

**THEME [ENV.2012.6.3-1]  
Innovative resource efficient technologies, processes and services**



**ZEPHYR project – Deliverable D1.1  
QUALITY PLAN**

Funding scheme: **Collaborative Project**

Project Acronym: **ZEPHYR**

Project Coordinator: **TUSCIA UNIVERSITY**

Proposal full title: **Zero-impact innovative technology in forest plant production**

Grant Agreement n°: **308313**

Author: **Carlo Polidori**

Summary: **This document provides the quality assurance procedures to be followed in the framework of the project as well as the forms to be completed, and templates for documents.**

Status: **FINAL**

Distribution: **All Partners**

Document ID: **ZR-Unitus-WP1-D1.1-Quality Plan.doc**

Date: **December 2012**

**Project start: October 2012**

**Duration: 36 Months**

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## 1. ZEPHYR Quality Plan

This deliverable presents the quality procedures to be established within the framework of ZEPHYR project, so as to guarantee that the outcomes of the project meet its objectives and are of high quality.

The Quality Plan is the document setting out the quality practices for the project, and is to provide assurance, that the quality requirements are planned appropriately. Once accepted by the Consortium, it becomes part of the documents. It has been written to achieve correlation between the standard ISO 9001 and relevant sections. The Quality Plan should be adjusted, where applicable, to include co-ordinators' comments and updates.

This Quality Plan is to be used by:

- Consortium Partners, responsible for preparing and amending deliverables,
- Internal Quality Experts of Consortium Partners responsible for reviewing completed quality plans and sign-off,
- Any responsible of a Consortium Partner for approving works to be done by third parties, in order to complete deliverables.

Quality planning is an integral part of the technical management planning. As a pre-requisite to its preparation, the Quality Assurance Manager has reviewed all requirements in order to determine the necessary activities that need to be planned. It has been prepared early in the project in order to demonstrate and provide the Consortium with the assurance that:

- a) the contract requirements and conditions have been reviewed,
- b) effective quality planning has taken place,
- c) the quality system is appropriate.

The Quality Assurance Manager ensures that the quality plan is available to all concerned and that its requirements are met.

### Quality Assurance Manager

The Quality Assurance Manager (QAM) will be responsible, for:

- Controlling the timely and good quality execution of the work,
- Assuring the conformity of all deliverables, with the initial criteria defined for them and guaranteeing that the deliverables are in accordance with the specifications in the project Description of Work,
- Consulting the Work Package Leaders, on the expected technical characteristics of the deliverables.

Thus, his main tasks are:

- Overview of the technical reports produced
- Quality control of all deliverables submitted
- Guidance (upon request) to the WP Leaders on the expected characteristics and contents of the relevant Deliverables

His main objective is to ensure that:

- All the outputs are consistent, with their contractual requirements
- All the project reports / documents do have the highest quality, regarding their overview / context

The Quality Assurance Manager, is appointed by the Consortium members and will report to the Project Co-ordinator; pending such appointment, this role will be covered by the coordinator's management assistant, as described in the DoW.

## 2. Document and data control

The Quality Assurance Manager is responsible for ensuring that all documents are controlled effectively. The system contains two levels of documentation under the control of the Quality Assurance Manager in association with the Quality Peer Reviewers.

Level 1: The control of document referencing

Level 2: The control of formal deliverables overall quality

## 3. Document coding

The project may issue official deliverables, according to the Description of Work and internal reports or preliminary versions of the deliverables;

***All official Consortium documents that are not official Deliverables, are cumulatively characterised hereafter as Project Internal Reports (IR).***

There will be a unique project document coding system, as indicated below:

First letters: ZR

*Dash*

Next three/four digits: Abbreviated name of the Partner issuing the deliverable

*Dash*

Next digits: "WP" and number of relevant WP

*Underscore*

Next digits : "IR" and number of report (or "D" and number of Deliverable) of this partners in this WP

*Underscore*

Next digits (optional) : "V" and number of revision of this report<sup>1</sup>

*Underscore*

*Optional* Optional description of the content (no more than one or two words)

i.e. :

**ZR-Unitus-WP1\_D1.1\_V2\_title.doc** : second revision of first report of Tuscia University relevant to WP1

## 4. Deliverables

### 4.1 Deliverables layout

Official Project Deliverables should have a first page as for the template in Annex 2. They should also use the page layout (headers / footers) suggested in the same Annex.

Furthermore, they should comply with the following rules:

- Have a list of abbreviations used within the Deliverable
- Have a table of contents
- Have a list of Figures (including the ones of the Annexes), if relevant
- Have a list of Tables (including the ones of the Annexes), if relevant
- Start with one-page Executive Summary
- End the main part with a Conclusions section of around 1 page
- Include a References section after the Conclusions section

## 5. Data Communication protocols

All documents and computer data files sent either on a removable media (CD, DVD, flash memory, etc) or by e-mail should be VIRUS checked before issuing and to be screened on receipt. If a VIRUS is found then action is to be implemented to purge both the system infected and to notify the sender to prevent a re-occurrence.

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<sup>1</sup> The Deliverable is the FINAL version of the Report, so it will not have any version number

If acknowledgement is requested, an explicit request will be included by the sender at the end of the message, stating "PLEASE ACKNOWLEDGE". Then, the recipient is required to send a message acknowledgement within the next two (2) working days.

## **6. Dissemination Event scheduling and reporting**

The following are considered dissemination events:

- Publications in Scientific, Technical or Commercial Journals
- Presentations in Conferences
- Exhibition stands and demos
- Participation in non-project workshops, forums and/or events

## **7. Software**

The main software standards have been defined as follows:

- Operative System: Windows XP/7
- MS Word: textual deliverable;
- MS Excel: textual deliverable support, cost statement, ...
- MS PowerPoint: transparencies, slides, posters, ...

## **8. Deliverables peer review and control of non-conforming deliverables**

*The following procedure refers only to project deliverables and not to internal reports.*

Each deliverable will be reviewed by:

- 2 members of the Consortium acting as internal inspector, which will be the most relevant with the deliverable under consideration / examination.
- The Quality Assurance Manager.

They will evaluate it with respect to the following matters and must conclude whether the deliverable is accepted or not.

- Deliverable contents thoroughness
- Relevance
- Quality of achievements
- Quality of presentation of achievements

- Comprehensibility, spelling, etc.
- Technical terminology

The relevant comments will be included in a Deliverable Peer Review Report, as indicated in Annex 4.

The layout and format of the deliverable will finally be checked by the Quality Manager to assure a uniform layout. The final rating of the Deliverable draft will be marked as:

- Fully accepted
- Accepted with reservation
- Rejected unless modified properly

The deliverable under consideration/examination will be sent by the author to the Coordinator that will forward it to the Quality Manager and to the reviewers. The deliverable will be in its draft version, and will be received three (3) weeks before its official publication. The reviewers list is presented in Annex 4, while each responsible per deliverables is listed in Annex 5.

The reviewer, within ten (10) working days, do study and revise the deliverable and prepare the «Peer Review Report», which are all collected by the Quality Manager .

The Quality Manager upon receiving the above report and integrating his/her own «Peer Review Report», compiles a list with all the approved deviations that have to be repaired. Furthermore, if needed, he compiles a «Corrective Actions List», along with the person responsible for carrying this action and the required date to be done, always up to five (5) working days. The above list is also forwarded through the QAM to the corresponding Work Package Leader, for his information, and at the end all corrections should be incorporated immediately within the specific deliverable by the author.

The main author of the deliverable, has to send back the peer review report, where the "Author response" fields under each question are completed. If needed, the author sends also a document entitled "Summary of main feedback and actions taken". In this, proper explanation should be given about each action taken as a result of the comments in the Overall Peer Review Report.

**Annex 1: Reviewers list<sup>2</sup>**

<b>Partner</b>	<b>Quality Peer Reviewer(s)</b>	<b>E-mail</b>
1 UNITUS		
2 DUTH		
3 COMETART		
4 VALOYA		
5 ROBOSOFT		
6 Vivai Torsanlorenzo		
7 FRAUNHOFER IFAM		
8 ACREO		
9 Dalarna University		
10 VELTHA		
11 UNINSUBRIA		
12 ADVANTIC		
13 AZORINA		
14 EXERGY		

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<sup>2</sup> To be filled and approved during the first project meeting after the issue of the Quality Plan



**Annex2: Deliverables reviewers list<sup>3</sup>**

<b>N°</b>	<b>Deliverable title</b>	<b>Issued by (N°-Short name)</b>	<b>Delivery date</b>	<b>Reviewer</b>
D2.2	Requirements for the new sensors for shoot portions and for soil-root portions	8 ACREO	Month 4	UNINSUBRIA <sup>4</sup> DALARNA
D2.3	Design of the new sensors	8 ACREO	Month 8	FRAUNHOFER IFAM UNITUS
D2.4	Technical specification for the power system with solar panels	14 EXERGY	Month 10	COMETART ROBOSOFT
D2.5	Technical specification for the LED lamps	4 VALOYA	Month 9	DALARNA DUTH
D2.6	Technical specification for the communication & control system	12 ADVANTIC	Month 12	ROBOSOFT ACREO
D3.1	New growth protocols	9 DALARNA	Month 6	UNITUS ACREO
D3.2	Intermediate report on growth tests	2 DUTH	Month 18	UNINSUBRIA DALARNA
D3.3	Final report on growth tests and biological validation	11 UNINSUBRIA	Month 35	DUTH UNITUS
D4.1	Final design of the Growth Chamber (mechanics and irrigation system)	3 COMETART	Month 14	ROBOSOFT FRAUNHOFER IFAM
D4.7	Report on completed development of technical components	5 ROBOSOFT	Month 22	ADVANTIC VELTHA
D5.2	User's Manual	5 ROBOSOFT	Month 31	COMETART ADVANTIC
D6.1	Report on the technical validation	12 ADVANTIC	Month 29	EXERGY VELTHA
D7.2	Market Analysis	10 VELTHA	Month 30	EXERGY VALOYA
D7.7	Industrial Implementation Plan and Plan for the organisation of the Distributed Company	10 VELTHA	Month 34	VALOYA AZORINA
D7.8	Plan for use and dissemination of the foreground	10 VELTHA	Month 12	ADVANTIC EXERGY
D7.9	Policy brief with a synthesis of policy relevant results	10 VELTHA	Month 35	AZORINA DUTH

**The following deliverables will not be included in the peer review:**

D1.1 Quality Plan, D2.1 Preliminary design of the mechanical parts, D4.2 New LED lamps built and tested, D4.3 New sensors built and tested, D4.4 Control, communication and monitoring system, D4.5 Robotic devices, D4.6 Power system with solar panels Technical specifications for the power system D5.1 New growth Chamber assembled, D7.1 Project Web site, D7.3-7.4-7.5 Proceedings for the workshops, D7.6 Articles and peer reviewed papers,

<sup>3</sup> To be approved during the first project meeting after the issue of the Quality Plan

<sup>4</sup> Due to the short time to the delivery, the peer review of D2.2 will be informal and during the development of the deliverable

**Annex 3: Deliverable template**

**THEME [ENV.2012.6.3-&]  
Innovative resource efficient technologies, processes and services**



**ZEPHYR project – Deliverable** [REDACTED]

[REDACTED]

Funding scheme: **Collaborative Project**

Project Acronym: **ZEPHYR**

Project Coordinator: **TUSCIA UNIVERSITY**

Proposal full title: **Zero-impact innovative technology in forest plant production**

Grant Agreement n°: **308313**

Author: [REDACTED]

Summary: [REDACTED]

Status: [REDACTED]

Distribution: [REDACTED]

Document ID: **ZR-** [REDACTED]

Date: [REDACTED]

**Project start: October 2012**

**Duration: 36 Months**

## **Table of Contents**

## 1. Heading 1 for chapters

Body text

### Heading 2 for sub-chapters

- List
- List

### Heading 3 for sub-chapters

## 2. Heading 1 for chapters

Text with footnotes<sup>5</sup>

### Heading 2 for sub-chapters

### Heading 3 for sub-chapters



*Table 1*

Heading Column 1	Heading Column 2	Heading Column 3
Text	Centre text	Centre text
Text	Centre text	Centre text

## 3. Conclusions

- Bullets
- Bullets

## 4. References

References

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<sup>5</sup> *Footnote text*

**Annex 4: Peer Review Report template**

**ZEPHYR project**



**Peer Review Report**

Deliverable n°.	Deliverable Title
Deliverable Author(s)	
Workpackage n°.	Workpackage Title
Task n°.	Task Title
Date of Review Document	File Name:

**PROCEDURES USED FOR PEER REVIEW**

*The ZEPHYR Consortium uses the Peer Review process for its internal quality assurance for deliverables to assure consistency and high standard for documented project results.*

*The Peer Review is processed individually by selected reviewers. The allocated time for the review is about two weeks. The author of the document has the final responsibility to collect the comments and suggestions from the Peer Reviewers and decide what changes to the document and actions are to be undertaken.*

**Reviewers:**

Name of the Reviewer 1: \_\_\_\_\_ e-mail: \_\_\_\_\_  
 Name of the Reviewer 2: \_\_\_\_\_ e-mail: \_\_\_\_\_

**Overall Peer Review Result:**

Deliverable is:

<input type="checkbox"/> Fully accepted	<input type="checkbox"/> Accepted with reservation	<input type="checkbox"/> Rejected unless modified as suggested
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**Suggested actions:**

1. The following changes should be implemented .....  
 .....
  2. Specify missing chapters / subjects .....  
 .....
  3. Required changes on deliverable essence and contents .....  
 .....
  4. Further relevant required improvements .....  
 .....
- (please add the number of rows or pages you need for all your comments)*

## COMMENTS OF PEER REVIEWER AND AUTHOR RESPONSE

<b>Comments of</b>
<b>General comment</b> <ul style="list-style-type: none"><li>•</li><li>•</li></ul>
<b>Specific comments</b>
<b>Topic A: Deliverable Layout / Spelling / Format</b>
<b>Reviewer comment</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Author response</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Topic B: Comprehensibility</b>
<b>Reviewer comment</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Author response</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Topic C: Technical terminology</b>
<b>Reviewer comment</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Author response</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Topic D: Deliverable layout / format (QAM only)</b>
<b>Reviewer comment</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>
<b>Author response</b> <ul style="list-style-type: none"><li>• _____</li><li>• _____</li></ul>