application of the Vendor for the assessment of its design and finishing by release of the new Volume 3 Subset. See §2.4 of this Project Manual for more details.

Project Design Documentation

The term “Project Design Documentation” comprises all documents submitted by the Vendor that describe the assessed design. See §2.7 of this Project Manual for more details.

Project Documents

All formal documents created and used in the project, such as the Project Deliverables, MoM, Q&As etc. The Vendor’s Project Design Documentation is not part of Project Documents.

Project Management Team (PMT)

The Project Management Team manages the project and consists of project manager(s) from the leading Sponsor (see Appendix 1). See §3.4.2.4 of this Project Manual for more details.

Requirement Assessment

The Compliance Assessment of an individual requirement is named Requirement Assessment.

Sponsor

Sponsors are those EUR utilities that are participating in the project and are mainly responsible for the Compliance Assessment of the EUR chapters.

Steering Committee (SC)

The Steering Committee is a permanent top-level EUR decision making structure which takes official EUR position on matters. Steering Committee is formed by a representative from each EUR utility. See §3.4.2.7 and §3.6.4.4 of this Project Manual for more details.

Supporter

Supporters are those EUR utilities that participate in the project, mainly to perform the review of the Compliance Assessment. They could also perform Compliance Assessment of some small EUR chapters.

Vendor

The Vendor is the company (i.e. [vendor]) that is responsible for the design of the plant subject to the assessment. See §3.4.2.5 of this Project Manual for more details.

2. INTRODUCTION

2.1. PURPOSE AND CONTENT

The purpose of this Standard Project Manual (SPM) is to provide guidelines for EUR assessment projects and a template which can with minimum modifications be transformed to a specific project manual for a specific assessment project. The SPM concerns mainly activities of the assessment and finalisation phase of the assessment project.



The Project Manual is structured as follows:

- **Introduction:** Description of the background, conditions and basis of the project.
- **Project Management Plan:** Definition of the organisation, co-ordination and planning necessary for an effective project execution.
- **Project Operation:** Instructions to all the activities that are required to perform the Compliance Assessments, i.e. those for assessment, review and approval.

The assessment methodology in Appendix 6 is written so that Assessors and Chapter Reviewers only need to study this appendix, together with the links presented in that document, to perform their tasks.

2.2. GOAL OF DESIGN ASSESSMENT PROJECT

The Vendor's [project] subset of the EUR Volume 3 shall be released within two years after the assessment is started.

The above-mentioned overall project goal is divided into two sub-goals, which are:

- To assess the [project] design towards each requirement of the EUR Volume 2 within 18 months after the initiation of the assessment phase,
- To produce a final and approved subset of the EUR Volume 3 within six months after the assessment phase has ended.
- To issue a certificate officially confirming that the Vendor's design has successfully passed the assessment vs. the EUR document.

2.3. CONDITIONS

The general conditions set up by the EUR Organisation and applicable to Design Assessment Projects are the following:

- The decision to start the work to produce a Volume 3 Subset X is made by the SC following the request from the Vendor,
- An EUR Coordination Group is set up to perform this work, constituted by the Sponsors, Supporters and the Vendor,
- The final deliverables are to be reviewed by the AG and to be approved by the SC.

2.4. DESIGN ASSESSMENT PROJECT LIFE CYCLE

The whole Design Assessment Project is divided into four parts: application phase, preparatory phase, assessment phase and finalisation phase. All the phases are in detail described in document "General Assessment Principles" available on the EUR public web page.

1. The application phase includes Vendor's self-assessment of key issues (included in EUR chapter 1.4) supported by Technical Plant Description (see §2.7.1) and evaluation of key issues by EUR. If the design to be assessed is by the AG and SC considered sufficiently mature, the preparatory phase can commence.
2. The preparatory phase involves the preparation and acceptance of Design Description Documents (see §2.7.2) and self-assessment sheets (see §2.7.3), the project plans and the distribution of work. This phase also involves the Start-up



Seminar where the Vendor introduces the design to be assessed to EUR utilities. The preparatory phase is finished by the pilot study evaluation. Its goal is to verify on a sample of the DDD that the Vendor's documentation is mature for the assessment phase and that the assessment process is well understood by all participants.

3. The assessment phase involves the Compliance Assessment of the design towards each requirement in Volume 2. The operational work to be done in the assessment phase is described in §4 of this Project Manual.
4. The finalisation phase encompasses the generation and approval of the Volume 3 subset including an exercise of checking consistency with previous assessment(s), and the issuing of an Administrative Feedback Report and a Background Report. The finalisation phase is further described in §5 of this Project Manual.

Project organisation somewhat differs depending on the phase. During the application and preparatory phase, it is mainly the Vendor and PMT who work on the project. However, Sponsors and Supporters may provide contribution as Assessor/Reviewer to the Vendor's assessment of key issues and pilot study. During the assessment phase, there is a large assessment organisation that requires intense coordination. Finally, the finalisation phase requires focused work, mainly from the PMT and the Coordination Group (CG), to produce the Volume 3 subset. To ensure consistency with earlier projects, the assessment phase involves strong involvement of the AG.

This Project Manual is focused mainly on the assessment and finalisation phase of the Design Assessment Project.

2.5. FROZEN DESIGN

In order to limit duration of the Design Assessment Project and need to assess repeatedly technical points, the design shall be "frozen" at the beginning of the project. Even if the Vendor makes changes to the design during the Design Assessment Project, they will not be considered in the assessment. The Frozen Design means that the delivered Project Design Documentation (see §2.7) shall not be modified during all phases of the Design Assessment Project with exceptions given in §4.4.2.

2.6. CONFIDENTIALITY

All documentation from the Vendor is confidential and is not to be disclosed to any third party not involved in the assessment in accordance with the stipulations set forth in a Non-Disclosure Agreement (NDA) signed by the Vendor and each EUR-party requesting access to Project Design Documentation to perform its role as part of the CG, AG or SC. For the [project] assessment, the NDA is personalised for each involved EUR-party. All documentation made available by the Vendor (including self-assessment sheets) is equally accessible by member utilities of the Coordination Group. EUR-parties which do not take part in the CG but have an NDA with the Vendor, are only allowed access to Project Design Documentation as far as it is required by their involvement in the AG or SC review of the Compliance Assessment.

In very specific cases, when information that has a higher degree of confidentiality is required, it is possible to keep information among a limited number of people (e.g. only the assessment team). However, this opportunity shall be kept to a minimal scope. The exact procedure is determined case by case.



2.7. PROJECT DESIGN DOCUMENTATION

The Vendor provides the following documents during the project:

- Technical Plant Description
- Design Description Documents
- Self-assessment sheets

The documents described in this section are issued in electronic form, prepared by the Vendor. The documents should enable to copy the text to facilitate the Assessor's work when writing the Analysis of Compliance Report.

2.7.1. Technical Plant Description

The Technical Plant Description (TPD) is a document of around 300 pages that summarizes the frozen design to be assessed. It is developed to understand the design as submitted by the Vendor for the assessment project. The TPD is made available to the CG members as a first part of the Project Design Documentation and is also used to support the Vendor's self-assessment of key issues. It can be disclosed to all EUR member utilities.

2.7.2. Design Description Documents

In addition to the Technical Plant Description, Design Description Documents (DDD) are available to the CG members, Assessors and Chapter Reviewers.

The Vendor can deliver the DDD either in one batch or in several packages, grouping them by EUR chapter to which these are relevant. So, prior to the start-up of each Chapter Assessment, the Vendor provides a specific package. These document packages should include at least all documents that are referred to in the self-assessment sheets for the corresponding chapter.

The level of detail of DDD shall be commensurate with the level of detail of EUR requirements to properly justify factual fulfilment.

As a general rule, DDD have to be fully applicable for the Project (i.e. [project] design). Whenever this is not the case, the Vendor shall clearly identify that a document is related to a different version of the design and indicate its exact applicability to the [project] Compliance Assessment project.

In that manner, all documents shall reflect the Frozen Design described in §2.5. Modification to the documentation is permitted only to the extent described in §4.4.2. Upon request from the Chapter Leader, additional documentation can be provided by the Vendor during the project. The decision of when to prepare and transmit supplementary documents is taken by the Vendor.

If the Vendor implements an EUR requirement as its design principle, it is desirable to provide representative examples showing how the principle is implemented in the assessed design.

By default, the Design Description Documents are only available to CG member utilities.

2.7.3. Self-assessment sheets

The Vendor's self-assessment sheets show detailed compliance analysis of the [project] design versus each requirement in the EUR chapter. The self-assessment sheets are based on the Assessment Sheets prepared by the EUR organisation. All references (to the Design



Description Documents) supporting the compliance assessment shall be quoted in the self-assessment sheets. The reference must be precise enough (chapter number or even page number for larger chapters) so that the Assessor can easily find the information in the Design Description Document. All statements regarding the fulfilment of the relevant requirement must be supported by the clear evidence provided in the Design Description Documents. Self-assessment sheets shall not serve as the only source of information about the assessed design. This point is essential for Assessor's effective work. Rules for performing the assessment (see § 4.2.1) are generally valid also for preparation of the self-assessment by the Vendor.

The self-assessment documents are not formal design documents and cannot be referred to in the Analysis of Compliance Report. There is however one exception: showing non-existence, i.e. the Assessor can rely on the conclusion in the Self-Assessment that there is no information about the concerned topic/requirement.

3. PROJECT MANAGEMENT

3.1. PROJECT DELIVERABLES

The project deliverables are the following:

- New Volume 3X subset,
- Analysis of Compliance Reports,
- Synthesis Reports,
- EUR certificate,
- Background Report,
- Administrative Feedback Report.

The project deliverables are defined and described in the following paragraphs.

3.1.1. The new Volume 3X subset

The main project deliverable is the new subset of the Volume 3X, dedicated to the [project] design, approved by the EUR Steering Committee. This document consists of four chapters:

- Chapter 0 – Introduction to the Subset
- Chapter 1 – Plant Description (written by the Vendor)
- Chapter 2 – Highlights of the Compliance Analysis
- Chapter 3 – Specific Requirements

See §5.3 for detailed description of Volume 3.

The Volume 3X subset is available to all EUR members, who have signed a bilateral Non-Disclosure Agreement with the vendor, and to the Vendor. For various reasons, the EUR organisation may ask the Vendor for permission to distribute the subset to another recipient outside EUR (company or organisation). Such distribution can only be done following explicit permission by the Vendor, as it includes vendor's proprietary information.



3.1.2. Analysis of Compliance Report

For each EUR chapter or, for the large chapters, part of EUR chapter¹, an Analysis of Compliance Report is produced that documents the detailed assessment of each requirement of Volume 2 and presents it to CG, AG and SC. This report is complemented by a Synthesis Report (see §3.1.3). The Analysis of Compliance Reports are available to all EUR members and to the Vendor.

3.1.3. Synthesis Report

The Synthesis Report is a summary of the detailed information contained in the Analysis of Compliance Report and is written for each chapter (see §4.3 and Appendix 4). For the large chapters split into parts (see Appendix 9) just one Synthesis Report for whole the chapter is written. The Synthesis Report includes a qualitative statement of the assessment, presents the quantitative results (statistics) of the assessment and the rationale for all NOCs and the main CWOs and main NANs (see §4.2.2 and Appendix 4 for further explanation). It includes also description of HOLD(A) and DIF labels and complete reference list, including Q&As (see §4.3). The Synthesis Reports are available to all EUR members and the Vendor.

3.1.4. EUR certificate

The certificate is an official confirmation that the Vendor's design has successfully passed all steps of the assessment process vs. the EUR document. The certificate will be issued by the EUR secretariat after the text of Volume 3X is finalised.

3.1.5. Background Report

During the assessment, issues that concern EUR requirements are identified, which are to be used for improvement of the EUR document. These issues are indicated by HOLD and DIF in the Analysis of Compliance Report. The HOLD labels are not considered when writing the Synthesis Report (nor in the statistics, neither in the rationale of the labels) – see §4.2.4

Throughout the assessment, technical feedback is generated directly on each Assessment Sheet (into the Analysis of Compliance Report). The technical feedback from each chapter eventually composes one chapter of the Background Report.

The Background Report is composed by the PMT. The Background Report is not formally approved but is consolidated and reviewed by the AG. It is available to EUR members only.

3.1.6. Administrational Feedback Report

Before closing the project, the lessons learned from the project is gathered and put in the Administrational Feedback Report. Lessons learned is gathered by asking the project participants for feedback and aims at improving the administrational aspects of future projects carried out by the EUR organisation. The Administrational Feedback Report is composed by PMT and is available to EUR members only.

¹ To speed-up the involvement of the Reviewer in the assessment process, the large EUR chapters are divided into parts following an agreed split shown in appendix 9.



In addition, when appropriate, the project documents, such as the General Assessment Principles, Standard Project Manual and templates are updated.

3.2. LIMITATIONS

The PMT is responsible for the follow up of the tasks performed in the project, and the Sponsors, Supporters and Vendor are responsible for ensuring that sufficient resources are available in the project. This is ultimately managed by the SC.

3.3. WORKING PLAN AND SCHEDULE

A flow scheme for the issuing of the new Volume 3 subset is given in Appendix 2. A detailed flow scheme of the project assessment phase is presented in Appendix 3 and in detail described in Appendix 6.

The PMT will work out a project schedule indicating the time frame per Chapter Assessment showing the period between the start of the assessment work and the end of the review by the Coordination Group for both Analysis of Compliance Reports and Synthesis Reports. It will also indicate AG and SC review and the detailed process of the finalisation phase of the project. The PMT will update the project schedule on a regular basis.

3.4. PROJECT ORGANISATION

In order to administrate the work, a Coordination Group (CG) is set up, consisting of Sponsors and Supporters from the EUR organisation and the Vendor. This is shown in Appendix 1.

3.4.1. Participants

The participating parties (Sponsors, Supporters and Vendor) and their representatives are listed in Appendix 1.

3.4.2. Roles and Responsibilities

3.4.2.1. Coordination Group

The Coordination Group is set up to administer the project and is in general responsible for the development and results of the project. The specific responsibilities of the representatives in the CG are:

1. To review and update the Project Manual,
2. To participate in the CG meetings,
3. For purposes of the Design Assessment Project, act as the contact person of its own utility and be responsible for relevant activities, including:
 - a. Coordinate the commitment of its utility, ensuring that the work to be done by the utility follows the procedures, methodology and time schedule defined in this Project Manual,
 - b. Report the progress of the work done by its utility; especially informing the PMT as soon as possible of any deviation of the compliance assessment from the schedule and scope of work proposed in this Project Manual,



4. Ensuring that the working methodologies during the design assessments are consistent among the compliance assessments,
5. Reviewing the drafts of all formal documents produced in this project,
6. Provide support (if needed) in drafting chapter 3X.0, 3X.2 and 3X.3 of Volume 3X.
7. Review chapter 3X.1 of Volume 3X drafted by the Vendor.
8. Hosting CG meetings.

In addition to the above, the EUR-CG representatives shall contribute to the following technical tasks:

1. To discuss the detailed assessment and the label proposed by the Chapter Leader versus each EUR-requirement,
2. To prepare and present its utility's position on controversial issues during the assessment process,
3. To seek for consensus on controversial issues during the assessment process,
4. To identify the alternatives for items where resolution by AG or SC is to be sought,

The CG is listed in Appendix 1.

3.4.2.2. Chapter Leader

The Chapter Leader refers to the person responsible for the process to generate the Analysis of Compliance Reports and the Synthesis Report for each chapter. The Chapter Leader for each EUR chapter is responsible for:

1. Preparing the first draft of the Analysis of Compliance Reports and the Synthesis Report,
2. Communicating with the Chapter Reviewer (if there are controversial issues, where the Chapter Reviewer and the Chapter Leader cannot agree, these are discussed in the CG meeting and if necessary escalated to AG/SC),
3. Discussing technical issues with the Vendor when needed,
4. Distributing the result of the work to the CG,
5. Updating them when needed,
6. Reviewing them when needed,
7. Discussing the main findings of his work;
8. Presenting the drafts of the Analysis of Compliance Report and the Synthesis Report during CG and AG meetings. This could also be done by the CG representative, if appropriate.
9. Informing as soon as possible the EUR CG representative of his utility of any deviation from the schedule proposed in this Project Manual,
10. Informing as soon as possible the EUR CG representative of his utility of any deviation of his work from the scope of work proposed in this Project Manual.

Assessment work can be done by a team of Assessors from the Chapter Leader's utility, but still the Chapter Leader is responsible for the outputs of the assessment work. Chapter Leaders can delegate to the Assessors direct contacts with the Vendor's Chapter Contact Persons or Chapter Reviewers.



The Chapter Leader of each chapter is listed in Appendix 8.

3.4.2.3. Chapter Reviewer

The Chapter Reviewer refers to the person responsible of the first review of the Compliance Assessment results for each chapter. The Chapter Reviewer of each chapter has the following responsibilities:

1. Review the drafts of Analysis of Compliance Report during the technical assessment and the first draft of the Synthesis report, both from technical and methodology point of view,
2. Communicate with the Chapter Leader (if there are controversial issues, where the Chapter Reviewer and the Chapter Leader cannot agree, these are discussed in the CG meeting and if necessary escalated to AG/SC),
3. Participate in technical meetings if needed,
4. Participate in CG meetings when the drafts of the Analysis of Compliance Report and the Synthesis Report are presented. This could also be done by the CG representative, if appropriate,
5. Review potential updates to the assessments after CG, AG and SC meetings.

The Chapter Reviewer of each chapter is listed in Appendix 8.

3.4.2.4. Project Management Team

The Project Management Team (PMT) refers to the person or people constituting the management, technical lead and administration of the project. The responsibilities of the PMT are the following:

1. Performing all project management processes, such as
 - a. planning, executing, monitoring and controlling and closing the project,
 - b. writing and updating the Project Manual,
2. Arrangement of the relationship with the Vendor,
3. The organisation² and chairing of the CG meetings, including writing the minutes,
4. Ensuring that a position is found for any controversial issue during the assessment process,
5. If a position is not found within CG, PMT is responsible for presenting the issue to AG,
6. Informing as soon as possible the SC and AG of any lack of resources which would impact the final objectives of this project,
7. Participate in the AG and SC review meetings, representing the CG,
8. Reporting of any important aspect of the Design Assessment Project, and distribution of relevant documents, to AG and potentially SC,
9. Reporting to CG of any aspect of the AG or SC meetings related to this project,

² This does not include the logistic organisation but PMT is in charge of providing the agenda, etc.



10. Management, distribution, archiving and accessibility of the final versions of all formal documentation.
11. To prepare the Background Report, based on the HOLD and DIF labels assigned during the CG review of each Chapter Assessment and the Administrative Feedback Report.

3.4.2.5. The Vendor

The Vendor is responsible of the following:

1. To provide the Project Design Documentation,
2. To link properly the self-assessments sheets based on the EUR Assessment Sheets with the Design Description Documents,
3. To assign one Chapter Contact Person for each chapter,
4. To participate in the CG meetings and also in the AG and SC reviews,
5. Provide technical support to the assessments (e.g. via Q&A, or technical meetings but also if asked in CG, AG and SC meetings),
6. Prepare and provide chapter 3X.1 Plant Description of the Volume 3X subset,
7. To arrange, or support, the arrangement of the start-up seminar,
8. Complement the Design Description Documents, if desirable, as result of the Q&A process,
9. To organise the closing seminar (not mandatory), see §5.3.14.

3.4.2.6. Administration Group

The Administration Group acts as promoter, supervisor and reviewer of the project, which includes the following responsibilities:

1. Continuously follow the project performance,
2. Advise the project on strategically important issues,
3. Support the project with guidance and experiences from earlier EUR projects,
4. To the extent possible, ensure the availability of the required resources for the project, more specifically manage any lack of resources reported by the PMT,
5. Keeping the SC informed of proposed changes or other relevant information,
6. Review the Compliance Assessments, providing technical guidance while being also responsible for the consistency with previous assessments.

The specific responsibilities of each representative in the AG are:

1. To review and approve the Project Manual,
2. To participate in the AG review meetings,
3. Review the applicable documents before each AG meeting, see below,
4. During the meeting, discuss the assessment that is presented during the meeting.

Consequently, the AG reviews all documents defined in §3.1, i.e. the Subset X, Analysis of Compliance Reports, Synthesis Reports and the Feedback Reports. The AG review is described in §4.5.3.



Two weeks prior to each AG meeting, all project documents that are reviewed during the AG meeting are made available to the AG members.

3.4.2.7. Steering Committee

The Steering Committee acts as the owner of the project; it defines the conditions of the project and manages all topics that cannot be solved by AG. This means also that the SC takes the final position on each issue related to both the administration of the project and the assessment. SC members shall receive documents two weeks in advance.

SC's task in relation to the assessment is to review and approve the final drafts of all project documents as described in the AG section above. The SC shall at the minimum review the Synthesis Report together with NOCs. The SC review is described in §4.5.4.

In addition, the SC is ultimately responsible for ensuring that sufficient amount of resources is available in order to reach the goal of the Design Assessment Project.

3.5. PROJECT RESOURCES AND COSTS

The scope of this Project Manual does not include the management of planning and identification of resources or any estimation of expected budgets at the utility or Vendor level. Consequently, each Sponsor, Supporter and Vendor is responsible for its own planning, estimations and budget of the resources involved in this project in accordance with §3.4.2, Roles and Responsibilities. It is required that the tasks defined in this Project Manual are performed with the expected quality and each utility and the Vendor shall take into account the flexibility required in order to administer the risks defined in §3.8, Project Risks.

3.6. COMMUNICATION PLAN

The communication plan includes the rules, requirements and plan how to share information within the project, how to distribute and retrieve project documents and how to archive the project documents. The project language is English. Direct English communication without an interpreter is desired during all the meetings mainly for the sake of time saving.

3.6.1. Exchange of information

The Vendor makes available all the Project Design Documentation (see §2.7) on an exchange server [to be specified here] which is hosted by the Vendor. The exchange server is available on [link to be specified here].

The exchange of project deliverables (from the first draft release to the final version), templates and blank assessment sheets, meeting minutes, etc. is done by posting documents on a dedicated [project] Assessment Coordination Group server, hosted by [to be specified here] and accessible to CG members (Vendor representative included), EUR secretariat, Chapter Leaders and Reviewers. **This server is called "Project Server" further on in this document.** The Project server is available on [link to be specified here]

All other exchange of information between people from different utilities involved in the Design Assessment Project (e.g. between CG members, between chapter assessor and reviewer, etc.) is done by on-line means (e.g. e-mail) or phone. To keep track of discussions and decisions, conclusions from phone conversations should be communicated to the PMT. This should be done by e-mail, unless the conclusions of the discussion and



their rationale are included into a project deliverable (e.g. as comments in the draft Analysis of Compliance Report reflecting the discussion).

In all e-mails sent to CG members, the subject shall start with “[project]:”.

The exchange of information during meetings is summarized in minutes. The rules with regard to meeting minutes are explained below.

3.6.2. Rules for meeting minutes

For all meetings, minutes of the meeting should be prepared that summarise the important discussions and the main conclusions from the meeting. PMT is responsible for preparing the minutes of the CG meetings.

The draft minutes of meetings shall be made available on the Project Server to the proposed meeting participants, including absent parties, within three working days after the meeting. Comments shall be sent within one week after issuing of the draft minutes, otherwise the minutes are considered approved.³ If comments are distributed and no additional comments are derived, the person chairing the meeting decides whether the comments are acceptable and the minutes can be considered final.

3.6.3. Rules for e-mail communication

3.6.3.1. With AG & SC

Correspondence with AG from the project shall be done by PMT.

Correspondence with SC from the project shall generally be done via the EUR Secretariat.

3.6.3.2. With the Vendor

Only the PMT, the Chapter Leaders (including their delegated Assessors) and the EUR CG representative can send e-mails directly to the Vendor.

All e-mail exchanges between Chapter Leaders (or Assessors) and the Vendor’s experts shall include the PMT and the Vendor’s CG representative in carbon copy.

3.6.3.3. Between Chapter Leader & Reviewer

The interaction between the Chapter Leader and Chapter Reviewer related to the Compliance Assessment can be done without involving the CG. However, PMT shall be informed of these communications (carbon copy).

3.6.4. Meeting goals and schedule

The types of meetings that can be envisaged in the project are CG meetings, technical meetings on specific topic, AG meetings, SC meetings and other meetings. In order to improve the efficiency of CG/AG/SC meetings, it is necessary to get the preparatory documents sufficiently in advance for everyone to read them and prepare some comments. The general rule is: two weeks in advance.

³ Rigid schedule rule in order to prevent endless discussions on controversial issues, for which a procedure is already envisaged for progressing.



3.6.4.1. CG meetings

The main goal of CG meetings is the review of draft Analysis of Compliance Reports and Synthesis Reports, the work progress and any other issue concerning administration of the project or assessment of the design.

The total number of meetings depends on the work development. The experience shows that 12 CG meetings should be considered for a first planning. The schedule of CG meetings is defined in the project time schedule as early as possible. The task to host these meetings is distributed among the EUR-members of CG in accordance with their involvement in the topics to be discussed. This also reduces travelling.

The representative of the host company takes care of the logistics of the overall meeting (including the invitation letter for the visa application, if needed).

CG meetings are initiated and chaired by PMT and all CG members, together with the concerned Chapter Assessors and Chapter Reviewers, are invited to these meetings. The participation of the CG members in each CG meeting is mandatory. The agenda draft(s) and draft minutes are distributed by PMT to CG and to the EUR secretariat. Concerning the technical review during the CG meetings, the Vendor does not have a formal mandate in assessment decisions.

3.6.4.2. Technical meetings

Assessors and experts from the Vendor can meet to explain and discuss specific issues related to the assessment, if necessary. Technical meetings may be conducted in person, via conference calls or via videoconference.

Technical meetings are initiated by the Chapter Leader. The Chapter Reviewer shall be invited to the technical meetings. PMT shall be kept informed of the occurrence of these meetings. Chapter Leader is responsible for drafting minutes of the technical meeting and will distribute the minutes to all participants and to the CG members.

Technical meetings can serve as the supporting tool for the assessment process. Technical meetings shall not replace the Design Description Documents. So, if any new information is presented at the technical meeting then such information, if it is to be used for the assessment, must be adequately implemented into the Design Description Documents as a new document since it is not allowed to modify existing document (see §4.4.2).

3.6.4.3. AG meetings

In AG meetings basically two items are discussed: technical review, including the Background Report, of assessments (AG-review) and project management items.

Since AG could be seen as the promoter, the PMT reports necessary items to the AG, such as work progress and risks, and receives guidance.

AG meetings are prepared by the EUR secretariat and are not managed by this project. But as one of the main tasks of AG meetings during this project is to review the assessment of the design, the AG review meetings are defined in accordance with the project time schedule.

3.6.4.4. SC meetings

In SC meetings basically three items are discussed: high-level technical review of assessments (SC-review), approval of assessments and high-level project management items.



3.6.4.5. Other meetings

Other meetings could occur for any reason not listed above, such as CG conference calls or meetings among EUR-CG only, where internal topics not to be disclosed to the Vendor could be discussed. Other meetings could be proposed by anyone but are initiated by PMT. Minutes are at least distributed to all meeting participants and PMT.

3.7. DOCUMENT CONTROL

In order to control the status of the documents produced in the project, each document shall follow the general rules of coding, tracking and archiving documents. Coding of documents is done by the file names. Tracking includes the documents' revision and draft labels.

3.7.1. File Formats

All written documentation, such as assessments, minutes of meeting and memos are done in Microsoft Word format. The Compliance Assessment is documented on specific Assessment Sheets provided by the EUR secretariat.

All final versions of project deliverables are exported to and stored in pdf-format.

As far as it is acceptable for the Chapter Reviewer, the working versions (drafts) of the Assessment Sheets may temporarily be converted into Microsoft Excel format. However, the draft version which is submitted for review by the CG must be in Microsoft Word format.

3.7.2. Document Coding

The documents shall be coded in accordance with the table in Appendix 7, where the document description and code are defined. In addition to the project deliverables described in §3.1, the following document types are identified in the project: Minutes of Meetings, Agenda proposals and Project Memos.

3.7.3. Document Tracking

A procedure capable of tracking back all the steps of the production process shall be implemented by all parties. The procedure is described hereafter and is in accordance with the general EUR document elaboration process.

For the reports related to the project deliverables, i.e. the Analysis of Compliance Report, the Synthesis Report, the Feedback Report, together with the Chapters 0, 1, 2 and 3 of the Volume 3X subset, the state of a report is identified by two parameters:

- Its revision letter: A, B,...;
- its status definition: draft 1, draft 2,..., final issue;
- and the date of release.

The first text elaborated is identified by revision A draft 1. A revision is a state that starts from a decision of the SC and lasts until the SC has approved it, when the final version of the document is given.

Each time the text is modified (author's decision, integration of comments, changes asked during reviews); its draft number is increased. As soon as the text is approved by the SC, it is considered as the final issue of the revision B.



Following a request of the Vendor, the SC can make the decision to update the Subset once the revision A has been approved and issued. In this case a new revision is opened, a first draft of revision B elaborated, and the process goes on. However, this is not done within this project.

For all other documents, the state of the report is identified only by its status definition: draft 1, draft 2,..., final issue.

Each party is responsible for maintaining its revision and status definition.

3.7.4. Archiving

All project deliverables (including the draft versions) are posted on the Project Server (see §3.6.1). The party that is responsible for the generation of a document shall also store all versions of that document until the project is finalised.

3.8. PROJECT RISKS

Project risks may affect the project's budget, schedule or quality of the project deliverables. Any project risk, such as administrative burdens or lack of commitment from involved parties, shall be reported by the PMT to AG/SC.

3.9. MONITORING AND CONTROL

As the amount of time during the CG meetings is limited, status reporting should be managed outside the meetings as much as possible. The PMT will agree with the CG members on the way of monitoring of the project progress.

To be able to keep AG informed, a brief status report that also describes the main risks should be presented in each AG-meeting, preferably by the PMT.

4. PROJECT OPERATION

The project's main operational workload is the technical assessment of the design, i.e. the assessment phase. This section describes the processes and methodologies required for the Compliance Assessment process, i.e. to produce the final versions of the Analysis of Compliance Reports and the Synthesis Reports.

4.1. THE COMPLIANCE ASSESSMENT PROCESS

The Compliance Assessments are performed by the Assessors based on the Project Design Documentation and is presented in Analysis of Compliance Reports, one for each chapter or more for large chapters split in parts (see Appendix 9). The review of each chapter is done both by the Chapter Reviewer through the assessment process and by the EUR-organisation during CG, AG and SC review meetings. Approval is done by the SC in SC-meetings. A schematic figure of the process is provided in Appendix 3.

A step-wise methodology is developed to execute the process of assessing the design, presented in detail in Appendix 6.

In order to achieve sufficient quality in the assessments, experts that perform the assessments shall understand the context of both the design and rationale of the requirement when making the evaluation.



4.2. PERFORMING THE ASSESSMENT

4.2.1. Assessment Sheets

The assessment is done directly on the Assessment Sheets, which is a template of the Analysis of Compliance Report initially containing only the EUR-requirements. The EUR Secretariat is responsible for preparing the initial Assessment Sheets. The Assessment Sheets are a Word files divided into four columns:

- A) Requirement: This column is already filled in the file provided by the EUR Secretariat and shall not be modified unless there are mistakes.⁴ For each section in the chapter the Assessor shall check the compliance with all the explicit requirements (as "shall" or "should" statements marked in blue letters) presented in the "Requirement" column. It is to be noted that the "Requirement" column of the assessment sheet is a combination of the "Requirement" and "Section Comment" columns of the EUR Chapter: each requirement is followed by the corresponding comment (marked in italics). "Shall" or "Should" are not supposed to be present in the comments. The comments are here either to help understanding the requirement or propose a possible way to fulfil the requirement.
- B) References: See §4.2.8 below for detailed instructions.
- C) Compliance assessment: A brief description of the approach used in the design shall be given together with the reasoning of the assessment. See §4.2.2 below for detailed instructions.
- D) Result: See the labels listed and described in §4.2.3 and §4.2.4 below.

4.2.2. Detailed assessment instructions

How to fill in the "compliance assessment" column

The assessment rationales shall be provided in the column "Compliance assessment". In general, it shall be possible for the reader to understand the text (i.e. how the Vendor fulfils the assessed EUR requirement) without having to study the reference documents, i.e. the text should be self-standing to the extent possible. For all other results than COM the rationales must be explained especially carefully and it must be obvious to the reader why other label than COM is used.

The preferred principles of writing the compliance assessment text are:

- Assessor uses relevant quotations from the Vendor's documentation together with reference and completes it with his viewpoint and rationale of the assessment result.
- For good understanding how the assessment was developing, the Assessor and the Chapter Reviewer should chronologically order their inputs to the assessment text by e.g. introducing the inputs as Draft 1:, Draft 2:, etc.
- Records written during the CG, AG and SC review shall not be deleted.
- Generally, it is not acceptable to present just Vendor's statement that the relevant requirement is fulfilled without adequate evidence of the design evaluation, e.g.

⁴ In case of mistakes any change in the assessment sheets files shall be recorded using the change tracking tool in MS Word in order to show a trace back to all the steps of the production process. The PMT shall be informed of this in order to inform EUR Secretariat.



calculated values compared with relevant limits, results of experiments and operational experience, well supported by the information provided in the Design Description Documents.

- The Assessor may use Vendor's text, or its parts, used in the self-assessment sheets but only if the text is well supported by information contained in the Vendor's Design Description Documentation since the self-assessment mustn't be used as reference (see §2.7.3).
- Section comments (marked in italics and containing neither "shall" nor "should") will not be assessed. Only the text "Not a requirement" is put in the box. However, each section comment shall be taken carefully into account as guidance to the requirement which the comment is related to.

"Shall" and "should"

In general, utility requirements are denoted by "shall", whereas utility preferences are denoted by "should". However, the distinction between "shall"- and "should"-requirements during assessments may be relaxed in the practice: in either case, other solutions can be accepted but the Vendor has to demonstrate that they are equivalent or better respecting the rationale of the requirement.

Multiple requirements in one requirement-box

In some cases the requirement comprises several "shall" or "should" or multiple bullets, which could be perceived multiple requirements. Three examples are identified:

- a) Multiple "shall" or "should" with different assessments => multiple result-labels
- b) Multiple "shall" or "should" but same assessment => one result-label
- c) One "shall" or "should" and multiple bullets => one (summarising) result-label or multiple result-labels

Clarification of situation a) and b); multiple "shall" or "should": In cases when there are multiple "shall" or "should" in one requirement-box, and the assessment is different between these requirements, the assessment shall be split and multiple result-labels given. However, they shall not by default be separated. It is a subjective decision; when separate assessments are considered appropriate and especially when the results of these "shall"s or "should"s are different.

For the situation c), there can be no general rule. If each bullet can be considered as a self-standing and independent requirement and simultaneously each bullet has different assessment, multiple result-labels are possible. The result-label has to be evaluated case-by-case.

Comments from EUR CG Members

Comments from EUR CG Members could be transmitted to the Chapter Leader and the Chapter Reviewer during the assessment and it is not necessary to wait until the CG review meeting. This gives to the Assessor and Chapter Reviewer the opportunity to address these issues already in the assessment. However, the sender cannot request a response (since that is outside the scope of the Assessors and could be time demanding). If the comment is ignored by the Chapter Leader and the Chapter Reviewer, then it is EUR CG Member's responsibility to bring up the matter during the CG-review meeting.

4.2.3. Classification labels

For each requirement the level of compliance shall be established. The following classification labels have to be used.



Compliance Assessment Label	Meaning	Classification Label
Compliance	the design meets the requirement or goes beyond it	COM
Compliance with objectives only	the design is supposed to achieve the objective of the requirement, but: A) a different approach from the EUR one is used to achieve the same objectives, or B) the approach is not yet sufficiently defined for a COM, but there is a fair expectation based on provided information and experiences that the Vendor will fulfil the requirement in the later phase of the design	CWO
Non compliance	the design does not meet the requirement	NOC
Not applicable	the requirement is not applicable to the technology	NAP
Not assessable now	the assessment cannot be made because of the stage of the design	NAN
Project, Owner or Site specific	the assessment cannot be made because the requirement is project, owner or site specific.	POS

Table 1. Classification labels available for the final compliance assessment of each EUR requirement.

In addition, during the assessment phase, the following labels are used. These labels are defined for internal EUR work purpose only.

Compliance Assessment Label	Meaning	Classification Label
See another section	the requirement is assessed in another section; reference to the section must be given	SEE
Background note	a proposal for change to the EUR text is given	HOLD ⁵
Difficulty to assess	difficulty in interpreting or understanding the requirement	DIF

⁵ The HOLD-label should be annotated to indicate level of importance of HOLD. The indices to choose from (see §4.2.4) are HOLD(A), HOLD(B) and HOLD(C).



Information needed	additional information is expected from the Vendor or EUR before completion of the assessment or consistency check is necessary.	INF ⁶
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Table 2. Classification labels available for internal EUR purpose.

4.2.4. Use of Classification Labels

CWO and NAN labels that the Assessor considers important are marked “main xxx” and described in the Synthesis Report together with all NOC labels (see Appendix 4). These topics are published in the Volume 3 document.

COM and CWO

COM is used when the design meets the requirement or goes beyond it. If the design goes significantly beyond the requirement, the COM label shall be complemented with more precise comments underlining how the design is particularly good in that field.

If a Requirement Assessment is supported only by documentation applicable to different project(s) than [project], it cannot lead to COM but to CWO only. The only exception is a case when EUR requirement demands demonstration of Vendor’s experience, or familiarity with practises, methods and procedures. In such case COM can be granted.

If EUR requirement is turned into Vendor’s design principle without any other evidence, it can’t lead to COM but to CWO only. Every such requirement must be supported by at least a practical meaningful/representative example of implementation of the requirement in the [project] design for full compliance.

NAP

NAP is for technological solution not applicable to the assessed design (for instance BWR vs. PWR, or passive vs. active). Moreover, a NAP label can be given when the requirement begins with "IF" and if the design does not comply with the requirement. This second rule is applied following a case by case study.

NAN

NAN is applied when the design or the verification will be developed in a later stage of the design process and it is considered acceptable. If the information is missing due to design not being developed enough compared to EUR expectations, NOC applies.

POS

POS is for requirements where a site, an owner or a specific project is needed. Generally, POS is assigned when the fulfilling of the requirement lays beyond the generic design phase and/or the Vendor’s responsibility.

Requirements marked as T in the EUR document (related to turbine island only) will also be assessed as POS. Rationale for this is that assessment of turbine island is not in the scope of the Design Assessment Project and different designs of turbine island can be supplied to different owners.

⁶ The INF-label should be annotated to indicate to whom the request for information is addressed. The indices to choose from (see §4.2.4) are INF(CG), INF(AG), INF(2.X) and INF(Q&A).



HOLD

The HOLD-label is used to mark that feedback is provided for a specific requirement (see also §4.2.6). The HOLD-label is always added in the same box as another compliance assessment label, marking that feedback is provided for the EUR. The feedback is assigned to one of following categories:

- **HOLD(A)** are the most serious technical findings having direct impact on the assessment such as e.g. the requirement is seemingly unreasonable or practically impossible to fulfil. HOLD(A) labels will be presented in the Synthesis Report, see §4.3.
- **HOLD(B)** are technical findings but not directly impacting the assessment such as e.g. contradiction with other requirement, poor formulations, etc.
- **HOLD(C)** are formal findings such as typing errors, suggestions to restructure or split composite requirements, etc.

DIF

DIF is a stand-alone label (not accompanying any other assessment label) used to mark that it is not possible to assess the requirement because it is not possible for the assessor to understand the technical background of the requirement. Guidance shall be requested from the EUR-organisation. See also §4.2.6.

INF

The INF-label can be used when additional information is considered required from within the EUR-organisation or from the Vendor or when consistency check between requirements is necessary.

- Information required from the EUR-organisation could be the clarification of a requirement, e.g. its background, intention or context. In that case the INF-label should be addressed to the CG or the AG, depending on the actual review phase of the concerned assessment. Such requests for information shall be indicated by **INF(AG)** or **INF(CG)**.
- It could also be that the label for a requirement depends on the assessment of requirements in another EUR Volume 2 chapter, without this being a situation invoking the SEE-label. This could be e.g. a case when it is necessary to check consistency of conclusions between similar requirements where one of them has not been assessed yet. In that case the INF-label is annotated by the chapter number as **INF(2.X)**.
- Finally, there's the most evident case: a request for information from the Vendor. As indicated in §4.4.2, a request for information is initiated in an informal manner during the assessment work (by e-mail or telephone). Nonetheless, if the first contacts between Chapter Leader and the Vendor do not lead to a satisfying interpretation of available information before the issuing of a first draft of the assessment report, a Q&A sheet is issued by the Chapter Leader. INF-labels addressed to the Vendor is annotated by Q&A between brackets, so **INF(Q&A)**.

In general, assessment result "INF" should be avoided to the extent possible. But when additional information is expected, the assessment of that requirement starts at the time the information is delivered (see step 2.9 in Appendix 6).



In the final Analysis of Compliance Report, no INF should be present. If, for some reason, the information is not provided by the Vendor and considered necessary in order to assess the compliance, this situation is managed on a case by case basis. As a last resort when the requested information is not provided by the Vendor, such requirement can be assessed as NOC.

SEE

When the SEE label is used, the text of the assessment should refer to the requirement(s) where the assessment is performed. See also §4.2.5.

The SEE label is used when a requirement explicitly refers to another EUR section or chapter OR when it is fully equivalent to another requirement or set of requirements somewhere else in the EUR document. The SEE label is withheld throughout the assessment process, contrary to the INF label. The SEE label cannot be combined with any other label.

So, when a requirement depends on the outcome of (a set of) requirements which are still to be assessed, the INF label applies. To avoid circular referencing by using SEE labels, the Assessor should be able to argue that the concerned requirement depends on the other (set of) requirement(s) and that it is not the other way around. In the latter case, SEE shall not be used.

4.2.5. EUR cross-references

There is a number of cross references in the EUR document. One requirement may refer to another one. Foreseen problems from this could be that the requirement causes a circular reference and the requirement is not assessed anywhere, getting different assessment results if similar requirements are assessed in different Chapter Assessments or increased workload if the scope of a requirement that is split into different sections is not obvious to the Chapter Leader.

The main objective with a procedure is that the risk that the requirement is not assessed anywhere shall be minimal. This shall be achieved without performing the assessments twice, to the extent possible.

Procedure:

- A) In many cases requirements concerning the same topic are distributed to different sections of the EUR-document. Often, the requirements on one subject are written on different levels (of details). In general, the compliance assessment for one requirement shall correspond to the level indicated in the requirement.
- B) To assure consistency of conclusions between similar requirements, the assessment of later chapters shall perform double-checking of the EUR-references to chapters that have been assessed previously. See also description of INF label in §4.2.4.
- C) To assure that SEE-labels that refer to different chapter are actually assessed in the other chapter, all Requirement Assessments with SEE-labels that refer to another chapter shall be tracked by PMT during the CG-review meeting.

See also further considerations for use of the SEE-label in §4.2.4.

4.2.6. Feedback to the EUR document

As one of the objectives with the project is to provide feedback to the EUR-document, the HOLD- and DIF-label and the corresponding text are an important part of the assessment.



For each feedback to the requirement, simply add the label "HOLD(x)" to the result field below the assessment label or label "DIF" as stand-alone label and add the feedback-text in the compliance assessment-column starting either with "HOLD:" or "DIF:".

Feedback with HOLD-label could be anything that would improve the document, e.g. references are not reasonable, wording is confusing, or requirement is not reasonable for Vendor. It is important to note that the more precise the feedback is the more useful and valuable it is to the EUR-document. Preferably, a change-proposal is provided.

Even more important feedback is provided by DIF-label because it indicates that the requirement is not clear to the assessor and thus impossible to assess. In this case guidance is needed from the EUR-organisation.

When compiling the Synthesis Report, the feedback to the EUR document is gathered in a separate document, called Background Report. The Background Report from each Chapter Assessment is the basis for the Feedback Report generated from the project.

4.2.7. Specific Requirements

It is possible to formulate design-specific requirements for the Volume 3 on topics where the guidance provided by the EUR Volume 2 is considered not sufficient. These requirements are mainly for the parts of the design that feature specific design provisions not addressed in the EUR. The Specific Requirements originate either from the Chapter Leader, the CG, the AG or the SC.

4.2.8. References in the Assessment Sheets

In the reference column of the Assessment Sheets it shall be noted what reference Design Description Documents are used for the Requirement Assessment, including the revision number of the document. Since many design documents are long, the section and pages that are used shall be indicated in the Assessment Sheets to provide efficient guidance for readers. The references to be given are Design Description Documents or other formally approved, controlled and archived documents, such as Q&As, follow-up documents, etc. provided by the Vendor. The exception is Vendor's self-assessment which shall not be used as reference, see §2.7.3. Each Assessor's reasoning in the assessment text should be supported by the relevant reference.

It is up to the Chapter Leader to decide exactly how to present references.

4.3. DRAFTING THE SYNTHESIS REPORT

In the Synthesis Report summary of conclusions and highlights of the assessments work is presented. The Synthesis Report is later the basis for Subset X, chapter 2 "Highlights of Compliance Analysis". The Synthesis Report is a self-standing document; it shall be possible to read the Synthesis Report without access to the Analysis of Compliance Report.

At the end of the assessment work, chapters which are divided in two or more parts have only one Synthesis Report, even if the assessment is worked out by different Assessors.

The content of the Synthesis Report is the following:

1. Qualitative Statement
2. Indicative Statistics
3. Main CWO labels
4. Non-compliances



5. Main NAN labels
6. DIF labels
7. HOLD(A) labels
8. References

For detailed instructions, see Appendix 4.

4.4. TECHNICAL SUPPORT FROM VENDOR

4.4.1. General support

Technical support from the Vendor is required during the Compliance Assessments. The reason to request technical support could be to increase the understanding of the design, reach clarification on certain issues or because the information provided is not considered sufficient to perform the assessment.

The request for specific support is initiated either by the Chapter Leader or the PMT and could be provided by the Vendor in meetings, by e-mail communication or by supplying additional documentation. Good practice is that the Vendor assigns one responsible per chapter as Chapter Contact Person, so as to be the Vendor's counterpart for the Chapter Leader. These Chapter Contact Persons are listed in Appendix 8.

When technical support is requested by e-mail, the Vendor shall provide a draft response within ten working days time. When additional documentation is requested, the schedule should be set on a case by case basis.

4.4.2. Questions and Answer Procedure

Technical questions can be asked directly and in an informal matter by the Chapter Leader (or his/her delegated Assessor) to the corresponding Chapter Contact Person (see Appendix 8).

When informal clarification by the Vendor cannot entirely rely on the available DDD, the Chapter Leader formalises his/her question by filling in the Q&A-template, available on the Project Server. For each technical question, a separate Q&A sheet is used. This document is then submitted to the Vendor's Chapter Contact Person.

The Q&A file name shall follow coding according to Appendix 7. The Q&A file name is then put into the reference-column of the Analysis of Compliance Report. It is Chapter Leader's responsibility to maintain numerical order of all Q&As related to the chapter under his responsibility.

Besides submitting the Q&A sheet to the concerned Chapter Contact Person a copy must be sent also to the Chapter Reviewer, PMT and the Vendor's CG representative, informing them about the existence of the new document.

The Chapter Contact Person shall reply within two working days following receipt of the Q&A sheet (taking into account the time lag), either by answering the technical question by e-mail or by proposing a target date for his response.

If the answer by the Chapter Contact Person is satisfactory to the Chapter Leader, the Chapter Leader shall clearly instruct him to copy the answer to the Q&A sheet and the related Q&A is closed.



If the answer by the Vendor's Chapter Contact Person is not satisfactory to the Chapter Leader, the discussion is continued by e-mail exchange and/or direct contact (phone calls or eventually technical meetings). Upon agreement between Assessor and the Chapter Contact Person, a formal answer is prepared by the Vendor and sent for final approval by e-mail to the Assessor. When the Assessor approves the final version of the answer, the answer can be copied to the Q&A sheet to close the Q&A. The Vendor is allowed to create new technical documents if the answer is too extended to fit the format of the Q&A template. Providing a new technical document is even desirable for giving an essential design information, since it can't be provided on a Q&A sheet only. Also name of the new technical document is then put into the reference-column of the Analysis of Compliance Report. However, the principle of Frozen Design (see §2.5) still must be born in mind and the Q&A process cannot invoke design changes.

When the Q&A related to a technical question is closed by copying the agreed answer into the Q&A sheet, the Vendor shall issue a signed version of the Q&A sheet.

It is important to note that the Vendor's response time and quality of answers in the Q&A-process is to a large extent dependent on the effort put in by the Assessor when writing the question.

It is conceivable that for improvement purposes the Vendor would like to update its design documents following Q&A, but during the assessment process, updating of the DDD shall be avoided. The main reason is that it would create a big risk of inconsistency of referenced documents between chapters or parts of chapters (for instance: different revisions of the same document in different chapters). Therefore, any additional information or clarification should be provided by the Vendor as an answer to the question on the Q&A sheet (or in a new technical document), and NOT by updating current technical documents. The Q&A sheet afterwards becomes the official reference, as described above.

If the Q&A process would reveal errors in the design documentation, the concerned document(s) should not be updated, but, for the ease of all subsequent readers during the project, it should be accompanied by an "errata" sheet, preferably included as first page(s) of the pdf file containing the document.

4.5. REVIEW OF THE COMPLIANCE ASSESSMENTS

4.5.1. Review by the Chapter Reviewer

For each Chapter Assessment a Chapter Reviewer is appointed. Before the Chapter Assessment is reviewed by CG, each Chapter Assessment shall be reviewed by the Chapter Reviewer. In order to reach a more efficient time schedule and distribute the Chapter Reviewer's workload, the Chapter Reviewer's work is done continuously during the Chapter Assessment period. This is described by the methodology in Appendix 6 and the chapter-specific time schedule, provided before start of the Chapter Assessment.

During the review, at the minimum the Chapter Reviewer verifies that:

- the reasoning in the column "Compliance assessment" is clear and solid and
- the compliance assessment text is in accordance with the reference documents,
- the instructions in this Project Manual have been followed.

The Chapter Reviewer's review is documented directly in the assessment sheets, using the Word-tool "track changes" and "comment". For details see Appendix 6.



If there are controversial issues, where the Chapter Reviewer and the Chapter Leader cannot agree, these are discussed in the CG meeting.

4.5.2. CG review

Each Analysis of Compliance Report and each Synthesis Report is reviewed by the CG. As the Synthesis Report is drafted after the CG review of the Analysis of Compliance Report is finished, the CG usually reviews the Synthesis Report on a following meeting.

The assessment reports for chapters to be reviewed in CG meetings shall be received by CG at least 2 weeks before the related meeting, so that there is proper time for the internal commenting in the organisations.

CG review of the Analysis of Compliance (AoC) report

The CG member shall have reviewed the AoC prior to the meeting. However, due to time constraints, the CG member is not required to verify that the compliance assessment is in accordance with the reference documents (as this has been done by the Chapter Reviewer).

It is not possible to discuss each and every Requirement Assessment during CG review meetings. The full AoC Report shall be "scrolled through" by the PMT and requirements shall be presented to CG by the Chapter Leader when:

- A) Label is other than COM
- B) Consensus was not reached between Assessor and Chapter Reviewer
- C) There is a need for advice from CG
- D) CG-members want to discuss specific points of the Requirement Assessment for whatever reason

The CG review is done on the Analysis of Compliance Report. The discussions during the meeting shall be tracked directly in the assessment sheet. These additions shall each start with the prefix "CGX:" (X is meeting number), as this is a complement to the MoM. However, the discussion could be recorded only if it really concerns the issue, i.e. side discussions should not be recorded.

CG review of the Synthesis Report (SR)

The CG member shall have reviewed the SR prior to the meeting. The CG review focuses mainly on:

- A) Wording and content of the Qualitative Statement
- B) Selection of main CWOs and their description
- C) Description of NOCs
- D) Selection of main NANs and their description

It is not necessary to review DIF and HOLD(A) labels since they were already reviewed during review of the AoC report. The CG review is done on the Synthesis Report either by changing the text in track-changes mode or using Word comment tool.

4.5.3. AG review

The Analysis of Compliance Reports and the Synthesis Reports, updated after the CG review (see Appendix 6), shall be sent to the AG members at least 2 weeks before the



relevant AG meeting. The documents should be clean from “track-changes” marks to the extent possible. The documents are distributed to AG by PMT via the EUR Secretariat.

The AG-review is performed primarily on the Synthesis Report and also on the Analysis of Compliance Report, if necessary. The chapter secretary (usually PMT) shall summarise the discussion and report the decisions into the Synthesis Report and the Analysis of Compliance report. The introduced text shall be identified with the prefix “AGXXX:” (XXX represents meeting number). This simplifies the preparations, the editing work and the work to prepare the next draft.

During the AG review meetings, emphasis should be put on the more controversial issues of the assessment. Detailed discussions of some other issues are, however, possible. Basically, only Requirement Assessments that fall within any of the points below are reviewed:

- A) Requirements with the labels main CWO, NOC, main NAN, DIF and HOLD(A), as recorded in the Synthesis Report,
- B) Qualitative statement in the Synthesis Report,
- C) Requirements where consensus was not reached in CG,
- D) Requirements related to unique features of the design or where the compliance assessment is considered controversial,
- E) Any other requirements that individual AG-members want to discuss.

The PMT, the Chapter Leaders and the Vendor’s representative of the CG participate in the AG reviews. The topics for review are presented by the Chapter Leader or the PMT. As mentioned earlier, it could be acceptable for the CG representative of the same EUR utility to represent the Chapter Leader.

Administration Group should try to find consensus on the controversial issues. If the consensus is not found, SC takes the final position on the issue. The updated SR (and when applicable AoC) based on the AG review shall be sent by PMT to CG as soon as possible after the AG meeting.

Items that cannot be closed in AG, apart from the above mentioned that is passed on to SC, are tracked in a list of open items by PMT. The items are split into two: critical items and non-critical items. Critical items are returned to next AG with a suggestion how to close them. Non-critical items are conditionally closed in AG, it is therefore sufficient with PMT-approval.

Chapters are closed by AG (conditional or final after those fundamental ones are agreed. If no consensus, go to SC).

What is put in the Synthesis Report could be public, which must be kept in mind during the review.

4.5.4. SC review

Analysis of Compliance Reports and the Synthesis Reports updated after the AG review (see Appendix 6) are sent to SC for review and final approval at least two weeks prior to the relevant SC meeting. During the review meeting a PowerPoint presentation prepared by PMT shall be used to speed up the review.

In general, one larger chapter should not take more than 1.5 hours in SC, so during the review, the emphasis should be put on high-level issues listed in the Synthesis Report. As a rule, SC shall only handle all NOCs, main CWOs and items where consensus was not



found in AG. The PMT shall also inform the SC of issues which involved large technical discussion, regardless of the outcome.

If needed, the documents are updated according to the comments by the SC and approved during the following SC meeting. The documents are distributed to SC by PMT via the EUR Secretariat.

5. FINALISATION PHASE

The finalisation phase of the project refers to the activities necessary to generate the Volume 3 subset "X" "[project] Project" and to close the project. The phase starts when the first activity starts, i.e. the finalisation phase starts before the assessment phase has finished, and finishes upon closure of the project.

5.1. DELIVERABLES

The main deliverable from the finalisation phase is a printed and distributed version of the Volume 3 subset "X" "[project] Project". The document consists of the following chapters:

- Chapter 0 "Introduction to the Subset"
- Chapter 1 "Plant Description"
- Chapter 2 "Highlights of the Compliance Analysis"
- Chapter 3 "Specific Requirements"

5.2. FINALISATION WORK BREAKDOWN

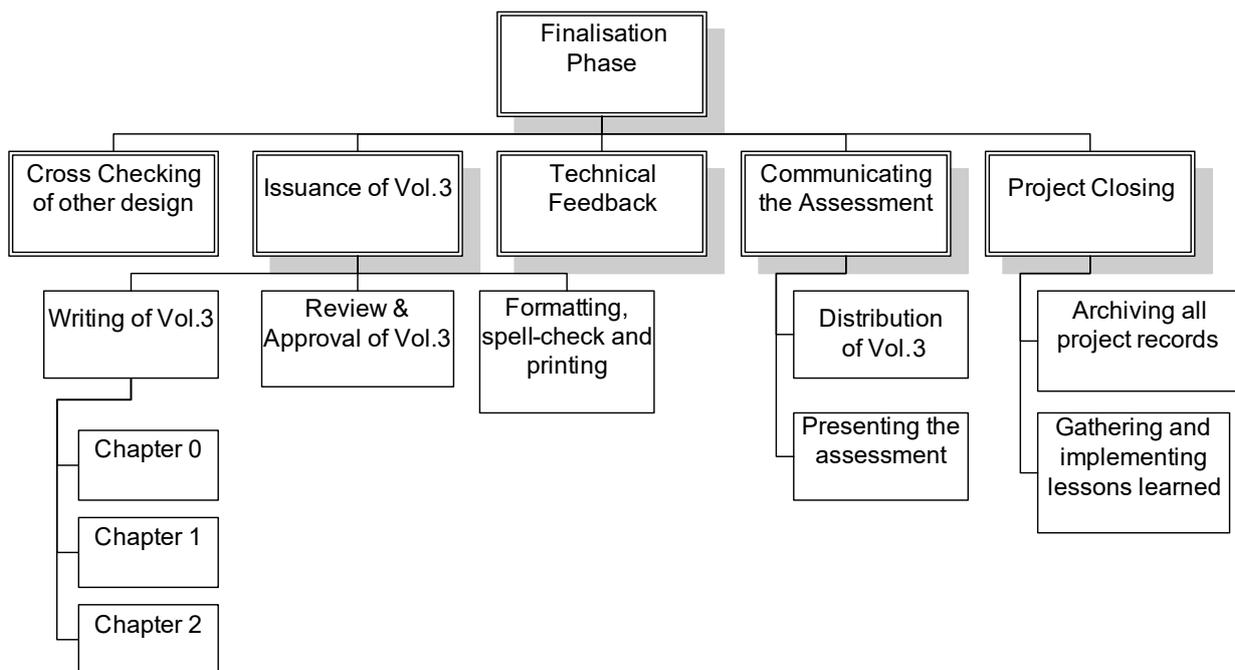


Figure 1, Work breakdown structure of the scope of the finalisation phase.



5.3. DESCRIPTION OF ACTIVITIES AND RESPONSIBILITIES

PMT is responsible for managing and performing all activities if nothing else is stated in this section.

5.3.1. Drafting Chapter 0 "Introduction to the Subset"

Chapters 3X.0 "Introduction to the [project] Subset" is a short introduction to the subset X. Most of the content is generic and can be copied from previous subsets. The chapter is drafted by PMT.

5.3.2. Drafting Chapter 1 "Plant Description"

Chapter 1 contains a technical description of the Vendor's design and it is written by the Vendor and reviewed by the EUR. It is a technical document which usually contains around 300 pages. PMT shall send a short paper with table of content from previous assessments and complementary instructions to the Vendor.

The vendor is completely responsible for the content of this chapter. This document is marked by the Vendor's logo and logo of the EUR. The language of this chapter shall be as neutral as possible, any formulations leading to promotion of the [project] design shall be avoided. Both CG and AG shall review the chapter. Finally, it shall be approved by the SC.

5.3.3. Drafting Chapter 2 "Highlights of Compliance Analysis"

The purpose of Chapter 3X.2 is to present a clear and comprehensible summary of the Compliance Assessment. Chapter 3X.2 "Highlights of the compliance analysis" is basically condensed versions of the 20 Synthesis Reports generated during the assessment, together with a description of the specific conditions and circumstances of the assessment project. This chapter is the main output from the assessment work; it is drafted by PMT with support of CG and available to all EUR members and the Vendor. Unlike the Synthesis Report, DIF and HOLD(A) labels are not presented in chapter 3X.2.

Based on previous Volume 3-subsets, the following table of content structure is proposed:

1. 3X.2 1. Introduction
2. 3X.2 2. EUR assessment of the [project] standard design
 - 2.1 Organisation
 - 2.2 Assessment process
 - 2.3 [project] standard design references
3. 3X.2 3 Highlights of the compliance analysis
 - 3.1 General observations
 - 3.2 Main items addressed as compliance with the objective (CWO)
 - 3.3 Items addressed as non-compliances (NOC)
 - 3.5 Main items addressed as not assessable today (NAN)
4. 3X.2 4. Extracts from the synthesis reports
 - 4.1 Chapter 2.1
 - 4.2 Chapter 2.2



4.3 Etc.

5. Appendix A: List of references
6. Appendix B: Table with information that is demanded by the EUR requirements, see below

Section 3X.2.3 shall be sorted on topic/issue. Modifications to the "Highlights of compliance analysis" shall not by default generate a modification to the Analysis of Compliance Reports. These reports have already been approved by SC at the time of compiling chapter 2. Such modifications would be time consuming without much added value.

Appendix A to Chapter 2 contains list of references for each chapter. For some assessments this would result in very long reference lists, maybe constituting half of the chapter. Alternative solution could be to put all references in one list for all chapters.

Appendix B to Chapter 2 concerns EUR Volume 2 sections making references into Volume 3 such as for example 2.9.4.3.A2, stating "A more comprehensive list of Safety Functions* related to Containment System* will be developed in Volume 3 for each plant design." This means that the design solution concerned must be presented in the Volume 3, Chapter 1 (Plant Description). The Appendix B to Chapter 2 consists of table, as an overview, containing the EUR section referring to Volume 3 and relevant reference into Volume 3, Chapter 1 (Plant Description).

5.3.4. Drafting Chapter 3 "Specific Requirements"

The Chapter 3 "specific requirements" is usually empty. It exists as an alternative approach for very (on conceptual level) unique design features, for which the current EUR do not have detailed requirements, allowing to perform an assessment in another way. The possibility to draft specific requirements shall be discussed by the CG.

5.3.5. Review of Volume 3

Review of Volume 3 is done in the following steps:

- 1) CG-Review, a meeting may be needed to review the document
- 2) Send out the subset to all stakeholders for consideration
- 3) AG-Review meeting to review the document
- 4) SC-Review meeting to review the document, including approval
- 5) Final CG-check of Volume 3 before printing

First the documents are iterated within CG. After that the documents are reviewed and approved by AG. AG comments are taken into account and updated versions are sent to SC for approval.

Before printing the Volume 3-document a final check must be done to verify the correctness of the document.

5.3.6. Consistency checking

Consistency with previous design assessment(s) is checked after the last SC review of the Assessment phase.

This consistency checking is performed by the PMT by comparing the NOC and CWO mentioned in the "Highlights of the compliance analysis" part of Chapter 2 of Volume 3 with those in the homologous part of the previous subset(s) and vice-versa. Controversial



issues from the ongoing project can be added to the selection of issues on the request of any CG or AG member, even when not labelled NOC or CWO.

This exercise is performed by the PMT, if possible with help from other CG members, and is presented in full detail to the AG for review. Because results from previous assessments are discussed, the review by the AG of the consistency checking is held without the presence of the Vendor.

If result-labels are changed during the AG meeting in which the consistency checking is reviewed, the PMT shall implement these changes in the Analysis of Compliance Reports and Synthesis Reports. These changes should be communicated to the Vendor by PMT.

5.3.7. Formatting, spell-check and printing of Volume 3

This includes editorial tasks such as English language check and formatting, i.e. transforming the drafted Volume 3 documents to the correct Volume 3-format. The printing of Volume 3 includes printing of Volume 3, issuance of CD-ROM and checking that the links are correct in the digital format. The responsibility of the activities during this phase is divided between the PMT and the EUR-secretariat.

Responsibility for formatting, spell-check and printing is discussed case by case.

5.3.8. Issuing of EUR certificate

After text of Volume 3 is finalised, the EUR secretariat will issue the certificate for the Vendor.

5.3.9. Distribution of Volume 3

Distributing the Volume 3 is under the responsibility of the EUR Secretariat.

The Volume 3 can be distributed outside EUR, upon request from a stakeholder and subsequent approval by the Vendor. This could have an impact on the content from a confidentiality point of view.

5.3.10. Presenting the assessment

The assessment can be presented both externally and internally within the EUR. Historically the EUR has taken the opportunity to present the results of the assessment during an international nuclear seminar or a similar event. This has to be agreed by the Vendor and the Steering Committee and should be in accordance with the EUR communication plan.

5.3.11. Background Report

Technical feedback of the EUR-document from the project work has been gathered throughout the project, mainly via the HOLD- and DIF-labels from the Analysis of Compliance Reports, but also additional reflections from the project participants. At the end of each Chapter Assessments, these are compiled in a general technical feedback report (Background Report) for the purpose of submitting input to future updates of the EUR-document.

The work to gather the technical feedback from one Chapter Assessment is done by PMT. All feedback should be put in the document. It is also possible for any project participant to add feedback items to the document.



5.3.12. Gathering and implementing lessons learned

The PMT shall ask for feedback from all project participants and the AG. These lessons learned shall be assessed and documented. The relevant lessons learned shall be implemented by updating documents of use for future EUR-assessment projects, i.e. the General Assessment Principles, the Standard Project Manual, templates, etc.

5.3.13. Archiving all project records

The PMT shall make sure that all project records are archived properly. This comprises the following documents:

- All final Analysis of Compliance Reports and Synthesis Reports updated after AG and SC meetings
- All formal project documents, such as Project Manual, memos
- This doesn't include any design documentation from the vendor.

Archiving is done by handing over these documents to the EUR-secretariat.

5.3.14. Closing seminar

A closing seminar can be organised by the Vendor close to the end of the finalisation phase. The seminar aims at summarising the project progress and highlighting the main technical findings by the EUR organisation and at providing feedback by the Vendor towards the EUR. It is recognised that this feedback is valuable for both the EUR and the Vendor.

The seminar should not take more than one day. To limit necessity for extra traveling, it is advantageous to connect this event with e.g. the last CG meeting or with the AG or SC meeting dedicated to Approval of Volume 3.

The closing seminar is not mandatory, the decision to organise the event is left to Vendor's discretion.

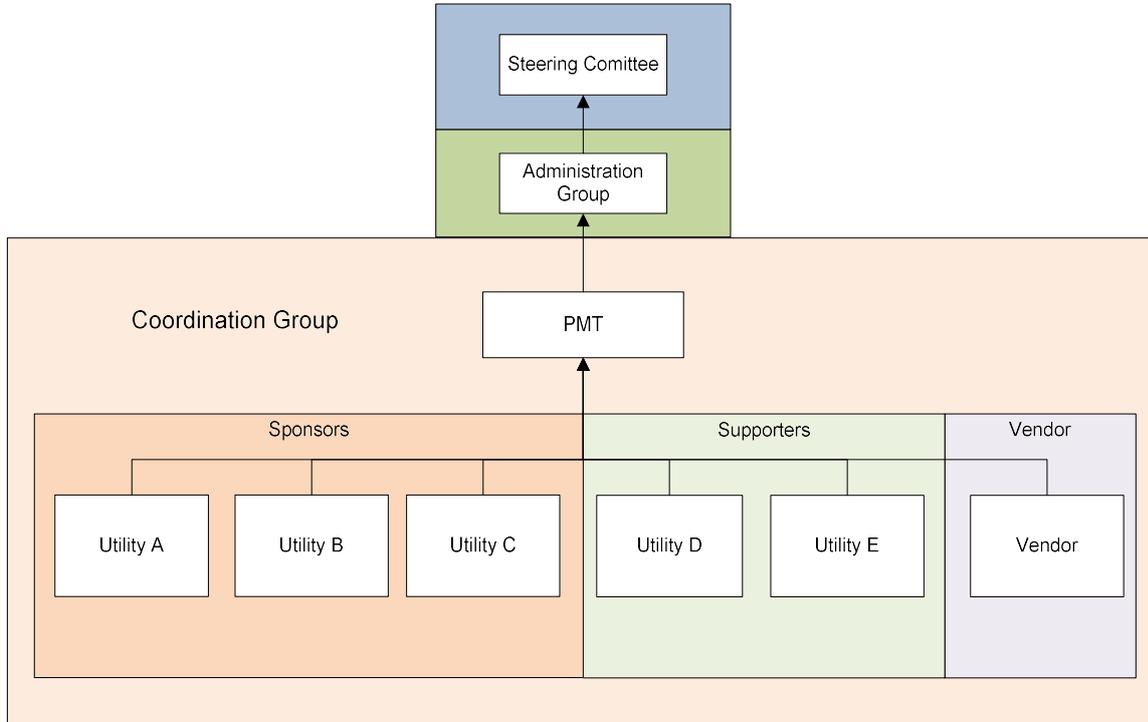
5.4. WORKING PLAN

5.4.1. General time schedule

The overview time schedule of the finalisation phase shall be defined approximately 6 months before the end of the project. The schedule shall include duration of activities, meetings, and milestones.



APPENDIX 1. Project organisation and contact persons



CG-members:

SPONSORS

Utility	Contact person	e-mail
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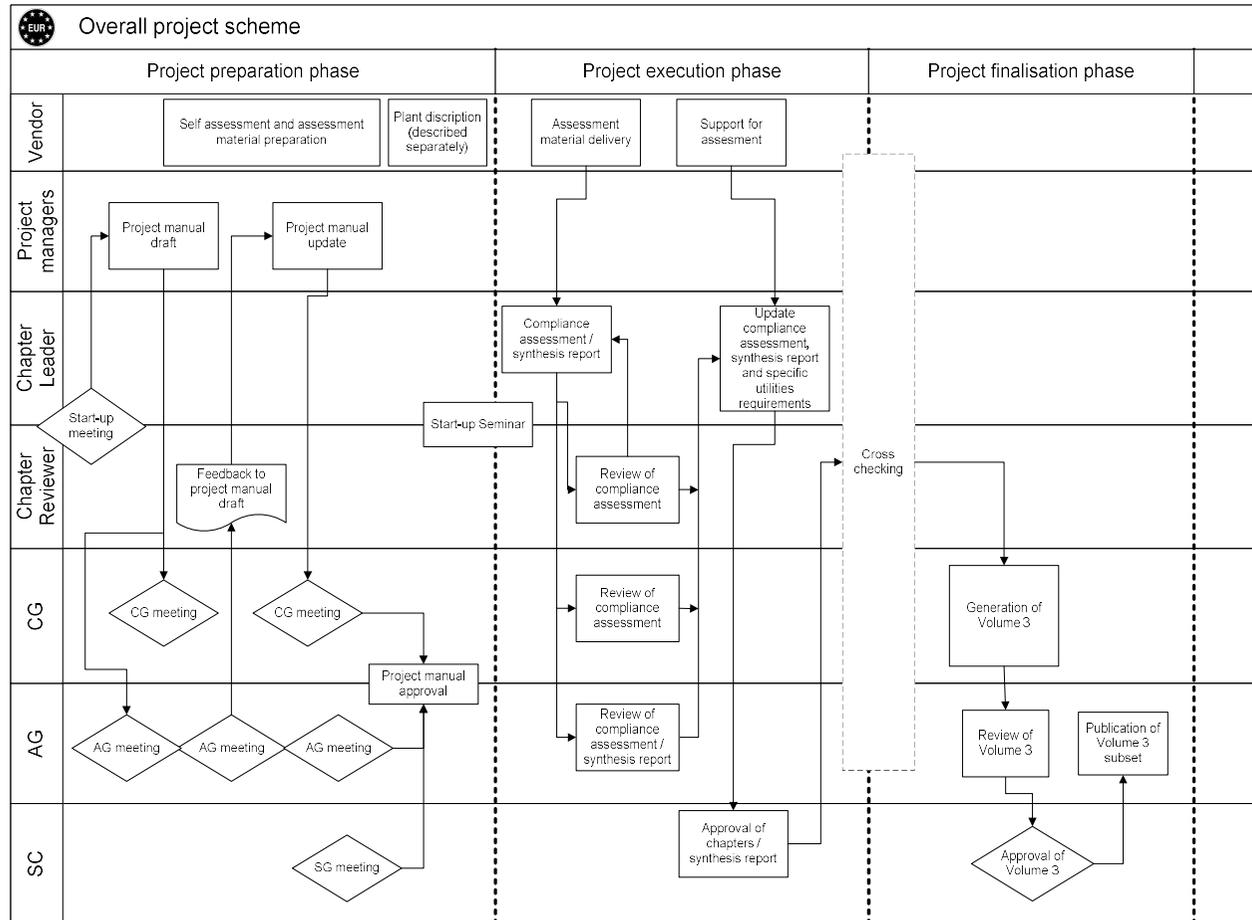
SUPPORTERS

Utility	Contact person	e-mail
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VENDOR	Contact person	e-mail
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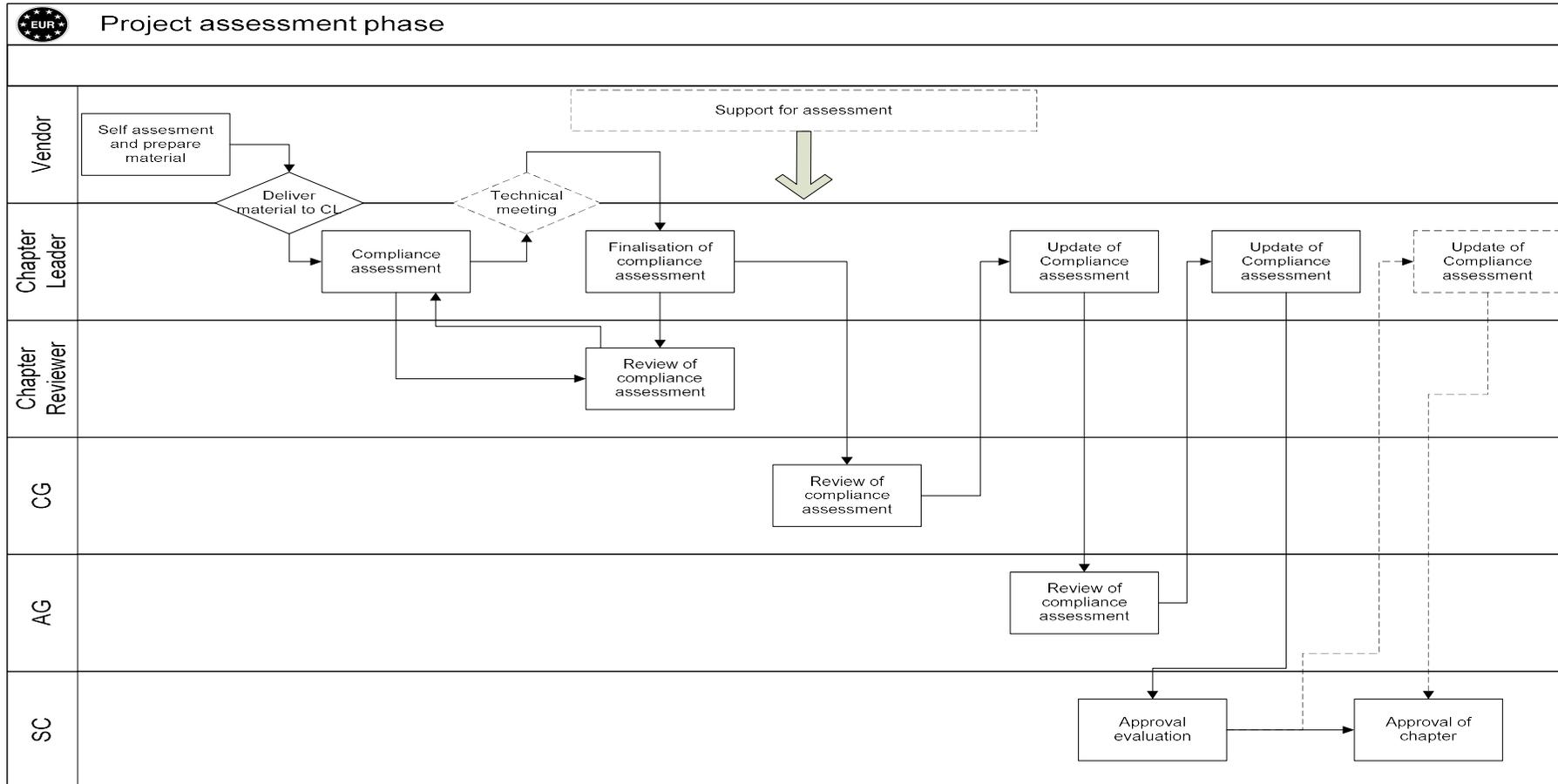


APPENDIX 2. Overall project scheme





APPENDIX 3. Project assessment phase





APPENDIX 4. Detailed instructions to the drafting of Synthesis Report

Qualitative Statement

In the section "Qualitative Statement" the Chapter Leader should present the general conclusions and main findings, together with describing features in the design and the documentation with impact on the assessment of this chapter.

The Chapter Leader has to be very careful when emphasizing the strengths and good points of the assessed design. If technical specificities may be pointed out, any promotion of the assessed design should be forbidden, so for example the use of statements like "efficient" judgements should be avoided.

Indicative Statistics

The indicative statistics is basically a table that summarises the labels in the result-column from assessment.

In a table, the statistical distribution of the labels is presented as percentages of the total sum of labels COM, CWO, NOC and NAN, because requirements labelled as such are considered within the field of responsibility of the Vendor. Between brackets is presented the percentage of each label compared to the total number of assessed requirements (COM, CWO, NOC and NAN completed by POS and NAP). Requirements which have been labelled (only) SEE, (only) INF or (only) DIF are considered not-assessed, because their assessment is:

- performed in another part of the EUR (SEE); or
- temporarily suspended awaiting extra information (INF); or
- considered impossible because of difficulty in interpreting or understanding them (DIF).

In the Synthesis Report, only the most important CWOs and most representative NANs are presented (labelled "main CWO" & "main NAN"). However, the Synthesis Report contains all the identified NOCs, DIFs and HOLD(A) labels.

Each of these NOC, main CWO, main NAN, DIF and HOLD(A) labelled requirements is presented with:

- a headline representative for the topic,
- EUR section number and requirement name,
- EUR requirement text,
- a concise rationale from the assessment, that provides sufficient and self-standing description for the reader.

If the same labels (either CWOs, NOCs or NANs) arise from the same topic, these are gathered under the same headline. The headline is introduced both to put the requirement in a context and to show the cases when many labels arise from the same topic.

With regard to NOCs, the severity of NOCs shall not be described, since that easily is subjective speculating, which is not appropriate in this rather sensitive section. Each EUR member may have its own point of view regarding each requirement.

List of references

In the Synthesis Report the complete reference list (including Q&As) shall be presented with the revision number of the document included.



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APPENDIX 5. Assessment Phase Overview Time Schedule

The assessment phase time schedule is updated on a regular basis and therefore is not part of this Project Manual. It is available as a separate file.



APPENDIX 6. Assessment Methodology

<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
1 Start-up of a Chapter Assessment					
1.1	Prepare the Assessment Sheets	Download the required Assessment Sheets from the Project Server and split it into parts according to Appendix 9.	<i>Chapter Leader</i>		Larger chapters are split in several parts. This split is defined in Appendix 9.
1.2	Plan the assessment work	<p>In order to meet the fixed CG review date for the Chapter, the Chapter Leader should agree with the Chapter Reviewer on a planning for issuing the different drafts (1 to 4, see following steps). Draft 4 of Analysis of Compliance Report(s) should be issued at latest two weeks before the CG review.</p> <p>The Chapter Leader should notify the PMT if the two review iterations are not feasible in due time before the CG review date.</p>	<i>Chapter Leader</i> <i>Chapter Reviewer</i>	E-mail to PMT on agreed dates for issuing drafts 1 to 4 of the Analysis of Compliance Report(s)	Chapter Leader's and Chapter Reviewer's responsibilities are defined in §3.4.2.2 and §3.4.2.3.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsibility</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2 Performing the technical assessment (issuing the Analysis of Compliance Report)					
2.1	Study the EUR requirement	Read and understand the EUR requirement.	<i>Assessor</i>		Assessment instructions are provided in chapter 4.
2.2	Analyse the Vendor's design documentation	<p>Perform a thorough analysis of the design documentation to evaluate the compliance of the design towards the EUR requirement.</p> <p>The assessment is the Assessor's responsibility, i.e. the Assessor shall take ownership of the rationale in compliance assessment column, even if the wording from the Vendor's self-assessment is copied.</p>	<i>Assessor</i>		<p>The Vendor's self-assessment is used to find the relevant design description.</p> <p>Documents that are referred to very frequently in the Vendor's self-assessment are preferably read entirely.</p>
2.3	Request Technical Support from the Vendor, if necessary	When necessary, the Vendor is available to provide technical support, see §4.4.	<i>Chapter Leader</i>		<p>Also the Chapter Reviewer and PMT shall be informed of and invited to these activities.</p> <p>Any technical exchange of common interest should be circulated to the CG.</p>



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2.4	Determine the compliance result	In the assessment sheets, column "Result", write the label (COM, CWO, NOC, NAP, NAN, POS, SEE, HOLD, DIF or INF), together with the rationale in column "Compliance assessment". See §4.2.	<i>Assessor</i>		
2.5	First draft of the Analysis of Compliance Report	Prepare the first draft of the Analysis of Compliance Report; either of the whole chapter (smaller chapters), or of part X of the chapter (larger chapters). Upload it on the Project Server and notify the Chapter Reviewer and the PMT.	<i>Chapter Leader</i>	Draft 1 of the Analysis of Compliance Report (full chapter or part X)	Delivery deadlines are specified in the time schedule. See step 1.2.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2.6	Review the first draft of the Analysis of Compliance Report	<p>The Chapter Reviewer performs a review of the Analysis of Compliance Report and returns the review results (commented report) to the Chapter Leader by uploading it on the Project Server and notifying Chapter Leader and PMT.</p> <p>See §4.5.1 for guidance of the Chapter Reviewer's review.</p>	<i>Chapter Reviewer</i>	Draft 2 of the Analysis of Compliance Report (full chapter or part X)	The Chapter Reviewer's review is documented directly in the assessment sheets, using the Word-tool "comment". "Track changes" are preferably used only in the Assessor's text for correcting spelling mistakes.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2.7	Update of the Analysis of Compliance Report, after the first review	The Assessor performs the necessary updates, taking the review into consideration. The Chapter Leader uploads the updated draft to the Project Server and notifies the Chapter Reviewer and the PMT by e-mail.	<i>Assessor Chapter Leader</i>	Draft 3 of the Analysis of Compliance Report (full chapter or part X)	Assessor either agrees or disagrees with each of the Reviewer's comments and text proposals, i.e.: -he/she agrees with the Reviewer's comment or text proposal, modifying the assessment accordingly, or -he/she disagrees with the comment or ignore the text proposal and justifies the decision using the Word's "comment"-tool. The Assessor never deletes Reviewer's comments.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2.8	Acceptance review of the Analysis of Compliance Report	<p>The Chapter Reviewer checks if his/her comments and text proposals are taken into account correctly. If the Chapter Reviewer accepts the modifications or responses from the Assessors, he/she deletes the comment and accepts the text written in "Track changes" mode.</p> <p>If the Chapter Reviewer disapproves the modification, the comment is passed on to draft 4 of the document.</p> <p>The Chapter Reviewer uploads the updated draft to the Project Server and notifies the Chapter Leader and the PMT by e-mail.</p>	<i>Chapter Reviewer</i>	Draft 4 of the Analysis of Compliance Report (full chapter or part X)	<p>This means a deleted comment or accepted text by the Chapter Reviewer is equal with an acceptance of the assessment.</p> <p>In case the Chapter Reviewer and the Assessor have different positions for any assessment result, the topic should be presented and discussed during the review in the CG meeting.</p> <p>Also, if there are controversial issues, these are discussed in the CG meeting.</p>



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
2.9	Late arrival of information (response to INF)	<p>When information (in response to INF) arrives after draft 4 of the Analysis of Compliance Report is prepared but sufficiently in time to assess related requirements, the requirements concerned should be reviewed by the Chapter Reviewer at least one time.</p> <p>The Chapter Leader and Chapter Reviewer upload the updated drafts to the Project Server and notifies each other and the PMT by e-mail.</p>	<i>Chapter Leader & Chapter Reviewer</i>	Draft 5&6 of the Analysis of Compliance Report (full chapter or part X)	
3 CG review meeting and issuing the Synthesis Report					
3.1	Preparatory review	Before the review meeting, each CG representative reviews the chapters that will be reviewed during the CG meeting.	<i>CG representative</i>		See section §4.5.2.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
3.2	Present the assessment	Present the Analysis of Compliance Report(s) during the CG review meeting.	<i>Chapter leader</i>		Before the requirement-by-requirement review of a chapter, the Chapter Leader briefly presents the main features of the design, together with the main issues, relevant to the concerned chapter.
3.4	Review the assessment	The full chapter or its part X is reviewed by CG during the meeting. See section §4.5.2.	<i>CG PMT</i>	Analysis of Compliance Report (full chapter or part X), draft Y (update during the CG-meeting)	The goal is to find consensus on the controversial issues and provide clear instructions for the Chapter Leader to update the assessment and write the Synthesis Report. PMT is responsible for writing the review comments in the AoC, see §4.5.2
3.5	Distribute the Analysis of Compliance Report	Distribution to CG, Chapter Leader, Chapter Reviewer and Vendor by uploading it to Project Server.	<i>PMT</i>		The CG comments may ask the Vendor for additional information. It should be provided as soon as possible after the meeting.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
3.6	Update the Analysis of Compliance Report	Update the assessment with consideration of the CG review and additional information from the Vendor, if applicable. Upload it on the Project Server and notify the Chapter Reviewer and the PMT.	<i>Chapter Leader</i>	Analysis of Compliance Report (full chapter or part X), draft Y+1	If the assessment by the Chapter Leader and review by CG diverge, decisions taken by CG shall apply.
3.7	Review the assessment	Review of the updated assessment by the Chapter Reviewer	<i>Chapter Reviewer</i>	Analysis of Compliance Report (full chapter or part X), draft Y+2	
3.8	Issue the Synthesis Report	When (all parts of) a chapter has (have) been reviewed by the CG and updated by the Chapter Leader the Synthesis Report is written. Upload it on the Project Server and notify the Chapter Reviewer and the PMT.	<i>Chapter Leader</i>	Synthesis Report, Draft 1	A template for the Synthesis Report is made available on the Project Server. Instruction is provided in Appendix 4.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
3.9	Review the Synthesis Report	The Chapter Reviewer performs a review of the Synthesis Report and returns the review results (commented report) to the Chapter Leader by uploading it on the Project Server and notifying Chapter Leader and PMT.	<i>Chapter Reviewer</i>	Synthesis Report, Draft 2	The reviewer will add corrections, additions and proposals for modification as Word-“comments” or “Track changes” text. The CG will review draft 2 of the Synthesis Report in a following CG meeting
3.10	CG review of Synthesis Report	The Synthesis Report is reviewed by CG during the meeting.	<i>CG PMT</i>	Synthesis Report, Draft 3	Depending on the amount of proposed modifications, the Chapter Leader might be urged to update the report subsequently. However, this report is only the basis for the final Volume 3 texts to be made by the CG (= opportunity to make further editorial changes) PMT is responsible for writing the review comments and modifying the text of the Synthesis Report



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
3.11	Distribute the Synthesis Report	Distribution to CG, Chapter Leader and Chapter Reviewer by uploading it to Project Server.	<i>PMT</i>		
3.12	Update the Synthesis Report	Update the Synthesis Report with consideration of the CG review and notify PMT.	<i>Chapter Leader</i>	Synthesis Report, Draft 4	Decisions taken by CG shall apply.
4 AG and SC review of the Chapter Assessment (steps 4.1 - 4.5 are the same for AG and SC review)					
4.1	Assessment Reports distribution	PMT verifies that the Analysis of Compliance Report(s) and Synthesis Report are in correct condition from an editorial point of view and distributes them to the relevant meeting group (AG or SC) via the EUR Secretariat.	<i>PMT</i>	Update (next draft(s)) of Analysis of Compliance Report(s) and Synthesis Report	
4.2	Preparatory review	Before the review meeting, each AG/SC representative reviews the chapters that will be reviewed during the AG/SC meeting.	<i>AG/SC</i>		The requirements on representatives in AG and SC and the review done by AG and SC are defined in the Project Manual, §3.4.2.6, §3.4.2.7, §4.5.3 and §4.5.4.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
4.3	Present the Chapter Assessment	<p>During the AG review meeting, Chapter Leader (or CG-representative) presents the Synthesis Report and selected parts of the Analysis of Compliance Report(s).</p> <p>During the SC review meeting, PMT presents slides indicating only the most remarkable issues.</p>	<i>CG-representative or Chapter Leader / PMT</i>		In the AG/SC-review, emphasis should be put on controversial issues, unique features of the plant design, unsolved issues from the CG review and other labels than "COM". See also §4.5.3 and §4.5.4.
4.4	Review the Chapter Assessment	<p>The presented topics are reviewed during the meeting.</p> <p>The outcome of the review by the AG/SC is documented on the Analysis of Compliance Report(s) and Synthesis Report directly during the AG/SC meetings.</p> <p>Upload them on the Project Server and notify the Chapter Leader.</p>	<i>PMT AG/SC</i>	Update (next draft(s)) of Analysis of Compliance Report(s) and Synthesis Report	<p>All changed labels and issues where consensus is not reached are listed in the MoM.</p> <p>If consensus could not be reached during SC review, a plan to reach consensus must be established during the same SC meeting.</p>



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
4.5	Update the Analysis of Compliance Report(s) and Synthesis Report	Update the Analysis of Compliance Report(s) and Synthesis Report with consideration to the AG/SC review. Upload it on the Project Server and notify the PMT.	<i>Chapter Leader</i>	Update (next draft(s)) of Analysis of Compliance Report(s) and Synthesis Report	
5 After SC review meeting and consistency checking					
5.1	Final review of Analysis of Compliance Report(s) and Synthesis Report by SC	If updates are required following the SC meeting, after Chapter Leader updates the Reports (see step 4.5), PMT distributes them to SC via the EUR Secretariat for additional review.	<i>PMT</i>		This step is necessary only in case of the still open major issues from the previous step.



<i>Id.</i>	<i>Task</i>	<i>Task Description</i>	<i>Task Responsible</i>	<i>Output document (See also Appendix 7)</i>	<i>Comment</i>
5.2	Consistency checking	<p>The objective is to check the highlighted NOC and CWO issues (and any controversial issues) from the assessment versus the corresponding labelling in previous assessments and vice versa.</p> <p>The consistency checking has to be fully reviewed by the AG. SC needs to approve the (eventual) subsequent label changes. All changes of assessment will be communicated to the Vendor by PMT.</p>	<i>PMT, AG, SC</i>	Analysis of Compliance Report(s) and Synthesis Reports (final approved version)	See §5.3.6
5.3	Distribute the final Analysis of Compliance Reports(s) and Synthesis Reports	Distribute the final report to CG, AG and SC, upload them on the Project Server.	<i>PMT</i>		PMT will administrate the distribution to AG and SC.



APPENDIX 7. Document Names and Coding.

Document Name	Document Code	Comment	Distribution to
Analysis of Compliance Report	[project] _AoC_2XX_dX Or [project] _AoC_2XX_pX_dX (for chapters split up in parts)	Assessment Sheet available on Project Server	Follow the methodology.
Synthesis Report	[project] _Syn_2XX_dX	Template available on Project Server	Reviewer and PMT
MoM	[project] _MoM_Meeting description_dX	For CG meetings, the meeting number should be mentioned in the description.	Depending on the meeting. Minimum meeting participants and PMT.
Agenda proposal	[project] _Agenda_Meeting description_dX	For CG meetings, the meeting number should be mentioned in the description.	Depending on the meeting. Minimum meeting participants and PMT.
Questions and Answers	[project] _2XX_QAX_dX Or [project] _2XX_pX_QAX_dX (for chapters split up in parts)	2XX refers to chapter number. QAX refers to Q&A number. The Chapter Leader is responsible for maintaining correct numbering of Q&A files.	The Vendor, Reviewer and PMT.
Project Memo	[project] _MemoXX_Memo description_dX	Any topic that does not fit to the above documents could be described in a project memo	Individual for each Project Memo
Technical Feedback/ Background Report	[project] _Background_Report_2XX_dX	2XX refers to chapter number.	PMT, who distributes it further to EUR.



APPENDIX 8. Lists of Chapter Leaders, Chapter Reviewers and [vendor] Chapter Contact Persons

Chapter Leaders			
Chapter	Name	Company	E-mail address
2.1			
2.2			
2.3			
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Chapter Reviewers			
Chapter	Name	Company	E-mail address
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[vendor] Chapter Contact Persons		
Chapter	Name	E-mail address
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APPENDIX 9. Split of large chapters into parts (can be modified based on actual needs)

2.1 SAFETY REQUIREMENTS pages

2.1 part 1	2.1.1	GENERAL SAFETY REQUIREMENTS	8-17
	2.1.2	DESIGN CONDITIONS	17-41
	2.1.3	QUANTITATIVE SAFETY OBJECTIVES	41-49
2.1 part 2	2.1.4	SAFETY ANALYSIS	50-57
	2.1.5	SAFETY CLASSIFICATION	57-72
	2.1.6	ENGINEERING DESIGN REQUIREMENTS	72-90
2.1 part 3	2.1.7	DESIGN OF SPECIFIC SYSTEMS	91-112
	2.1.8	OTHER CONSIDERATIONS	112-121
	2.1.9	TABLES	122-136
2.1 part 4	2.1 A	SOURCE TERM AND RELEASE QUANTIFICATION METHODOLOGY FOR DESIGN EXTENSION	137-149
	2.1 B	VERIFICATION PROCESS OF THE EUR ENVIRONMENTAL IMPACT TARGETS	150-165

2.4 DESIGN BASIS pages

2.4 part 1	2.4.1	STANDARD SITE DESIGN CONDITIONS	7-28
	2.4.2	PLANT DESIGN LIFETIME	29-32
	2.4.3	DESIGN BASIS PHILOSOPHY	32-33
	2.4.4	COMPONENTS AND SYSTEMS CRITICAL TO PLANT PERFORMANCE	33
2.4 part 2	2.4.5	DESIGN LOADS AND CONDITIONS	33-61
2.4 part 3	2.4.6	SEISMIC DESIGN	62-80
	2.4 A	METHOD OF SEISMIC ANALYSIS	A3-A31
2.4 part 4	2.4.7	DESIGN OF PIPEWORK SYSTEMS	80-87
2.4 part 5	2.4.8	EQUIPMENT QUALIFICATION	87-97



2.7 FUNCTIONAL REQUIREMENTS: COMPONENTS

			pages
2.7 part 1	2.7.1	INTRODUCTION	9-16
	2.7.2	REACTOR COOLANT SYSTEM COMPONENTS	16-26
	2.7.3	VALVES	27-36
	2.7.4	VALVE ACTUATORS	36-40
2.7 part 2	2.7.5	PUMPS	41-53
	2.7.6	HEAT EXCHANGERS	53-57
	2.7.7	TANKS	57-59
	2.7.8	BOLTED JOINTS AND THREADED FASTENERS	60-61
	2.7.9	PIPEWORK AND FITTINGS	62-64
	2.7.10	FILTERS AND ION EXCHANGERS	64-70
	2.7.11	FUEL	70-78
2.7 part 3	2.7.12	ELECTRICAL EQUIPMENT	79-87
	2.7.13	DIESEL GENERATORS AND OTHER POWER SUPPLIES	88-95
	2.7.14	HVAC EQUIPMENT	96-101
	2.7.15	HANDLING EQUIPMENT IN THE NUCLEAR ISLAND	101-108
	2.7.16	HANDLING EQUIPMENT IN THE POWER GENERATION PLANT	108-111

2.8 FUNCTIONAL REQUIREMENTS: SYSTEMS & PROCESSES

			pages
2.8 part 1	2.8.1	INTRODUCTION	11-17
	2.8.2	REQUIREMENTS ON FUNCTIONS	17-49
2.8 part 2	2.8.3	SYSTEM FUNCTIONAL REQUIREMENTS	49
	2.8.3.1	Introduction	49-50
	2.8.3.2	Core and fuel systems	50-51
	2.8.3.3	Reactor coolant systems	51-62
2.8 part 3	2.8.3.4	Engineered safety systems	62-91
	2.8.3.5	Reactor auxiliary systems	91-104
	2.8.3.6	Fuel Storage and Handling Systems (FSHS)	104-107
	2.8.3.7	Electrical power supplies	108-115
	2.8.3.8	Radioactive waste processing systems	115-116
2.8 part 4	2.8.3.9	Heating, ventilation and air conditioning systems (HVAC)	117-122
	2.8.3.10	Plant cooling water systems	123-131
	2.8.3.11	Process radiation monitoring system	132-139
	2.8.3.12	Process Instrumentation and Control functions	139-142
	2.8.3.13	Protection system	143-145
	2.8.3.14	Non-process instrumentation and control functions	146-150
	2.8.4	SYSTEMS ASSOCIATION REQUIREMENTS	150-161



2.9 CONTAINMENT SYSTEM

pages

2.9 part 1	2.9.1	CONTAINMENT SYSTEM SAFETY FUNCTIONS	7-11
	2.9.2	CONTAINMENT SYSTEM PERFORMANCE	11-28
2.9 part 2	2.9.3	STRUCTURAL DESIGN AND VERIFICATIONS	29-72
2.9 part 3	2.9.4	EQUIPMENT AND SYSTEM DESIGN REQUIREMENTS	73-93

2.10 INSTRUMENTATION & CONTROL AND HUMAN-MACHINE INTERFACE

pages

2.10 part 1	2.10.1	General introduction on Instrumentation and Control and HMI	7-11
	2.10.2	Scope	11-12
	2.10.3	Normative references	12-15
	2.10.4	Terms and definitions	16
	2.10.5	Symbols and abbreviations	16
	2.10.6	Overall I&C life cycle	16-63
2.10 part 2	2.10.7	System life cycle	64-117

2.11 LAYOUT

pages

2.11 part 1	2.11.1	GENERAL ARRANGEMENTS AND SITE ASPECTS	5-22
	2.11.2	SAFETY AND HAZARD ASPECTS	23-57
2.11 part 2	2.11.3	EQUIPMENT ARRANGEMENT RULES	57-71
	2.11.4	ROUTING OF SERVICES	71-90
	2.11.5	SITE SUPPORT SYSTEMS	91-92
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