



DELIVERABLE n. 1.2

QUALITY PLAN

DISSEMINATION LEVEL: PUBLIC

Grant Agreement n. 633174 Í 3EMOTIONÎ Collaborative Project

Project Co-Funded by:



Workpackage n. 1.2

Version 1.0

Date of preparation 09/11/15





DOCUMENT CONTROL SHEET

Project	3EMOTION - Environmentally Friendly, Efficient Electric Motion
Grant Agreement n.	633174
Document Title	Deliverable n.1.2: Quality Assurance Plan
Nature	R : Report
Available languages	E : English
Dissemination level	P: Public
Version	n. 1.0 Draft
Date	09/11/15
Number of pages	50
Archive name	D1.2 Quality Plan
Authors	FIT Consulting
Contributors	
Reviewers	Van Hool





TABLE OF CONTENT

EX	ECUTIVE SUMMARY	5
1.	INTRODUCTION	6
Овј	JECTIVES AND SCOPE OF THE DOCUMENT	6
STR	RUCTURE OF THE DELIVERABLE	7
2.	3EMOTION IDENTITY CARD	8
3.	3EMOTION OVERALL QUALITY CONTROL METHODOLOGY	10
3.1	QUALITY CONTROL APPROACH	10
3.2	DECISION MAKING PROCEDURES IN 3EMOTION	11
4.	TECHNICAL & SCIENTIFIC PROJECT OUTPUTS MONITORING	12
4.1	OBJECTIVES FOR THE QUALITY CONTROL OF TECHNICAL AND SCIENTIFIC OUTPUTS	12
4.2.	. QUALITY CONTROL PROCESS STEPS	13
4	4.2.1 Selection of the quality Reviewer	13
4	4.2.2 Document production	14
4	4.2.3 Quality control	16
4	4.2.4 Document release and storage	
4	4.2.5 Quality control form	20
5.	FINANCIAL PROJECT OUTPUTS MONITORING	22
5.1	OBJECTIVES FOR THE QUALITY CONTROL OF FINANCIAL OUTPUTS	22
5.2	QUALITY CONTROL PROCESS STEPS	23
5	5.2.1 Financial Forms production	23
5	5.2.2 Financial monitoring	25
5.3	FINANCIAL CONTINGENCY PLAN	28
5	5.3.1 General approach	28
5	5.3.1 Identification of possible scenarios and specific actions	29
5.4	REPORTING RULES	33
5	5.4.1 Expected actions for non-performing partners	33
6.	PROJECT COHERENCE MONITORING	35
6.1	OBJECTIVES FOR THE COHERENCE ANALYSIS	35
6.2	COHERENCE ANALYSIS PROCESS STEPS	35
6	6.2.1 Coherence analysis control	36
6	6.2.2 Document release and storage	38





7.	PROJECT REPORTS AND DELIVERABLES	39
7.1	LIST OF 3EMOTION TECHNICAL-SCIENTIFIC OUTPUTS	39
7.2	LIST OF 3EMOTION FINANCIAL OUTPUTS	42
8.	ANNEXES	43
8.1	DELIVERABLE TEMPLATE	43
8.2	QUALITY CONTROL FORM (DELIVERABLE REVIEW)	44
8.3	TIME-SHEET TEMPLATE	45
8.4	DEPRECIATION CRITERIA TEMPLATE	46
8.5	FINANCIAL REPORT TEMPLATE	47
8.6	FORM C TEMPLATE	48
8.7	CERTIFICATE ON FINANCIAL STATEMENT (AUDIT) TEMPLATES	49





EXECUTIVE SUMMARY

This Quality Assurance Plan is a key document for the management of the 3EMOTION Project.

The responsibility for ensuring quality is shared between all of the partners. Quality outcomes are wanted in terms of the efficacy and efficiency of working practices.

The Quality Assurance Plan seeks to establish the procedures and standards to be used in the 3EMOTION project and allocates responsibility for ensuring that these procedures and standards are followed and met.

The Quality Assurance Plan is effective throughout the life cycle of the project but is open to review.

It lays out the activities that will ensure overall quality control is carried out effectively, and quality control mechanisms are adequately planned, and plans are followed, reviewed and updated in light of experience and changing circumstances. This includes the mechanism for proposing and authorizing changes to Workpackages, Deliverables or any other agreed plan.

The Quality Assurance Plan requires that there is evidence of achievement of high quality standards in the final version of every Deliverable and output.





1. Introduction

Objectives and scope of the document

From the outset the 3EMOTION consortia defined as the overall goal for the project the development of high quality products and services (such as reports, events and other services). In order to work towards such goal, two main issues have to be present during its whole duration:

- Technical consistency
- Sound management procedures

For that, it was establish to develop from the early stages of the project a quality assurance plan (in line with the ISO 9001:2008 standards) where the different requirements and criteria are discussed, agreed and implemented. The overall package for that quality assurance plan results from four different, yet integrated, sources:

- Milestone M1.1 Contingency plan, to be submitted by the end of month 3, which will
 identify the main risks associated with the project and establish an action plan for their
 mitigation;
- **Deliverable D1.1 Project handbook**, be submitted by the end of month 2, containing all the contractual documentation (in particular the description of work and consortium agreement that detail the decision making rules and the financial rules) and templates, which was submitted by the project coordinator during the kick-off meeting;
- <u>Deliverable D1.2 Quality Plan</u>, this report, submitted at the end of month 3, establishing the
 criteria and measurement tools for the evaluation of outputs (scientific and financial).
- Deliverable D1.3 Contingency plan for evaluating impact of project objectives & results, to be submitted by the end of month 3, containing the detailed operative plan, describing each WP at task level, specifying clear responsibilities and a Gantt of resources, including as well the key indicators against which will be evaluated the achievements of project objectives;

This document refers to the D1.2 (Quality Plan) report whose objectives are as follows:

- To define a framework for the continuous progress monitoring, from the management perspective;
- To establish a measurable form to evaluate the results (criteria and thresholds) and to apply corrective actions (whenever necessary), both for scientific and financial outputs





To present the quality management procedures in place.

Structure of the deliverable

This report is structured along seven main chapters:

- <u>Chapter 1</u> (current one) provide an overview of the key issues that lead to the development of the quality assurance plan and the structure of the report;
- Chapter 2 presents the project identity card;
- <u>Chapter 3</u> describes the <u>overall methodology</u> applied to the Quality Plan adopted in 3EMOTION project;
- <u>Chapter 4</u> describes the process, including the quality control mechanisms, measurement
 units and thresholds based on which the decision is taken as well as the reporting forms for
 the quality evaluation of project <u>scientific & technical outputs</u>;
- <u>Chapter 5</u> describes the process, including the quality/quantity control mechanisms, measurement units and thresholds based on which the decision is taken as well as the reporting forms for the evaluation of project <u>financial outputs</u>;
- <u>Chapter 6</u> describes the <u>coherence analysis</u> performed between activities done and resources used:
- Chapter 7 highlights the project outputs that will be subject to the quality control process.
- <u>Chapter 8 (Annexes)</u> includes the <u>list of templates</u> and guidelines required to fill in the project reports (deliverable and financial reports)





2. 3EMOTION IDENTITY CARD

Proposal Number: 633174

Call identifier: FCH-JU-2013-2

Topic addressed: SP1-JTI-FCH.2013.1.1 Large-scale demonstration of road vehicles

and refuelling infrastructure VI

Acronym: 3ENOTION

• Title: Environmentally Friendly, Efficient Electric Motion

Funding Scheme: Large-scale Demonstration project

Starting Date: 1st of January 2015

Duration: 60 months

Total EC Funding: 14.999.983 "

• EC Funding Rate: 46,20%-70%, according to activity and partner type

Co-ordinator contact details

Name: Flip Bamelis

Organisation: Van Hool N.V.

• E-mail: <u>flip.bamelis@vanhool.be</u>

• Telephone: +32 476 555509

• Fax: +32 34202268





Contractors

Benef. n°	Beneficiary name	Benef. short name	Country
1	VAN HOOL N.V.	VH	BELGIUM
2	DANTHERM POWER A.S	DANTH	DENMARK
3	AIR LIQUIDE ADVANCED TECHNOLOGIES	ALAT	FRANCE
4	COTRAL SpA	COTRAL	ITALY
5	Communauté Urbaine de Cherbourg	CUC	FRANCE
6	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	CEA	FRANCE
7	REGIONE LAZIO	LAZIO	ITALY
8	Vlaamse Vervoersmaatschappij De Lijn	DE LIJN	BELGIUM
9	Provincie Zuid-Holland	PZH	NETHERLANDS
10	London Bus Service Ltd	LBSL	UK
11	Rotterdamse Elektrische Tram N.V	RET	NETHERLANDS
12	WaterstofNet vzw	WATERSTOFNET	BELGIUM
13	FIT CONSULTING SRL	FIT	ITALY
14	UNIVERSITAqDEGLI STUDI DI ROMA ‰a Sapienza+- CIRPS	CIRPS	ITALY





3. 3EMOTION OVERALL QUALITY CONTROL METHODOLOGY

3.1 Quality control approach

This chapter presents the quality control methodology applied to 3EMOTION project.

According to the DoW, the project quality plan is an on-going activities that start at the very beginning of the project and ends after the last month of the project, integrating the last reporting documents.

Its ultimate objective is to assure a high quality of the 3EMOTION outputs with respect of the EC required standards.

Due to the complexity of the project, the quality control is related to different aspects of the project delivery.

On one side it will assure to each technical and scientific report produced by the project, including both the mandatory reports requested by the EC, such as the progress reports and deliverable, and the internal project documents that will be used for the 3EMOTION knowledge creation and dissemination

On the other side the quality control procedures will be applied, as well, to all the financial reports that each partner will produce. Even in this second domain, the quality control methodology will applied to both the mandatory financial reports requested by the EC (Form C and Audit Certificates) as well as to the internal management financial reports (Financial Report).

The Quality plan methodology will apply different process to these two kind of topic. This differentiation has been applied for several reasons:

- The two domains follow different processes of production:
 - <u>Technical and scientific documents</u> are mainly Demonstration reports of FCBs and HRSs implementation processes. Therefore the review is based on the evaluation of the quality of content and action produced, its coherence with expected scientific project objectives and their technical quality and richness. According to this structure the review is based mainly on content and process evaluation.
 - <u>Financial outputs</u> are mainly fulfilling of existing template. Partners should only fulfil standard templates with actual resources information. According to this structure the review is based mainly on deviation evaluation and justification.
- The two domains require different reviewer selection and evaluation





- Technical and scientific documents require always the selection of an appropriate reviewer according to the topic of the report. 3EMOTION has chosen an internal review process based on the selection of adequate reviewer for each specific document. According to the complexity of the report, one reviewer could be selected for the quality document purpose.
- Financial outputs will be always evaluated by the same staff, managed by FIT and Van Hool. Due to the fact that expected financial reports are expected every 18 months, the financial review process will be done in a standard and agreed way every 6 months, in order to avoid any relevant problem at the time of the formal reporting.

Finally, in order to assure a comprehensive and exhaustive quality control, 3EMOTION has defined a specific methodology to evaluate the coherence between the work performed (directly evaluate within the Technical and scientific outputs methodology) and the resources used to perform such activities (directly evaluate within the Financial outputs methodology).

This evaluation will involve both the financial and administrative manager as well as the technical and scientific coordinator. The main objective of this evaluation process is to demonstrate that the activities performed for a specific activity (already accepted from the technical and scientific side) have used a reasonable amount of financial resources (expected time, expected personnel/effort, and expected financial resources) in line with expectations. as specified into the DoW.

3.2 Decision making procedures in 3EMOTION

Whenever a conflict arise in the peer review process (disagreement regarding the quality of a specific output, between the author and the assigned reviewer), the decision making process follows the approach and the procedures included into the Technical Annex and the Consortium Agreement, here below summarised:

STEP 1: Steering Committee decision

Once this disagreement will occur, the Coordinator will request to the Steering Committee to perform jointly the review of the output. Decisions will be taken by a majority of two-thirds (2/3) of the votes.

STEP 2: General Assembly ratification

The decision taken by the SC will be then ratified/rejected by the formal approval of the General Assembly. Decisions will be taken by a majority of two-thirds (2/3) of the votes.





4. TECHNICAL & SCIENTIFIC PROJECT OUTPUTS MONITORING

As highlighted previously, this chapter aims to establish a framework for the evaluation of 3EMOTION outputs defining the mechanisms, criteria and formats for this evaluation (commonly the quality control procedures) to be applied during the whole project life.

In this chapter the following issues are covered:

- Objectives for the quality control of technical and scientific outputs
- Description of the process;
 - Selection of the quality reviewer;
 - Criteria and evaluation grids;
 - Decision criteria;
- Template for review;
- Quality note.

4.1 Objectives for the quality control of technical and scientific outputs

The development and implementation of a technical and scientific quality control mechanism for a study/project refers to the overall objective of ensuring that all outputs (reports, brochures, web site) fulfil a set of conditions (previously established in an internal consortium document and reflecting the requirements established in the ISO 9001:2008), before its dissemination, particularly in relation to:

- answer to the requirements and objectives;
- technical consistency,
- · respect to the agreed formats;
- clearly presents the results;
- presentation and graphic appearance.

In order to assess the accomplishment of those conditions, all outputs should be subject to a quality review (internal). Such procedure is of utmost importance for the 3EMOTION project given its strong interaction with an enlarged number of stakeholders (as the transport sector, but also the policy and decision makers) whose main interest relies on focused, clear and practical results. This implies





creating the conditions for the translation of highly technical contents into a political and practical language.

It should be noted that such type of quality control is already in place by some of the partners involved in 3EMOTION project, in particular those that are certified by quality management systems, with positive results in terms of the outputs produced. Such process does not invalidate the application of the 3EMOTION quality control.

4.2. Quality control process steps

Quality control process can be divided in four main steps which refer to:

- Designation or <u>selection</u> by the project coordinator of the quality control team for each document, based on its expertise and experience;
- The <u>production</u> by the partners involved of a specific item and which must be done in respect to a set of agreed aspects;
- The <u>quality control</u> performed in accordance to the guidance provided, including the incorporation of corrections or suggestions by the partner responsible for its final production; and,
- The <u>release</u> of the document and its storage in the project repository

Selection of quality Reviewer

Production of the Document

Document quality Review

Document release & storage

4.2.1 Selection of the quality Reviewer

Objective: select the quality reviewer for a 3EMOTION document

Responsibility: Steering Committee

Conditions to fulfil:

- a. per principle the reviewer should not be directly involved in the production of the final document (though it could have provided inputs)
- b. a document classified as restricted should be subject to a revision and quality control by one





3EMOTION partner;

c. a document classified as public should be subject to a revision and quality control by one or two partners.

Description: The project coordinator, with the support of the Steering Committee will jointly select the proper expert reviewer on a document basis or in an aggregate mode (i.e. establish from the outset who will be engaged in the process). From a management perspective the second option is desirable since it enables better time planning.

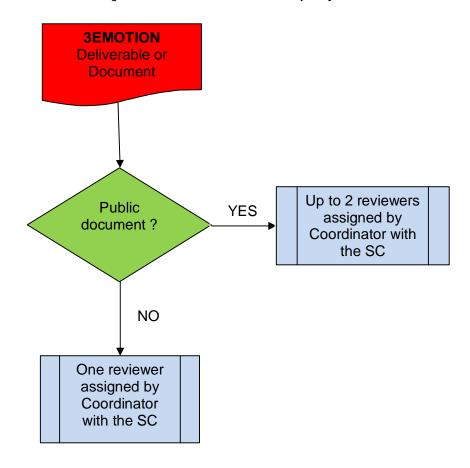


Figure 1 - Process for selection of quality reviewer

4.2.2 Document production

Objective: to produce a high quality 3EMOTION document

Responsibility: Partner with report responsibility and all partners involved

Conditions to fulfil:





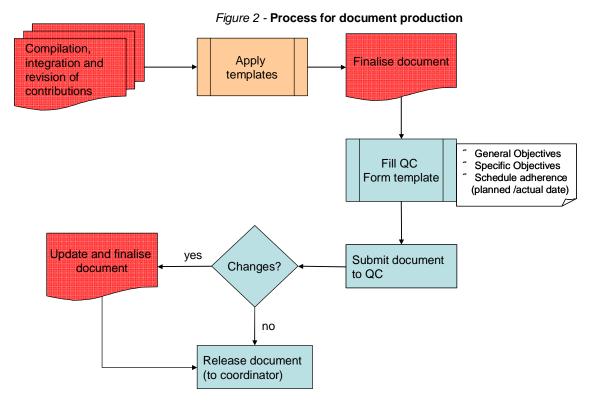
- a. partners involved in the production (the author) should provide the inputs in time and in accordance to the agreed formats;
- b. submission of document for quality control at least <u>3 weeks</u> in advance to the contractual date for EC submission;
- c. quality control form duly filled with the objectives (general and specific) and dates (planned and actual)

Description:

- a. Responsible partner integrates the different inputs received from partners and compile the document. Such process involves the checks for content, coherence, grammar and syntax revisions.
- b. Official template for document production is available on Annex of this report
- c. Responsible partner fill the quality control form with the indication of objectives, requirements (in most of the cases such objectives should correspond to the initial text of the executive summaries) and dates. quality control form is an annex to this report
- d. Responsible partner submits the document and QC form to the coordinator and reviewer and circulate it among all partners
- e. Partner is responsible for the incorporation of changes / suggestions to the document (if any). In case major modifications are suggested, a consensus must be reach between partner, Steering Committee and reviewer.







4.2.3 Quality control

Objective: to define the procedure for quality control of 3EMOTION documents

Responsibility: Quality reviewer, Steering Committee and responsible partner

Conditions to fulfil:

- a. Quality reviewer receives the document to revise and the quality control form duly filled with the requirements and objectives at least 3 weeks prior its official delivery;
- b. Review is done within 1 week;
- c. Decision criteria could be accepted, accepted with minor modifications or rejected (major modifications suggested)

Description:

- a. Reviewer perform the quality control against:
 - I. Stated objectives and requirements . is the document in line and answering to the stated objectives and requirements;
 - II. Logical structure of the document . the organisation of the document follows a logic and coherent structure (objectives, methodologies, results, recommendations);





- III. Clearness of concepts, analysis and results . is the document clear in terms of the explanation of methodologies, procedures, analysis, results and conclusions;
- IV. Language proficiency. English style, easiness (smooth) to read;
- V. Presentation and graphical appearance
- b. Decision criteria (qualitative judgement of the reviewer)
 - For the criteria a. (stated objectives and requirements) classification is yes/no
 - II. For the other criteria, classification is done according to a scale from 1 (very bad) to 5 (excellent)
 - III. A document with a classification of NO in criteria a., is automatically considered as rejected and a new version must be produced;
 - IV. A document having a classification of 1 or 2 in any of the other criteria, is automatically considered as rejected and a new version must be produced;
 - V. A document having all criteria classified as 3 is considered as accepted and suggested modifications should be included
- c. Reviewer could add additional comments and suggestions to the document;
- d. After the quality control, reviewer returns the document (in track changes mode) and the quality control form to the partner responsible for the document and to the coordinator with the final decision. In case of significant changes to the structure and contents, a separate document should be produced;
- e. If decision is accepted or accepted with minor modification, author should produce a final version taking into account such modifications within one week, for its submission to the EC
- f. If decision falls under the rejection (major modifications suggested), a new version is produced (consensus among reviewer, partner and coordinator) and the process restarts;





Document for Answer to objectives and QC requirements Logical structure Quality control Clearness of concepts, analysis and conclusions Language proficiency QC form Presentation Perform QC and fill the form Aceppted or Concertation with Revised doc. for with minor partner and QCmodifications? no coordinator yes Return documents to coordinator and responsible partner

Figure 3 - Process for quality control

4.2.4 Document release and storage

Objective: procedure for the release and storage of 3EMOTION documents

Responsibility: Project Coordinator

Conditions to fulfil:

- a. Coordinator store all final documents produced in the framework of the project within the online repository.
- b. All documents have a registry (document control sheet) with the name and version (e.g. deliverable1_2.doc), this information should be visible on the cover sheet.

Description:

a. All final documents and the supporting material associated (excel, presentations, etc.) are sent by the responsible partner to the coordinator;





b. Coordinator performs a final check and includes a quality note in the document

This document was reviewed by ## in accordance to the 3EMOTION quality assurance plan.

- c. Coordinator submits the document in paper and electronic formats;
- d. Coordinator archives in the project repository according to the classification provided in the document control sheet;
- e. In case of new versions, the repository should be updated.

Submission (paper & electronic)

QC Form

Repository

Figure 4 - Process for release and storage

On-line repository for Technical& scientific documents (including Progress Reports)

The final approved version of the 3EMOTION documents has to be stored into the official repository in the SESAM system within the Participant Portal:

https://ec.europa.eu/research/participants/portal/page/home

Once entered into the participant portal, the partner has to access to the link Scientific Deliverable, clicking the following arrow (at the bottom of the Participant Portal Home page)







This link will open the page:

https://webgate.ec.europa.eu/sesam-fp7/projectHome.do?projectId=633174

Within this page the partner, supported by the coordinator, will be allowed to save one the following documents:



4.2.5 Quality control form

Quality control form is composed of four main blocks.

A snapshot of this template is available below.

The full template is available as annex to this report





	view
ESEMBLE DE LE PROPERTO DE LA PORTE DE LA P	Reviewers Document
1. Document identification	
Delivery n°	
Delivery title	
Original planned date	
Actual planned date Date of draft release	
Date of draft release	
Latest date of review submission	STORY TO THE ASSESSMENT
This review should be send back to	flip.bamelis@vanhool.be
Indicated reviewers	
mulcated reviewers	
1	
1	
2. Reviewers identification	
Reviewing partner	
Name of author	
Review submission date	
3. Reviewers Report	e fields marked in yellow are to be completed
Classification of the document	1 2 3 4 5
1 Answers to objectives and requirements	
2 Logical structure	
3 Clearness of concepts, analysis and conclusions	
4 Language proficiency	
5 Presentation	
Strategary County Co	1: very poor - 5: excellent
Decision	
Accepted with mine	Accepted or modifications cions suggested)
Rejected (major modificat	





5. FINANCIAL PROJECT OUTPUTS MONITORING

As highlighted previously, this chapter aims to establish a framework for the evaluation of 3EMOTION financial outputs defining the mechanisms and criteria for this evaluation to be applied during the whole project life.

In this chapter the following issues are covered:

- Objectives for the quality control of financial outputs
- Description of the process;
 - o Criteria and evaluation grids;
 - o Decision criteria:
- Template for review;
- Quality note.

5.1 Objectives for the quality control of financial outputs

As mentioned at the beginning of the document, the main objective of the financial quality control is mainly related to the evaluation of a coherent expenditure process with respect of the agreed consumption.

The financial quality control will be based on two different analysis:

- Evaluation of personnel effort usage
- Evaluation of financial resources usage

This double approach has been chosen in order to allow the project management group to control two main aspect of resources usage:

- Allow a specific analysis of personnel effort usage, representing the personnel cost one of the relevant cost category of the project. In order to keep under control this major cost category the management team has to clearly analyse the two variables constituting this cost: number of person/months used and the average personnel cost used into the project. These information will be evaluated within the Evaluation of personnel effort usage
- Allow a specific analysis of financial expenditure of each cost category allowed into 3EMOTION Project. Specific attention will be paid to the Durable equipment, being it the most relevant project cost category



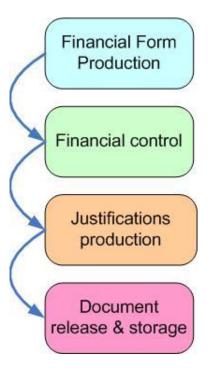


Over the previous two evaluations, the information collected and evaluated under the project financial control will be used for the implementation of the final project quality control, the coherence analysis between resources and activities, discussed into the next chapter.

5.2 Quality control process steps

Quality control process can be divided in 4 main steps which refer to:

- The production by the partners involved of a specific financial item and which must be done in respect to a set of agreed aspects;
- The financial control performed in accordance to the guidance provided, including the incorporation of corrections or suggestions by the partner responsible for its final production; and the deviations identified
- The production by the partners involved of the needed justification of any identified deviation
- The release of the document and its storage in the project repository



5.2.1 Financial Forms production

Objective: to produce a high quality 3EMOTION document

Responsibility: Partner with report responsibility

Conditions to fulfil:

- a. partners involved in the production of its financial report should provide the inputs in time and in accordance to the agreed formats;
- b. submission of financial document for financial control at least 3 weeks in advance to the contractual date for EC submission;

Description:

a. Responsible partner integrates the different inputs received from internal staff and compile





the document. Such process involves the checks for costs, time spent on the project revisions.

- b. Responsible partner fulfil the official templates for financial documents. These templates are included in Annex to this report:
 - <u>Time-sheet template</u>
 - Depreciation criteria of durable equipment template
 - Financial Report template
 - Form C template
 - Certificate on Financial Statement (Audit) Templates
- c. Responsible partner submits the financial report to the coordinator and to the financial and administrative manager of FIT.
- d. Partner is responsible for the incorporation of changes/suggestions and justification of financial deviation with respect of financial plan agreed (if any) to the Financial Report.





Compilation of financial figures

Apply Internal Financial Templates (FS, Form C)

Submit Financial document

Ves Required changes

Release document to the coordinator

Figure 5 - Process for financial document production

5.2.2 Financial monitoring

Objective: to define the procedure for financial control of 3EMOTION documents

Responsibility: Financial and administrative manager, the coordinator and responsible partner

Conditions to fulfil:

- a. Financial reviewer, from FIT, receives the financial document to revise and at least 3 weeks prior its official delivery;
- b. The financial Review is done within 1 week;
- c. Decision criteria could be accepted, accepted with justification and modification or rejected

Description:

- a. FIT financial manager performs the financial control against:
 - Planned distribution of persons/months and financial expenditures declared into the
 periodic financial report with respect of the planned distribution of persons/months and
 financial resources, as described in the DoW and into the Inception Report. The analysis
 will be applied for each partner at WP and Task level and for each cost category
 (personnel, travel, subcontracting, other project costs, indirect costs)

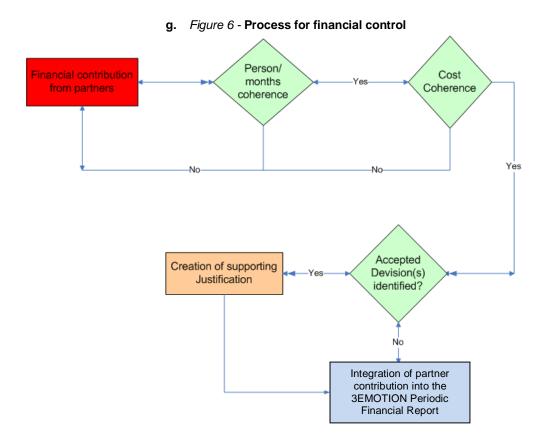




- 2. Adequacy of the financial report to the templates given and included into the Project Handbook IWD
- b. Decision criteria (judgement of the reviewer)
 - 1. For the criteria a. classification is:
 - i. No deviation identified
 - ii. Minor deviations, no action required
 - iii. Major deviations . action required
 - 2. For the criteria b. answer is yes/no
 - 3. A document with a classification of NO in criteria b., is automatically considered as rejected and a new version must be produced;
 - 4. A document having a classification of 3 in criteria a., is automatically considered as rejected and a new version must be produced, and suggested modifications/justification of deviations should be included
 - A document having all criteria classified as 1 or 2 in criteria a. is considered as accepted
- c. Reviewer could add additional comments and suggestions to the document;
- d. After the financial control, reviewer returns the document to the partner responsible for the document and to the coordinator with the final decision. In case of significant changes to the structure and contents, a separate document should be produced;
- e. If decision is accepted or accepted with minor modification, author should produce a final version taking into account such modifications within one week, for its submission to the EC
- f. If decision falls under the rejection (major modifications suggested), a new version is produced (consensus among reviewer, partner and coordinator) and the process restarts;







On-line repository for the Financial documents

Once produced the final version of the Form C, each partner will be requested to fill in the Form C on-line, into the official repository within FORCE system into the Participant Portal: https://ec.europa.eu/research/participants/portal/page/home

Once entered into the participant portal, the partner has to access to the link Scientific Deliverable, clicking the following arrow (at the bottom of the Participant Portal Home page)



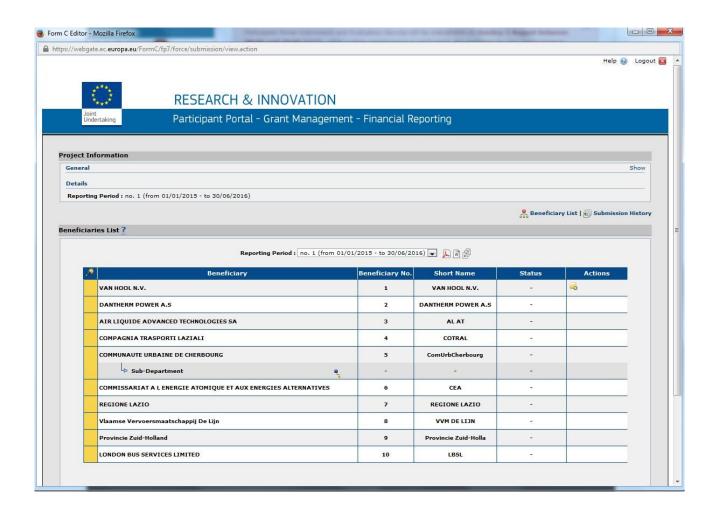
This link will open the page:

https://webgate.ec.europa.eu/FormC/fp7/force/submission/view.action

Within this page the partner, supported by the coordinator, will be allowed to save the agreed financial data into the Form C on-line template.







5.3 Financial Contingency Plan

5.3.1 General approach

The activity of financial quality control applied each semester has the ultimate objective to evaluate the coherence of each partner financial reporting avoiding any un-expected deviations. As a second objective the annual evaluation should also evaluate appearing deviations evaluating the cause and providing a clear justification for them as soon as they appears.

According to this rules, the financial quality control should select among possible existing deviations the ones produced for real acceptable plan deviations. These deviations, duly justified will be processed by the management team and formally submitted to the Steering Committee for their formal approval and consequent DoW adjustment.

Any deviation that will not be duly justified or not accepted by the management team or not ratified by the positive vote of the Steering Committee will be rejected by the project.





A rejection of these deviations will imply for the partner(s) involved a consequent adjustment of their financial reporting, solving the deviation initially included.

5.3.1 Identification of possible scenarios and specific actions

According to the previous experience in previous distributed EU funded projects some financial deviation could occur into the project life-time.

Of course deviations between a preliminary plan (as the one provided at the proposal stage) and the real detailed action plan (as the one produced at the beginning of the project according to the inception report details) will always occur. 3EMOTION project will have therefore a degree of flexibility in accepting minor deviation between original plans and actual reporting, as outlined in the following paragraphs. Nevertheless, according to our experience, some deviations could occur having a destabilization impact on plans and project outputs. Below are listed some of the % Legislations that could occur during the project lifetime and that the Quality financial control should identify and solved:

Deviation in PM allocations:

- Partner will use a number of PM in a ratio not allowed by the project, especially if analysed at WP level. Deviations at WP level (even if this deviation will not appear globally to the partner level) will not be accepted by the management team. In order to avoid deviations at WP level, the financial control will be done at WP level.
- Sometimes partners use an actual average monthly salary rate different from the one identified at the project proposal stage. In order to reach the expected personnel cost value, partners tend to adjust accordingly the number of persons/months. This adjustment to reach expected value on personnel cost will not be accepted. In order to avoid this solution, 3EMOTION will apply an analysis of deviation to persons/months rate by itself.

Deviation in Cost allocations:

- Sometimes, partner budget allocation to different cost categories, as identified at the proposal stage, differs from the real implementation plans. 3EMOTION will try to avoid any budget transfer between different cost categories inn order to keep a strong coherence with planned budget structure. According with this basic approach 3EMOTION will evaluate deviations in cost categories, measuring cost deviations (planned versus actual) within each of the following categories:
 - Personnel cost
 - Travel costs





- Other direct costs
- Indirect costs

Not accepting any major deviation (see its definition in the following paragraph) within each of the mentioned category

In order to apply a standard contingency plans on previous outlined deviations, 3EMOTION project has applied its own micro-management rules:

Overspending within each partner budget and/or its persons/months allocation

Whatever the size and the complexity of a project, the project management is always confronted with the human behaviour of consuming more budget and more resources than planned and initially allocated. However, a project cannot be detailed at the very beginning and regular adjustments are normal practices during its lifetime.

In the context of the 3EMOTION project, the project management will apply the following procedure regarding the deviation of the actual resources (persons/months allocation and financial expenditures) declared with respect of the planned ones over-expenditure:

- If one 3EMOTION Partner in its financial reporting file will over-expend their allocated resources (Person days and/or financial expenditures) for a specific period, the Steering Committee will decide if it accepts or not these extra effort;
- If the over-expending is more than 20% of planned in each reporting period, the Steering Committee will automatically reject any overspending higher than 20% of the planned costs/funds, unless previously agreed or unless the justification of deviation described by the partner is accepted by the Steering Committee.
- If the over-expending is below 20% of the planned one in each reporting period, the Steering Committee will analyse the over-spending for acceptance.

This analysis will be done for each partner with respect of:

- Overall persons/months allocation and budget
- For each WorkPackage for the persons/months analysis
- For each cost category for financial expenditures

At the end of the project no cumulative over-expending will be accepted (unless agreed with the Steering Committee).





Under-expending within each partner budget and/or its persons/months allocation

In case one partner is well below planned in each reporting period (-20% less) Steering committee will analyse together with the partner the reasons of such under-expending. Two cases are considered:

- 1. The partners is not able to perform some part of the activities planned. The steering committee then could decide to move some budget to another partner or to ask the partner to subcontract such activities.
- 2. The partner is doing all planned activities but is not able to justify the cost at the initially planned level. The remaining budget will be moved to other partner(s) based on a proposal made by the Steering Committee and approved by the plenary.

Each partner is asked to inform the coordinator/steering committee in advance if it thinks to be in the case 2 situation, in particular in the last project period. This in order to allow a proper reallocation and use of the made available financial resources.

Budget transfer between partners

In principle, 3EMOTION project does not accept any budget and persons/months transfer from one partner to another. Each partner indeed, has its own plan of persons/months allocation and financial expenditure plan.

If one partner needs to update this structure, not increasing its overall financial amount assigned, should formally ask to the coordinator an update of its financial and person/month plan, clearly justifying requested changes (example: this is the case when a partner want to move some of its travel budget to personnel one, or if he wants to update the number of persons/months without changing the personnel cost).

Nevertheless, 3EMOTION project accept minor resource transfer from one partner to another one according to the following rules:

- Both partners agreed to this changes (the one who will receive the added resources and the one that will reduce its resources)
- The transfer is clearly justified
- The transfer has no impact on the activity planned

Exchange Rates

3EMOTION uses Financial Template in euro. Costs not expressed in euro should be converted to Euro using the conversion rates available on the European Central Bank (http://www.ecb.int/stats/eurofxref/) and corresponding one of these two options that will be decided





from the partner at the beginning of the project and that can not be changed during the project lifetime:

- Conversion rate is the one identified in the first day of the month following the end of the reporting period.
- Conversion rate applied is the one identified when the cost has been done





5.4 Reporting rules

According to the EC Reporting Guidelines, every project is requested to provide the European Commission with a periodic Progress Report within 60 days after the end of each reporting period (including the last reporting period), therefore each partner contribution should be provided to the coordinator by 30 days after the end of each reporting period.

The periodic report comprises the following financial sections and documents:

- a. An explanation of the use of the resources (Financial Report)
- b. A Financial Statement (Form C . Annex VI of the Grant Agreement) from each beneficiary and each third party, if applicable, together with a summary financial report consolidating the claimed Community contribution of all the beneficiaries (and third parties) in an aggregate form, based on the information provided in Form C by each beneficiary.
- c. Financial statements should be accompanied by certificates (Audit Certificates), when this is appropriate (once each partner cumulative funds reach the value of 325.000 euro or once at the end of the project if cumulate funds reach 50.000 euro)

Regarding the intermediate reporting below is described the internal project management decisions regarding report delivery: This section, more in details, explains rules regarding delivery of the financial information to the Coordinator.

Financial Report (FR)

In order to take into consideration problems encountered by several partners in previous project experiences, the management team has decided to delay also the delivery of the FR as much as possible, considering the time constrain given by EC. It is mandatory, therefore, to send to the Coordinator the FR of each specific *reporting period by 30 calendar days after the end of the period.* In case some costs are not fully detailed by 30 days after the end of the reporting period, each partner has the opportunity to specify which costs are missing and include them, as Adjustment, in the following FR.

5.4.1 Expected actions for non-performing partners

In order to assure to the project a smooth running of its activities, including a delivery process aligned with the mandatory expectation of the European Commission, the Coordinator has introduced stern corrective actions for partners who do not respect the deadlines stated above. In time financial and administrative delivery from each partner is critical considering that due reports to





European Commission are collective reports. Delay of one single partner imposes to the entire consortium a delay in the submission of the mandatory reports.

Whenever one of the previous financial reporting documents, Form C, Audit Certificates or Financial Report is not submitted in time by a partner, according to the above rules, the request for funds by that specific partner will not be accepted. This implies that no funds will be given to the partner for that specific period.

Under this situation the default partner is able, anyhow, to recover these funds into the next reporting period, adding the expenses of a specific reporting period with the previous period not delivered in time.

Previous rule will be applied by 3EMOTION project, unless the delivery delay is clearly justified by the involved partner before the end of the reporting period and accepted by the coordinator. In this case, the Coordinator will have the opportunity to give a maximum of four extra weeks to the pending partner to provide the project with their financial reporting.

In order to support FR delivery the Coordinator will keep informed partners about the status of missing Forms.

The Coordinator hopes that the Consortium will not misinterpret these rules. It is in everyoneces interest, and also a matter of respect and fairness toward the individuals responsible for monitoring, to work together efficiently and responsibly on all aspects of the project, including the reporting.





6. PROJECT COHERENCE MONITORING

This monitoring process covers the last quality plan control expected within 3EMOTION project.

Once performed the quality control and financial monitoring, 3EMOTION will implement the third quality control, the valuation of the coherence between activities performed versus resources declared to implement them,

Due to its interdisciplinary nature, coherence analysis and monitoring will require collective effort of the entire management team, the Financial & Administrative manager, the Project Manager and the Coordinator.

6.1 Objectives for the coherence analysis

The development and implementation of coherence analysis monitoring mechanism for an activity refers to the overall objective of ensuring that each scientific work and its connected resource usage are coherent among each-others

In order to assess the accomplishment of this condition, all scientific outputs should be already validated from a quality control point of view (internal or external) and involved financial resources already validated by the financial monitoring process. Once these controls have been performed, scientific outputs and financial resources used to implement them will be finally connected.

According to this process, the coherence analysis process is the ultimate and most complex analysis of the state of the work and does not use standardised approach. On contrary an in dept analysis of the work performed and the resources consumed is expected by the managers involved in the process.

It should be noted that such type of coherence control is already in place by some of the partners involved in 3EMOTION project, in particular those that are certified by quality management systems, with positive results in terms of the outputs produced and financial assessments.

6.2 Coherence analysis process steps

Coherence Analysis process can be divided in only main steps which refer to:

 The <u>quality control</u> performed in accordance to the guidance provided, including the incorporation of corrections or suggestions by the partner responsible for its final production;





and,

• The <u>release</u> of the document and its storage in the project repository

Indeed the coherence analysis process does not need some typical steps of the standard quality control (see chapter 4): selection of the reviewers and ad hoc document production.

<u>Reviewers</u> are assigned by default and are the Financial Manager, the Coordinator and the Project Manager.

No <u>document production</u> is needed as well for this specific control, do to the fact that the work will be done within the information already collected into the Periodic Progress Reports.

Previous simplification can be assured to the fact that the Coherence analysis is performed upon existing documents already requested to each partners and to the fact that the coherence is evaluated between the technical and scientific outputs (already evaluated under the quality control process) and actual financial information (already evaluated under the financial monitoring process).

Coherence evaluation process, therefore, should be considered as the final and comprehensive project control, matching scientific and financial information among each other, outlining a clear correspondence among them.

6.2.1 Coherence analysis control

Objective: to define the procedure for coherence analysis control of 3EMOTION outputs

Responsibility: Financial manager, Project Manager, Coordinator

Conditions to fulfil:

- a. Stable and assigned reviewers receives the Financial chapter ad content sections of the Periodic Progress Report at least 3 weeks prior its official delivery;
- b. Review is done within 1 week;
- Decision criteria could be accepted, accepted with minor modifications or rejected (major modifications suggested)





Description:

Once the financial and scientific components of the Periodic Progress Report has been delivered to the 3EMOTION Management team, the three selected reviewers will analyse the project coherence analysis at WP level.

Each WP will be analysed according to the following approach:

- a. First, it will be identify the status of the content produced and level of objectives achievement. Within this phase, each WP will be measured according to its accomplishment of expected results planned, identifying any eventual delays
- b. Once the evaluation process for each WP has been achieved, a clear deviation list will be applied, identify the reasons and the partners involved in deviations: expected outputs not delivered, responsibilities of delays, On contrary, anticipation to expected work will be outlined as well, if any. No inconsistency with plans should be identified considering that the work of each WP has been already evaluated during the quality control phase (see chapter 4).
- c. Once the delay/deviation/anticipation analysis on expected contents and objectives has been identify, the Coherence analysis process will merge this analysis results with the status of resources consumed (Persons/Months usage); for each WP will be produced a deviation effort in terms of persons/months comparing actual resources used with the planned ones.
- d. Expected results of the coherence analysis: Deviation on expected objectives and deviation on expected resources will be compared:
 - 1. WP affected by delays in activities should presents proportional under-spending in terms of resources (persons/months) consumed.
 - 2. WP affected by anticipations in activities should presents proportional over-spending in terms of resources (persons/months) consumed.
 - 3. WP not affected by any deviation in terms of accomplished activities should presents no deviations in terms of resources (persons/months) consumed.

Three previous scenarios are the coherent situations expected by the analysis. On contrary, incoherence situations (see list below) will not be accepted and clear justifications will be asked to partners involved.

e. WP affected by delays in activities presenting over-spending in terms of resources (persons/months) consumed.





- f. WP affected by anticipations in activities presenting under-spending in terms of resources (persons/months) consumed.
- g. WP not affected by any deviation in terms of accomplished presenting deviations in terms of resources (persons/months) consumed
- h. WP affected by deviation in activities accomplished (delay or anticipation) presenting no deviation in terms of resources (persons/months) consumed

Of course, in presence of incoherence between activities performed and resources consumed, the activity description will be considered the independent variable, resources used, therefore, will be asked to be adjusted in order to became coherent with the status of activities performed.

6.2.2 Document release and storage

Objective: procedure for the release and storage of 3EMOTION documents

Responsibility: Project Coordinator

Conditions to fulfil:

- a. Coordinator store all final documents produced in the framework of the project within the online repository;
- b. All documents have a registry (document control sheet) with the name and version (e.g. Progress Report1_2.doc, version 1.1), this information should be visible on the cover sheet;

Description:

- a. All final documents and the supporting material associated (excel, presentations, etc.) are sent by the responsible partner to the coordinator;
- b. Coordinator performs a final check and includes a quality note in the document

This document was reviewed by ## in accordance to the 3EMOTION quality assurance plan.

- c. Coordinator submits the document in paper and electronic formats;
- d. Coordinator archives in the project repository according to the classification provided in the document control sheet;
- e. In case of new versions, the repository should be updated.





7. PROJECT REPORTS AND DELIVERABLES

This chapter includes the list of 3EMOTION outputs (external dissemination and official documents) over which quality reviews should be conducted. The allocation of quality reviewers here included corresponds to a first iteration which final decision will be taken in the next Steering Committee meeting.

7.1 List of 3EMOTION technical-scientific outputs

Del. No	Deliverable name	WP n.	Author	Diss. level	Deliver y date	Reviewer
D1.1	Project Handbook	1	FIT	PP	2	VAN HOOL
D1.2	Quality Plan	1	FIT	PP	3	VAN HOOL
D1.3	Contingency plan for evaluating impact of project objectives & results	1	VAN HOOL	PP	3	FIT
D2.1	HRS procurement specifications	2	Each SITE	PP	3	ALAT
D2.2	HRS commissioning	2	Each SITE	PP	6	ALAT
D2.3	HRS manufacturing and delivery	2	ALAT	PU	18	VAN HOOL
D2.4	Operational HRS performances, including costs	2	Each SITE	PU	26	ALAT
D2.5	Operational HRS performances, including costs	2	Each SITE	PU	38	ALAT
D2.6	Operational HRS performances, including costs	2	Each SITE	PU	50	ALAT
D2.7	Operational HRS performances, including costs	2	Each SITE	PU	60	ALAT
D2.8	Stakeholdersqposition paper on HRS Commercialisation package	2	ALAT	PU	50	FIT
D2.9	HRS scale-up and Recommendations for HRS commercialisation	2	ALAT	PU	54	VAN HOOL
D3.1	FCB procurement specifications	3	Each SITE	PU	3	DANTH
D3.2	FCB commissioning	3	Each SITE	PP	6	DANTH
D3.3	FCB delivery	3	Each SITE	PU	18	DANTH
D3.4	Pilot Demonstration sitesqplan . Including maintenance	3	DANTH	PU	12	CEA





D3.5	Report on bus operation, including costs	3	DANTH	PU	26	CEA
D3.6	Report on bus operation, including costs	3	DANTH	PU	38	CEA
D3.7	Report on bus operation, including costs	3	DANTH PU		50	CEA
D3.8	Report on bus operation, including costs	3	DANTH	PU	60	CEA
D3.9	Stakeholdersqposition paper on FCB commercialisation package	3	DANTH	PU	50	VAN HOOL
D3.10	Report on performances achieved within the pilots	3	CEA	PU	54	DANTH
D4.1	Evaluation Plan	4	CEA	PU	12	VAN HOOL
D4.2	Ex-ante evaluation of sites	4	Each SITE PU		15	VAN HOOL
D4.3	FCB & HRS indicatorsqassessment	4	CEA	EA PU		ALAT & VAN HOOL
D4.4	FCB & HRS indicatorsqassessment	4	CEA	A PU		ALAT & VAN HOOL
D4.5	FCB & HRS indicatorsqassessment	4	CEA	PU	48	ALAT & VAN HOOL
D4.6	FCB & HRS indicatorsqassessment	4	CEA	PU	60	ALAT & VAN HOOL
D4.7	Non-technological evaluation assessment	4	Each SITE PU		26	CEA
D4.8	Non-technological evaluation assessment	4	Each SITE	PU	38	CEA
D4.9	Non-technological evaluation assessment	4	Each SITE	PU	48	CEA
D4.10	Non-technological evaluation assessment	4	Each SITE	PU	60	CEA
D5.1	Policy Guidelines for Administrations to promote FCB & HRS market uptake in European regions	5	Each SITE	PU	36	FIT
D5.2	Roadmap for 3EMOTION sites supporting the up scaling of FCB & HRS adoption beyond the project	5	FIT PU		48	ALAT, VAN HOOL
D5.3	Cross-site meeting on FCB commercialisation and exploitation	5	WaterstofNet	PU	48	FIT
D5.4	Commercialisation package	5	ALAT, VAN HOOL	PU	54	FIT
D6.1	Dissemination Plan	6	WaterstofNet	PU	4	VAN HOOL





D6.2	3EMOTION web site	6	WaterstofNet PU		6	VAN HOOL
D6.3	Dissemination material (Brochure, web, flyers)	6	WaterstofNet	PU	4	FIT
D6.4	Dissemination material (Brochure, web, flyers)	6	WaterstofNet	PU	24	FIT
D6.5	Dissemination material (Brochure, web, flyers)	6	WaterstofNet	PU	36	FIT
D6.6	Dissemination material (Brochure, web, flyers)	6	WaterstofNet	PU	48	FIT
D6.7	Local dissemination packages (in 5 languages)	6	Each SITE	PU	18	WaterstofNet
D6.8	Awareness guidance document and Help desk for next phase development	6	WaterstofNet	PU	54	VAN HOOL
D6.9	Final Conference	6	WaterstofNet	PU	60	VAN HOOL





7.2 List of 3EMOTION Financial outputs

Report name	WP n.	Author	Diss. level	Delivery date	Reviewer
Time-sheet of each involved person	1	Each PARTNR	RE	Every 6 months	FIT
Depreciation criteria for each durable equipment	1	Each PARTNER	RE	Month 12	FIT
Financial Report n°1 (Months 1-18)	1	Each PARTNER	RE	Month 19	FIT
Form C on-line (Months 1-18)	1	Each PARTNER	RE	Month 20	FIT
Financial Report n°2 (Months 19-36)	1	Each PARTNER	RE	Month 37	FIT
Form C on-line (Months 19-36)	1	Each PARTNER	RE	Month 38	FIT
Certification on Financial Statements (AUDIT)	1	On demand	RE	Month 38	FIT
Financial Report n°3 (Months 37-54)	1	Each PARTNER	RE	Month 55	FIT
Form C on-line (Months 37-54)	1	Each PARTNER	RE	Month 56	FIT
Certification on Financial Statements (AUDIT)	1	On demand	RE	Month 38	FIT
Financial Report n°4 (Months 55-60)	1	Each PARTNER	RE	Month 60	FIT
Form C on-line (Months 55-60)	1	Each PARTNER	RE	Month 60	FIT
Certification on Financial Statements (AUDIT)	1	On demand	RE	Month 60	FIT





8. ANNEXES

8.1 Deliverable template

The word file is attached to this report!





8.2 Quality Control Form (Deliverable review)

The excel file is attached to this report!





8.3 Time-sheet template

The excel file is attached to this report!

This report has to be produced at each project semester.

Time-sheets must be produced for each person involved in the project.

- Time-sheets will be used to justify personnel costs incurred and claimed, along with all other justifications for costs.
- Each person has to update its time-sheet at the end of each month, filling in the cells market in green.
- Each time sheet has to be then approved and signed by the person in charge of the work and counter-signed by the manager of your organisation for the 3EMOTION project.
- Hours information should be included using decimals to report fractions of an hour. Example: to report 4 hours and 30 minutes, please use 4,5
- Each person involved into the 3EMOTION project is requested to fill in his/her time-sheet to ALL the months covered by the reporting period, even if no activities have been carried out for the 3EMOTION project

As requested by European Commission, the time-sheet shall not only record the time spent on 3EMOTION, but shall reconcile the total working time of one person.

The 3EMOTION effort is detailed and reported at Work-package level, while all other work (NON 3EMOTION activities) should be summarised in the row 20 % ther activities.

WARINING: Coherence with Financial Report

The number of working hours spent on the project recorded into the time-sheets should be exactly the same of the working hours reported in the Financial Report. Please, double check this coherence before submitting the financial forms to FIT.

Example: If you report 500 working hours in the time-sheets, cumulatively for all involved staff, we are expecting to see that the cumulate working hours in the Financial Report correspond to 500 as well.





8.4 Depreciation criteria Template

The excel file is attached to this report!

This report has to be produced by Month 12. Each partner (having FCBs and/or HRS equipment in their budget) is expected to provide its own depreciation criteria.





8.5 Financial Report template

The excel file is attached to this report!

This report has to be produced by:

- Month 19 (covering Months 1-18)
- Month 37 (covering Months 19-36)
- Month 55 (covering Months 37-54)
- Month 61 (covering Months 55-60)

Attached is available the example produced for VAN HOOL. The full set of FR for each partner will be produced once the depreciation criteria will be fixed (see Annex 8.4)

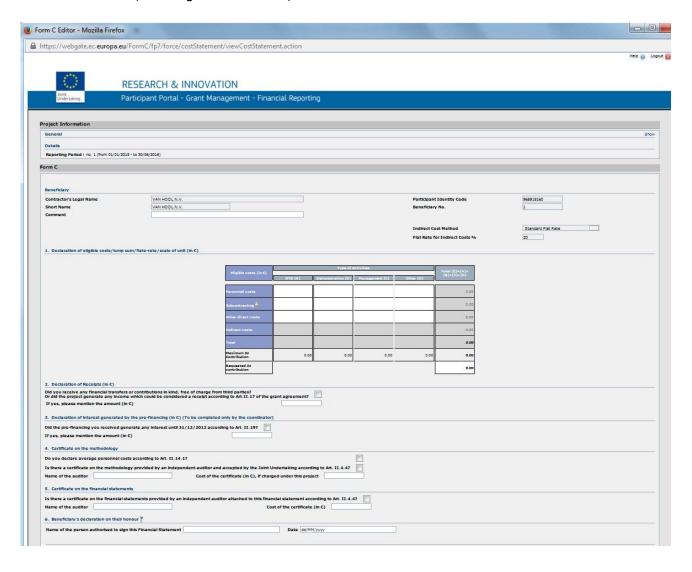




8.6 Form C template

This report has to be produced on-line only by:

- Month 20 (covering Months 1-18)
- Month 38 (covering Months 19-36)
- Month 56 (covering Months 37-54)
- Month 61 (covering Months 55-60)







8.7 Certificate on Financial Statement (Audit) Templates

The word file is attached to this report!

End of the Document

Deliverable n. 1.2 Page 50 of 50 09/11/15