This project is part of the PRIMA Programme supported by the European Union

INNOVATIVE GREENHOUSE SUPPORT SYSTEM IN THE MEDITERRANEAN REGION: EFFICIENT FERTIGATION AND PEST MANAGEMENT THROUGH IOT BASED CLIMATE CONTROL — IGUESSMED

O•••O•••O

Deliverable D1.1
Project Coordination Procedure Manual

Due date:	01/07/20
Submission date:	05/10/20
Deliverable leader:	CREA
Author list:	Alejandra Navarro Garcia (CREA), Aliona Lupu (Subcontractor Iniziativa Cube S.r.l.)

Dissemination Level

☒	**PU:**	Public
☐	**PP:**	Restricted to other programme participants (including the Commission Services)
☐	**RE:**	Restricted to a group specified by the consortium (including the Commission Services)
☐	**CO:**	Confidential, only for members of the consortium (including the Commission Services)

Abstract

The "Project Coordination Procedure Manual" represents a management handbook containing the description of the project management procedures, structure and roles and responsibilities of the parties involved.

Table of Contents

Figure Summary

Table Summary

1 Introduction

The iGUESS-MED project aims to develop a Decision Support System (DSS) able to effectively manage fertigation and prevent plant diseases and pests in tomato crops grown in soil and soilless in commercial greenhouses of the Mediterranean region. This innovative greenhouse DSS will be developed to (i) help greenhouse farmers to improve the management of fertigation in areas with low (saline) quality waters (ii) to reduce the use of chemicals by a sustainable and integrated pest and disease control and (iii) to improve the climatic efficiency in the existent greenhouse by low-cost climate actions. The DSS will allow obtaining healthier and higher quality productions and higher yields, while will reduce the use of water and the losses of nutrients and chemicals to the environment. iGUESS-MED will be able to manage efficient fertigation, to forecast diseases and pests, and to improve the climatic efficiency in tomato greenhouses, using only climate data acquisition and basic information on cropping system. The DSS will provide feedbacks and alerts about crop needs and real time recommendations to the farmers through friendly portable real time data visualization tools as PC, tablets or smartphones. To achieve this objective, new models for calculating crop evapotranspiration will be performed by integrating sensor data from plant, soil and climate, and forecasting models for assessing disease and pest risks will be developed by using the Integrated Pest Management.

The project consortium (research centers, SMEs and end-users of EU and non-EU countries belonging to the Mediterranean basin) will collaborate from the beginning to make the DSS marketable involving, end-users and stakeholders to validate the system in own greenhouses, reducing gaps between research, application developers and farmers. The application of DSS will benefit the workers and the consumers, providing better working conditions, crop healthiness and reduction of environmental impact.

1.1 Summary of the deliverable

The purpose and objective of the management of a project is to ensure that the work is performed according to clear and appropriate rules and methods, at all level and all times, to ensure a satisfactory completion of the Grant Agreement [GA].

The Project Coordination Procedure manual is the operational plan containing the description of the project management procedures, tasks and structure and roles and responsibilities of the parties involved.

Such deliverable is the document which details explicitly and formally all management aspects, i.e. which defines and details those people and committees and their roles, the tools to be used in the project, the agreed rules, methods, means to be applied or used for managing it.

It forms the top of the organizational documentation structure.

This document is the key to navigate within the organizational documents when looking for operational rules. All iGUESS-MED Consortium participants must know and use it for all aspects of management, project control, communication mechanism, documentation or quality assurance within the project.

This document is structured as follows:

- **General frame definition**
  - Chapter 1: “Introduction” – this chapter briefly presents the project and reminds the purpose of the Project Coordination Procedure manual;
  - Chapter 2: “Work Breakdown Structure” – this chapter reminds the Work Breakdown Structure as drawn from the Work Plan;
  - Chapter 3: “Members” – this chapter reminds the list of beneficiaries, as presented in the Grant Agreement;
- **Management organization**
  - Chapter 4: “Management organization and procedures” – this chapter is the core of the document, presenting the management entities and roles and their relationships;
  - Chapter 5: “Configuration Management” – this chapter presents the configuration management rules. It defines the configuration items that are supposed to be identified within the iGUESS-MED consortium and provides rules for identifying those latter. In addition, it details the documentation management rules that apply to the project.
- **Specific Aspects**
  - Chapter 6: “Communication within the Consortium” – this chapter details the communication rules.

2 Work Breakdown Structure

iGUESS-MED will achieve its objectives and impacts through a stepwise approach, which is based upon 4 stages:

1. **Decision Support System (DSS) development (WP2):** the implementation of iGUESS-MED will firstly start with the product development process by gathering input from previous OPI DSS and research work. The goal of these activities is to deliver a greenhouse support system that fits perfectly the farmer needs;
2. **Validation and Demo of DSS (WP3):** at this stage, iGUESS-MED Support System will be tested in commercial greenhouses under different growing systems, climatic conditions, and available technologies (pilot farms of the project located in Italy, Spain, Turkey and Tunisia), to evaluate its performance and versatility for different greenhouse cropping system conditions;
3. **Environmental and socio-economic impact assessment (WP4):** the environmental and socio-economic impact in all the countries will be monitored through WP4 activities. The overarching objective of WP4 is to create an enabling environment for the transition towards sustainable, resilient and inclusive greenhouse cropping systems;
4. **Dissemination, exploitation, communication, and outreach (DECO) plan (WP5):** this WP will organize the bundling of all outreach, communication and exploitation activities. WP5 will be responsible for gathering, disseminating and conveying knowledge and experiences produced in previous WPs;

All the above activities will be coordinated in **WP1 (Project coordination)** to match the overall objectives and check all financial and administrative tasks of the project.

WP No	WP Title	Lead Participant No	Lead Participant Short Name	Person-Months	Start Month	End Month
1	Project Coordination	1	CREA	**33**	1	48
2	DSS development	2	EVJA	**130**	1	24
3	Validation and Demo of DSS	8,9	Akdeniz University and CRRHAB	**64**	24	48
4	Environmental and socio-economic impact assessment (SEA)	3	UNIPI	**40**	1	42
5	Dissemination, exploitation, communication, and outreach (DECO) plan	6	CAJAMAR	**59**	18	48
			Total person-months	**326**		

Table 1 - List of work packages

All WPs are not meant as isolated research and innovation activities, rather they are all interconnected with outcomes of one feeding into the others, implementing a real transdisciplinary approach to the iGUESS-MED applied research. The Work Plan is summarized and visualized in **Errore. L'origine riferimento non è stata trovata.**, which provides an overview of the main building blocks of iGUESS-MED.

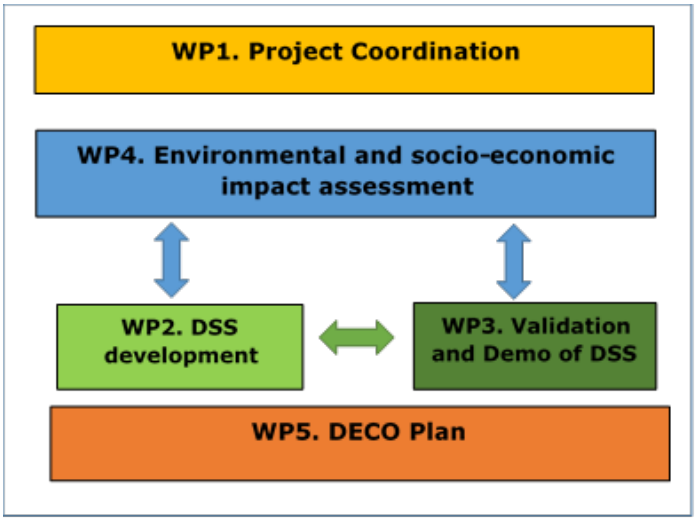

Figure 1 - Pert chart

3 Members

The consortium is comprised by 4 of the most important countries in Med-area as regards the greenhouse tomato cultivation, 2 European (Italy and Spain) and 2 non-EU (Turkey and Tunisia). There are 7 entities from the 2 European countries and 2 entities from 2 non-EU countries, from which 1 very small company, 1 SME, 1 big company, 1 non-profit foundation, and 5 RTDs (Universities or other research organizations). The DSS will be tested in 8 pilot farms located in Italy, Spain, Turkey and Tunisia receiving inputs from different types of users, growing systems, tomato typologies, in different geographic locations and climate environments, and in this way, ensuring its scalability in terms of getting the largest number of final users as possible.

No.	Organization name	Country	Expertise
1	CREA	Italy	Plant physiology, plant pathology, fertigation management, cultivation techniques, soilless culture, eco-sustainable defense in greenhouse crops, and development and implementation of models

No.	Organization name	Country	Expertise
			for irrigation of vegetable crops.
2	EVJA	Italy	DSS design and development, IoT technology, retune processes, machine learning, cloud computing, data management and generation of algorithms application of Smart Agriculture.
3	UNIPI	Italy	Crop modelling, irrigation and fertilization management, soilless growing systems, greenhouse climate control, DSS design, biological control, entomology, insect behaviour, life cycle assessment, socio-economic impact assessment, multicriteria analysis, cost-effectiveness and cost-benefit analysis.
4	BIOPLANET	Italy	Expertise in insects and mites for biological control.
5	UAL	Spain	Use of models and monitoring approaches to improve nutrients and irrigation management, and climate control of greenhouse production systems.
6	CAJAMAR	Spain	Irrigation and N management for greenhouse-grown vegetable crops, greenhouse climate control, functional biodiversity as a new approach to support biological control by conservation, and great experience in dissemination activities and training course for farmers and agricultural players.
7	La Caña	Spain	Leading company in the horticultural sector at national level, and a major benchmark within commercialization, exportation, production and distribution of fruit and vegetable products. It's well-equipped with platforms required to carry out the proposed activities in iGUESS-MED. Development and dissemination activities.
8	Akdeniz University	Turkey	Evapotranspiration calculation, irrigation scheduling and determination of water-yield relations of crops, techniques to increase water use efficiencies at different scales, use of saline and wastewater in agriculture, improvement of saline and alkaline soils, irrigation-drainage, structural problems of greenhouses, determination of suitable greenhouse types and constructions, automation of greenhouse climate control, plant-environment simulation modeling.
9	CRRHAB	Tunisia	Biocontrol, integrated pest management in greenhouse crops, crop water requirement under standard and stressed conditions, fertigation and irrigation management, climate change impact on crop and water requirements, irrigation scheduling, precision tools and modeling, agricultural economics, bioeconomic modeling, mathematical programming and econometrics.

Table 2 - List of iGUESS-MED partners

4 Management organization and procedures

4.1 Introduction

The aim of the project management is to guarantee that the objectives of the project are achieved on time, on budget, and with high quality. The iGUESS-MED project will be managed with sound and efficient decision-making, execution, and control – and will maximize partner accountability, commitment, involvement, and prospects of success.

The management structure and hierarchy is explained below.

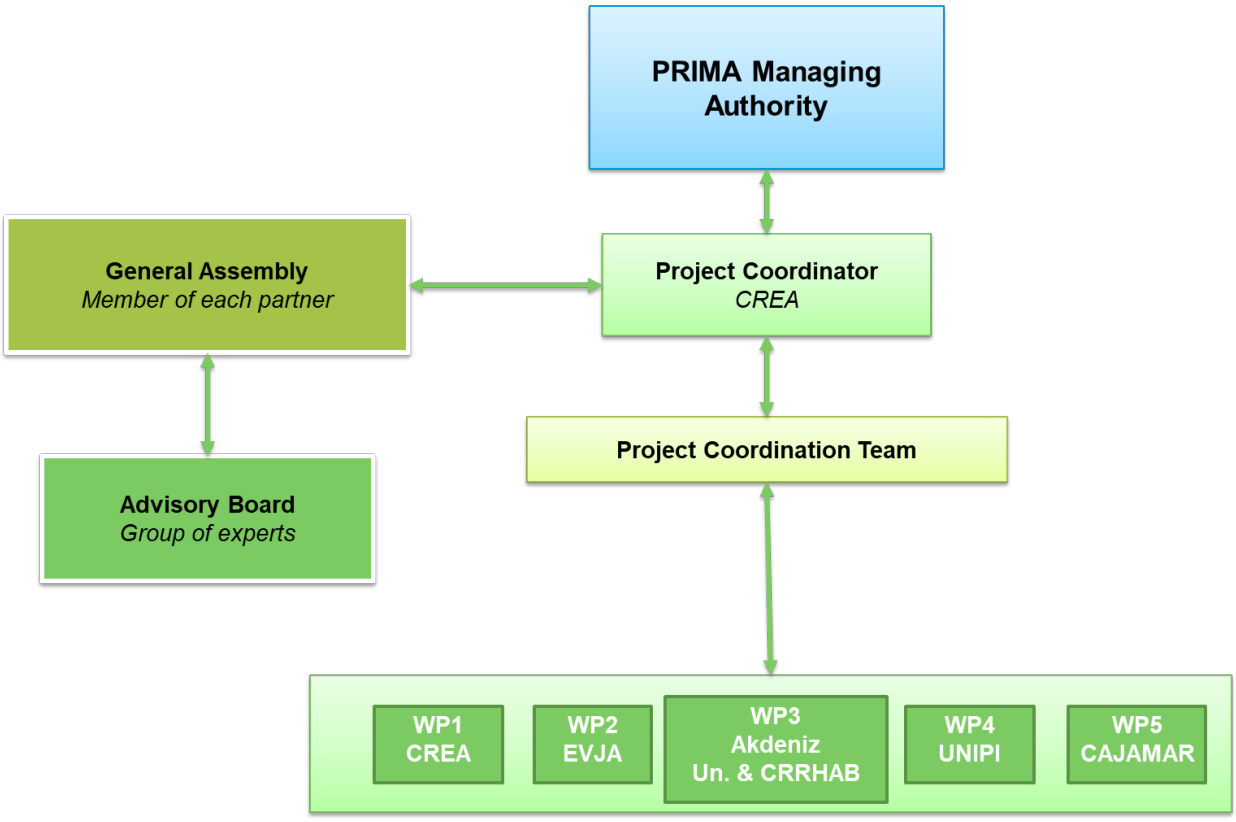

Figure 2 - iGUESS-MED Management structure and hierarchy

The organizational structure of the Consortium shall comprise the following Consortium Bodies:

- **Advisory Board** (AB) as a cooperation body that will be represented by experts at European level to speed-up the impact of the project and provide advice to General Assembly on iGUESS-MED research activities (TBD);
- **General Assembly** as the ultimate decision-making body of the Consortium;
- **Project Coordination Team** (PCT) as the supervisory body for the execution of the Project which will report to and be accountable to the General Assembly;
- **Project Coordinator** (PC) as the legal entity acting as the intermediary between the parties and PRIMA Managing Authority;

Communication flow, meetings and reporting

The communication flow between the partners, the Coordinator and PRIMA Managing Authority follows from the management structure as described and visualised in Figure 2:

- The WP partners will report to the WP Leader, the WP Leader to the PCT and the Coordinator will report to PRIMA Managing Authority;
- The Consortium will have regular meetings;
- Advisory Board will meet General Assembly during the regular meeting in order to provide input, feedback and recommendations on the iGUESS-MED research.

More specifically, in order to ensure clear and efficient project management, regular WP conference calls, project conference calls, project management meetings and plenary meetings will be organised as described in the following paragraphs.

4.2 General operational procedures for all Consortium Bodies (CA Section 6.2)

4.2.1 Representation in meetings

Any Party that is a member of a Consortium Body (hereinafter referred to as “Member”:

- should be present or represented at any meeting of such Consortium Body;
- may appoint a substitute by presenting or a proxy statement to the chairperson of the Consortium Body in order to attend and vote at any meeting;
- and shall participate in a cooperative manner in the meetings.

4.2.2 Preparation and organization of meetings

4.2.2.1 *Convening meetings*

The chairperson of a Consortium Body shall convene meetings of that Consortium Body.

	Ordinary meeting	Extraordinary meeting
General Assembly	At least once a year	At any time upon written request of the PCT or 1/3 of the Members of the General Assembly
Project Coordination Team	At least monthly on-line (via Skype, teams or meet) At least once a year off-line (online during COVID-19 outbreak)	At any time upon written request of any Member of the PCT

Table 3 - Convening Meeting table

Meetings may take from half a day to several days. Apart from:

- planning the meetings sufficiently in advance thanks to the Meeting overview table (§4.2.2.2);
- providing the agenda in due time;
- providing the minutes of meeting in due time and according to the approval process (§4.2.2.7).

The meeting organizer and the partner hosting the meeting shall have the responsibility of organizing the accommodations (venue, access, security requirements, list of hotels, etc.)

All this information and the documents to be known for or reviewed during the meeting should be distributed with the meeting calling notice.

All attendants should confirm their participation (or representative or absence) at least one week before the meeting.

4.2.2.2 *Notice of a meeting*

The chairperson of a Consortium Body shall give notice in writing of a meeting to each Member of that Consortium Body as soon as possible and no later than the minimum number of days preceding the meeting as indicated below.

	Ordinary meeting	Extraordinary meeting
General Assembly	30 calendar days	10 calendar days
Project Coordination Team	14 calendar days	5 calendar days

Table 4 - Notice to call a Meeting

4.2.2.3 *Sending the agenda*

The chairperson of a Consortium Body shall prepare and send each Member of that Consortium Body a written agenda no later than the minimum number of days preceding the meeting as indicated below.

General Assembly	15 calendar days, 7 calendar days for an extraordinary meeting
Project Coordination Team	5 calendar days

Table 5 - Notice for Meeting Agenda sending

4.2.2.4 *Adding agenda items*

Any agenda item requiring a decision by the Members of a Consortium Body must be identified as such on the agenda.

Any Member of a Consortium Body may add an item to the original agenda by written notification to all of the other Members of that Consortium Body up to the minimum number of days preceding the meeting as indicated below.

General Assembly	14 calendar days, 7 calendar days for an extraordinary meeting
Project Management Team	2 calendar days
Advisory Board	2 calendar days

Table 6 - Rules to allow change of the agenda

4.2.2.5 *Add a new item to the original agenda*

During a meeting, the Members of a Consortium Body present or represented can unanimously agree to add a new item to the original agenda.

4.2.2.6 *Meetings to be held by teleconference or other telecommunication means*

Meetings of each Consortium Body may also be held by teleconference or other telecommunication means.

4.2.2.7 *Accepted Minutes*

Decisions will only be binding once the relevant part of the Minutes has been accepted.

4.2.2.8 *Decision taken without a meeting*

Any decision may also be taken without a meeting if the Coordinator circulates to all Members of the Consortium Body a written document, which is then agreed by the defined majority of all Members of the Consortium Body. Such document shall include the deadline for responses.

Decisions taken without a meeting shall be considered as accepted if, within the period set out in section 4.2.4.4, no Member has sent an objection in writing to the chairperson. The decisions will be binding after the chairperson (Project Manager/Coordinator) sends to all Members of the Consortium Body and to the Coordinator (as legal entity, i.e. CREA) a written notification of this acceptance.

4.2.3 Voting rules and quorum

4.2.3.1 *Quorum*

Each Consortium Body shall not deliberate and decide validly unless two-thirds (2/3) of its Members are present or represented (quorum). If the quorum is not reached, the chairperson of the Consortium Body shall convene another ordinary meeting within 15 calendar days. If in this meeting the quorum is not reached once more, the chairperson shall convene an extraordinary meeting which shall be entitled to decide even if less than the quorum of Members are present or represented.

4.2.3.2 *Vote*

Each Member of a Consortium Body present or represented in the meeting shall have one vote.

4.2.3.3 *Defaulting Party*

A Party which the General Assembly has declared to be a Defaulting Party may not vote.

4.2.3.4 *Majority of votes*

Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast.

The present or represented Members may decline to participate in a vote of the General Assembly by stating that they abstain, in which case they shall not be counted for the purposes of determining the majority of the votes. On the contrary, the abstaining Members shall be counted for the purpose of determining the quorum of validity.

When a decision has been adopted or rejected, it may be reconsidered and proposed in another further meeting of the General Assembly only if the request comes at the initiative of at least two-thirds (2/3) of the Members.

4.2.4 Veto rights

4.2.4.1 *Exercise a veto*

A Member which can show that its own work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of a Consortium Body may exercise a veto with respect to the corresponding decision or relevant part of the decision.

4.2.4.2 *Veto of a decision foreseen on the original agenda*

When the decision is foreseen on the original agenda, a Member may veto such a decision during the meeting only.

4.2.4.3 *Veto a new decision*

When a decision has been taken on a new item added to the agenda before or during the meeting, a Member may veto such decision during the meeting and within 15 calendar days after the draft minutes of the meeting are sent. A Party that is not a Member of a particular Consortium Body may veto a decision within the same number of calendar days after the draft minutes of the meeting are sent.

4.2.4.4 *Veto a decision taken without a meeting*

When a decision has been taken without a meeting a Member may veto such decision within 15 calendar days after written notification by the chairperson of the outcome of the vote.

4.2.4.5 *Exercise of veto*

In case of exercise of veto, the Members of the related Consortium Body shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all its Members.

4.2.4.6 *Impossibility to veto decisions*

A Party may neither veto decisions relating to its identification to be in breach of its obligations nor to its identification as a Defaulting Party. The Defaulting Party may not veto decisions relating to its participation and termination in the Consortium or the consequences of them.

4.2.4.7 *Impossibility to veto decisions for leaving Party*

A Party requesting to leave the Consortium may not veto decisions relating thereto.

4.2.5 Minutes of meetings

4.2.5.1 *Written minutes*

The chairperson of a Consortium Body shall produce written minutes of each meeting, which shall be the formal record of all decisions taken. He/she shall send the draft minutes to all Members within 10 calendar days of the meeting.

4.2.5.2 *Acceptation of minutes*

The minutes shall be considered as accepted if, within 15 calendar days from sending, no Member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.

4.2.5.3 *Send of accepted minutes*

The chairperson shall send the accepted minutes to all the Members of the Consortium Body and to the Coordinator, who shall safeguard them. If requested, the Coordinator shall provide authenticated duplicates to Parties.

4.3 Specific operational procedures for the Consortium Bodies (CA Section 6.3)

4.3.1 General Assembly

In addition to the rules described in Section 4.2, the following rules apply.

4.3.1.1 *Members*

The General Assembly shall consist of one representative of each Party (hereinafter General Assembly Member).

Each General Assembly Member shall be deemed to be duly authorized to deliberate, negotiate and decide on all matters listed in Section 4.3.2.1 (“Decisions”).

The Coordinator shall chair all meetings of the General Assembly, unless decided otherwise in a meeting of the General Assembly.

The Parties agree to abide by all decisions of the General Assembly. This does not prevent the Parties to submit a dispute to resolution in accordance with the provisions of Settlement of disputes in the Section 11.8 of the CA.

Partners have indicated the GA representative by formal letter or email.

Participant No	Member (Name and Surname)	Participant organisation name
1	Alejandra Navarro Garcia	CREA
2	Davide Parisi	EVJA
3	Luca Incrocci	UNIPI
4	Andrea Sala	BIOPLANET
5	Marisa Gallardo	UAL
6	Maria Dolores Fernandez	CAJAMAR
7	Edurne Azcona	La Caña
8	Dursun Buyuktas	Akdeniz University
9	Asma Laarif	CRRHAB

Table 7 - General Assembly Composition

4.3.1.2 *Decisions*

The General Assembly shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein. In addition, all proposals made by the PCT shall also be considered and decided upon by the General Assembly.

The following decisions shall be taken by the General Assembly:

- content, finances and intellectual property rights:
  - proposals for changes to Annexes 1 and 2 of the Grant Agreement to be agreed by PRIMA Managing Authority;
  - changes to the Consortium Plan;
  - modifications to Attachment 1 of CA (Background Included);
  - additions to Attachment 3 of CA (List of Third Parties for simplified transfer according to Section 8.3.2 of the CA);
  - additions to Attachment 4 of CA (Identified Affiliated Entities).
- evolution of the Consortium:
  - Entry of a new Party to the Consortium and approval of the settlement on the conditions of the accession of such a new Party;
  - Withdrawal of a Party from the Consortium and the approval of the settlement on the conditions of the withdrawal;
  - Identification of a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement;
  - Declaration of a Party to be a Defaulting Party;
  - Remedies to be performed by a Defaulting Party;
  - Termination of a Defaulting Party's participation in the Consortium and measures relating thereto;

- Proposal to the PRIMA Managing Authority for a change of the Coordinator;
- Proposal to the PRIMA Managing Authority for suspension of all or part of the Project;
- Proposal to the PRIMA Managing Authority for termination of the Project and the Consortium Agreement.

- Appointments: on the basis of the Grant Agreement, the appointment if necessary of Project Coordination Team Members.

The role of the GA is:

- to monitor and assess the overall progress and output of the project according to the objectives, timetable, deliverables and milestones and to recommend solutions for any shortcomings;
- to review the draft version of the progress reports and final report, to make recommendations for improvements and to approve final versions before these are submitted to the EC;
- to promote the sharing of good practice in research and dissemination activities, to inform the partners about dissemination opportunities, and to enhance collaboration with research, entrepreneurial, advocacy and policymaking activities outside the Consortium.

4.3.2 Project Coordination Team

In addition to the rules in Section 4.2, the following rules shall apply:

4.3.2.1 *Members*

The PCT shall consist of the Coordinator, WP Leaders and other members as described in § 4.3.2.2 and appointed by the General Assembly. The Coordinator shall chair all meetings of the PCT, unless decided otherwise by a majority of two-thirds.

4.3.2.2 *Other roles*

PCT will encompass the following other main roles:

- **Project Coordinator (PC)** The PC is a legal entity (CREA), which represents the Consortium in the negotiations with PRIMA Managing Authority and the EC and will be the intermediary between the involved parties during the project. The Project Manager/Coordinator (physical person) on behalf of the PC in iGUESS-MED is Alejandra Navarro Garcia. She is responsible for the monitoring of the progress of the project according to the Work Plan, timetable, deliverables and deadlines established in the GA and CA, budget controlling and reporting of the major changes from the agreed work-plan;

- **Technical Manager (TM)** is appointed by the Coordinator and must ensure a high technical performance and innovation of iGUESS-MED. In this project will be Mr. Antonio Affinito from EVJA. The TM will act as a high-level advisor and oversee the supervision and monitoring, in joint with the rest of technological partners, of the progress, development, validation and market replication of iGUESS-MED DSS.
- **Risk and Quality Manager (RQM)** will be appointed by the Coordinator and will lead the impact analysis of iGUESS-MED in terms of tracking of established KPIs, identification of deviations, establishment of corrective actions, and monitoring of their implementation within the project. This role will be assumed by Mr. Daniele Massa from CREA. The RQM will develop the Quality Assurance Plan (QAP) and the Risk Management Plan (RMP) of the project with the support of one partner by country (UAL – Spain, CRRHAB – Tunisia, and Akdeniz University – Turkey). They will contain all procedures, plans and other documents applicable to the project as well as the managerial and technical activities to be implemented in terms of quality assurance and risk management;
- **Administrative Manager (AM)** Overall administration of in iGUESS-MED is undertaken by the AM. In this project, the PC also covers the AM role. The AM oversees the processes and controls needed for fair and effective internal administration. The AM is responsible to ask to the consortium's partners the administrative issues about their organisations regarding to submissions of cost statements, deliverables or other administrative information requested by the PO;
- **Dissemination and Communication Manager (DECO Manager)** The role of the DECO manager is to provide a deep understanding of both market and technical problems, with the overall goal of successfully implementing innovative and creative ideas into the project. This role will be performed by Mrs. Maria Dolores Fernández from CAJAMAR, with a strong background in the field. Other responsibilities of the DECO manager will be the coordination of the exploitation activities and business plan of the project, with a strategic innovation vision, ensuring that the iGUESS-MED's project outcomes influence the market as much as possible;
- **Data Manager (DM) –** the DM will be responsible for the management and protection of the data generated during the project. For this task Mr. Luca Incrocci from UNIPI has been appointed. The DM will be responsible for maintaining the accuracy, integrity and security of partners' and end-users' data, applying regulations, policies, protocols and/or procedures to control and maintain accurate records.
- **Work Packages Leaders (WPL) -** the project is structured in 5 WPs. Each WP has a leader (WPL) with the task of presenting the status and progress of their WP to the PCT and report feedbacks to the participants of their own WP. They will be responsible for the management and technical coordination of their WP and they will translate decisions of the PCT, organize call meetings with the WP participants when necessary and report results and potential critical issues and risks to the PCT. They will also communicate with other WPL towards aligning and agreeing the work in the respective WPs for achieving the iGUESS-MED objectives.

The proposed PCT is the following (to be formally approved by GA):

Name and Surname of the person in charge	Participant organisation name	Role in the Project
Alejandra Navarro Garcia	CREA	Project Manager/Coordinator
Antonio Affinito	EVJA	Technical Manager
Daniele Massa	CREA	Risk and Quality Manager
Alejandra Navarro Garcia	CREA	Administrative Manager
Maria Dolores Fernández	CAJAMAR	Dissemination and Communication Manager
Luca Incrocci	UNIPI	Data Manager
Alejandra Navarro Garcia	CREA	WP1 Leader
Davide Parisi	EVJA	WP2 Leader
Dursun Buyuktas and Asma Laarif	Akdeniz University and CRRHAB	WP3 Leader
Luca Incrocci	UNIPI	WP4 Leader
Maria Dolores Fernández	CAJAMAR	WP5 Leader

Table 8 - PCT Composition

4.3.2.3 *Minutes of meetings*

Minutes of PCT meetings, once accepted, shall be sent by the Coordinator to the General Assembly Members for information.

4.3.2.4 *Tasks*

The PCT shall prepare the meetings, propose decisions and prepare the agenda of the General Assembly.

The PCT shall seek a consensus among the Parties.

The PCT shall be responsible for the proper execution and implementation of the decisions of the General Assembly.

The PCT shall monitor the effective and efficient implementation of the Project.

In addition, the PCT shall collect information at least **every 3 months** on the progress of the Project, examine that information to assess the compliance of the Project with the Consortium Plan and, if necessary, propose modifications of the Consortium Plan to the General Assembly.

The PCT shall:

- support the Coordinator in preparing meetings with PRIMA Managing Authority and in preparing related data and deliverables;
- prepare the content and timing of press releases and joint publications by the Consortium or proposed by the PRIMA Managing Authority in respect of the procedures of the Grant Agreement for Members Article 29.

In the case of abolished tasks as a result of a decision of the General Assembly, the Project Coordination Team shall advise the General Assembly on ways to rearrange tasks and budgets of the

Parties concerned. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.

4.4 Coordinator (CA Section 6.4)

4.4.1 Role of the Coordinator

The Coordinator shall be the intermediary organization between the Parties and PRIMA Managing Authority and in particular shall perform all tasks assigned to it as described in the Grant Agreement, in the Consortium Agreement and all other contractual documents.

The Coordinator, who will chair the PCT, will be responsible for the overall management, communication, and coordination of the entire project. A special emphasis within its responsibilities is to assure the overall integration of all work package activities.

The project partner in charge of coordinating the project is CREA**.**

4.4.2 Responsibilities of the Coordinator

In particular, the Coordinator shall be responsible for:

- monitoring compliance by the Parties with their obligations;
- keeping the address list of Members and other contact persons updated and available;
- collecting, reviewing to verify consistency and submitting reports, other deliverables (including financial statements and related certifications) and specific requested documents to PRIMA Managing Authority;
- transmitting documents and information connected with the Project to any other Parties concerned;
- administering the financial contribution of the PRIMA Managing Authority and fulfilling the financial tasks described in Section 7.3 of CA;
- providing, upon request, the Parties with official copies or originals of documents that are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims.

If one or more of the Parties is late in submission of any project deliverable, the Coordinator may nevertheless submit the other 'Parties' project deliverables and all other documents required by the Grant Agreement for Members to the PRIMA Managing Authority in time.

4.4.3 Failures of the Coordinator

If the Coordinator fails in its coordination tasks, the General Assembly may propose to the PRIMA Managing Authority to change the Coordinator.

4.4.3.1 *Coordinator acting on behalf of any Party*

The Coordinator shall not be entitled to act or to make legally binding declarations on behalf of any other Party or of the Consortium, unless explicitly stated otherwise in the Grant Agreement or Consortium Agreement.

4.4.3.2 *Coordinator roles beyond the specified tasks*

The Coordinator shall not enlarge its role beyond the tasks specified in Consortium Agreement and in the Grant Agreement.

4.5 Work Package Leader

The Work Package Leader shall have the following functions:

- transmission of any documents and information connected with the Work Package to the Parties concerned;
- transmission of any documents and information connected with the Work Package to the Coordinator;
- transmission of the Project deliverables of the Parties within the Work Package to the Coordinator;
- coordinating on a day-to-day basis the progress of the technical work under the Work Package;
- reviewing deliverables at each agreed step under the Project Plan for the Work Package concerned and advising the Coordinator of any delay in delivery that could not be remedied or any major discrepancy;
- the Work Package Leader shall neither be entitled to act nor make legally binding declarations on behalf of any other Party or to enlarge its role beyond the one described herein.

WP No	Work Package title	WP Leader	Name and surname of person in charge
WP1	Project Coordination	CREA	Alejandra Navarro Garcia
WP2	DSS development	EVJA	Davide Parisi
WP3	Validation and Demo of DSS	Akdeniz University and CRRHAB	Dursun Buyuktas and Asma Laarif
WP4	Environmental and socio-economic impact assessment (SEA)	UNIPI	Luca Incrocci
WP5	Dissemination, exploitation, communication, and outreach (DECO) plan	CAJAMAR	Maria Dolores Fernández

Table 9 - List of WP Leaders

4.6 Advisory Board (CA Section 6.5)

The Advisory Board (AB) is a valued group of experts that will provide inputs, feedback and recommendations on the iGUESS-MED research. It is composed of high-level international experts with long experience on the topics of the project.

The AB will be appointed and steered by the Project Coordination Team. The AB shall assist and facilitate the decisions made by the General Assembly. The Coordinator will ensure that a non-disclosure agreement is executed between all Parties and each AB member. Its terms shall be not less stringent than those stipulated in the Consortium Agreement, and it shall be concluded no later than 30 calendar days after their nomination or before any confidential information will be exchanged, whichever date is earlier. The Coordinator shall write the minutes of the AB meetings and prepare the implementation of the AB's suggestions. The AB members shall be allowed to participate in General Assembly meetings upon invitation but have not any voting rights.

Gender	Advisory Board Members	
F	**Prof. Kathy Steppe**	**Professor - Head of the Laboratory of Plant Ecology. Faculty of Bioscience engineering. Ghent University. BELGIUM**
F	**Dr. Maria Fernanda Ortuño Gallud**	**Researcher - Centre of Edaphology and Applied Biology of Segura (CEBAS). Spanish National Research Council (CSIC). SPAIN**
M	**Prof. Antonio Elia**	**Professor - Sciences of Agriculture, Food Natural resources and Engineering. University of Foggia. ITALY**

Table 10 - List of Advisory Board Members (TBD)

Through the AB, iGUESS-MED will create important synergies with global initiatives on the future of innovative greenhouse support systems, IoT based climate control solutions, in particular for efficient fertigation and pest management. It will include representatives of high-level organizations.

5 Configuration Management

5.1 Configuration items identification

Here are two types of configuration items to be identified:

- the document items;
- the non-document items.

5.1.1 Identifying document items

Any document produced by a participant that should be shared among participant shall be identified by a unique reference made of:

- project Acronym;
- document ID: is used to uniquely identify a document within iGUESS-MED project;
- version number: is used to identify the different stages of the document.

e.g. <Project Acronym >_<Document ID>_<DocumentVersion>

This includes (but not limited to):

- all deliverables;
- all calling notices and minutes of meetings;
- all WP reports;
- all technical notes;
- presentations made at the meetings.

The **<Document ID>** labelling convention will be:

- D + Project deliverable number: deliverable;
- TRP: Technical Report;
- MEM: Memorandum;
- MOM: Minutes of Meeting;
- PRS: Presentation;
- MNGT: for all management related documents;
- DISM: for all dissemination relation documents;
- OTHR: for any other document that doesn't fit into one of the types described above.

The **<DocumentVersion>** is made of the draft number of the document e.g. "Version 1.0".

All documents start with a first version called "Version 1.0". Following versions are Version 2.0, Version 3.0… up to the approval. The approved document then becomes "FINAL".

The **document file name** will be take the following form:

<project Acronym >_<Document ID>_<DocumentVersion>

5.1.2 Identifying non-document items

This includes identification of any hardware, software and any physical support such as CD-ROM.

5.2 Document Management

5.2.1 Definition and basic rules

A document is defined as a set of electronic data that needs to be exchanged (whatever the reason) with other participants.

In iGUESS-MED project a document:

- shall be uniquely identified as per 5.1 rules;
- shall see its associated file identified as per 5.1 rules;
- shall be compliant with a template. The word template to be used is enclosed in the Annex 1 of this deliverable.

Each document must be under the responsibility of a nominated person, called the Document Manager, who is in charge of ensuring the production of the document:

- in compliance with the schedule;
- as per the process described below.

For documents identified in the Work Plan, the document manager is the WP Leader.

For any other document, the default document manager is the WP Leader of the WP owner of the document, unless stated otherwise.

For each document, the document manager has the responsibility to produce or coordinate the production (in compliance with the template), issue, amend and finalize it. He/she must know the dates at which the document is due, anticipate the verification and approval process delay, control that the document is processed through the relevant verification and approval chain, and make sure that the deadlines for delivery are met.

However, the document managers can delegate their role of document manager to another iGUESS-MED member, provided the latter is made fully aware (such as decision in a meeting) of the time schedule and is given all information necessary to take that role.

The editor of a document will be responsible of any virus present in the soft copy of the document when delivered by any electronic means to other partners (the anti-virus application shall be frequently updated).

Should new versions of productivity software become available for handling documents during the course of the project, old agreed-upon versions should always accompany the distribution of new, although it might cause the loss of some formatting information, unless an agreement is led upon the partners to use newer versions of tools.

5.2.2 Production of documents and distribution

iGUESS-MED Consortium documents for electronic distribution must be storable/retrievable in an MS Windows XP or higher environment supporting long names.

5.2.2.1 *Production Tools*

For production tools, the following must be used:

- for word processing (.doc format): Microsoft, Word. Exchange format “word 2013”;
- for tabular spreadsheet information and Graphs (.xls format): MS Excel. Exchange format “Excel 2013”;
- for presentations: MS PowerPoint (.ppt format): Exchange format “PowerPoint 2013”;
- for Project Planning: Microsoft Project: Exchange format “Microsoft project 2013” (TBC);
- for Images (.jpeg format): any software tools that can produce .jpeg files;
- for compressed files (.zip format): any software tool that can produce .zip files;
- Portable Document Format (.pdf): any software that can produce .pdf files.

If the participant responsible for the delivery of any document using one of these format is using a higher version than the one mentioned, then the original version should also be included (preferably through a .zip format).

The partner shall ensure that the images are suitable for printing and especially those images could be embedded larger printing for dissemination purposes.

The use of the .pdf format is limited to its capability of obtaining files that are printable with the same layout regardless of the printer. This explicitly excludes the use of any modification capability that can be offered by a .pdf capable tool.

5.2.2.2 *File Naming*

Please refer to § 5.1.1

5.2.2.3 *Electronic distribution*

Documents may be exchanged and distributed by means of electronically either through e-mail or through a physical support (CD-Rom or USB key).

E-mail-systems used for document transfers/embedding, should be MIME-Version 1.0 compliant. This is the norm for most mailers (MS Exchange, MS Outlook, Netscape/Mozilla).

5.2.3 Documentation templates

Document templates is defined in the Communication, dissemination and exploitation plan in order to ease the writing of a document, enforce a common layout and structure of the document itself.

5.2.4 Language

All produced documents will be written in U.K English and will be spell checked before delivery.

5.2.5 Confidentiality

As a rule, it is considered that all technical documents and reports are confidential. However, they must be handled in compliance with the confidentiality principles and rules described in the Grant Agreement and Consortium Agreement documents.

Of course, dissemination data and public deliverables are considered as non-confidential documents.

5.2.6 Deliverables release procedure

All deliverables generated within the project under each WP are subject to an internal quality review process in order to ensure the quality and relevance of the document with respect to the project objectives and expected outcomes.

The WP Leader is responsible for producing the deliverable and milestones as presented in Annex 1 of the Grant Agreement, must ensure that it is of consistently high quality.

A final draft shall be sent to the Project Coordinator normally about 20 calendar days before the deadline set in the Grant Agreement. Exceptions might be allowed under due motivation.

PCT is in charge of doing a Peer-Review on a draft deliverable.

The WP Leader will finalize the deliverable according to the remarks and further request of the Coordinator about 5 days before the deadline of the deliverable. After this step, the deliverable will be formally approved and submitted by the Coordinator as described in § 5.2.7.

All final deliverables will be shared with all partners through the repository area on the iGUESS-MED website.

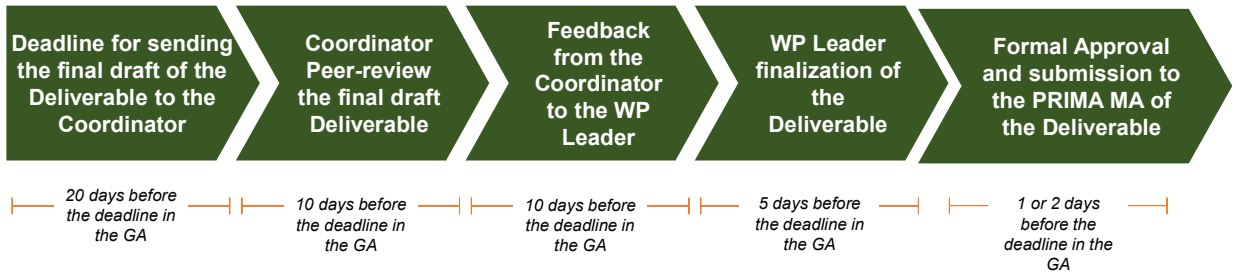

Figure 3 - Overview of deliverable approval and submission process

5.2.7 Verification and approval procedure

There are basically three categories of documents:

- the contractual documents (i.e. the deliverables);
- the internal technical documents (such as non-contractual technical reports);
- other management documents (such as minutes of meetings).

In all cases, for each document, a document manager and a verification authority are explicitly appointed.

However, the formal procedure for verification and approval of the documents detailed here is only valid for the first two categories.

The third category documents, e.g. Minutes of meeting, are not verified but discussed, amended if necessary and approved according to the rules above.

Moreover, for the technical documents circulating internally to a Work Package for working purpose no formal verification and approval is made by the WP leader.

The following authorities are defined for the verification and approval of documents:

Type of document	Verification Authority	Approval Authority
Periodic and Final report	Project Coordinator	Project Manager/Coordinator
Deliverables	WP Leader	Project Manager/Coordinator
Internal documents	Informal verification	N/A
Calling notices of Minutes of Meeting	Chairperson of a Consortium Body	N/A

Table 11 - Verification / Approval authorities

6 Communication within the Consortium

The normal means of communication will be the e-mail, conference calls (in particular during COVID-19 breakout), calls, depending on the urgency and the kind of the communication.

Since all project partners are distributed across EU, the centrepiece of the overall project communication will be Smart Sheets of PRIMA Programme, offering to each partner independent access to important documents, supporting materials, and other project information (e.g. budget etc.).

E-mailing rules

All e-mail sent to partners must be virus-safe.

In order to ease e-mail management and automatic filtering, it is suggested to use standardize message Object: *field.*

The following rules should be applied:

- use “to” for persons having to complete an action, and “copy” for persons having to know, but without having to complete an action;
- avoid attachments as much as possible;
- avoid as much as possible the “reply to all”;
- do not mix two topics in one e-mail:=> One e-mail per topic;

- when you reply to an e-mail, don't add another subject => Create another e-mail with a relevant subject name;
- when using a past e-mail to obtain the list of recipient do not forget to change the subject;
- if you have no answer from a partner to an important e-mail => Be pro-active (call until you succeed)!;
- ensure your e-mail reach the recipients (e-mails can be removed due to spam filters);
- use the auto-reply messages when you are out of the office for some days.

Internal Email Lists

Several target group-specific mailing lists have been established to address iGUESS-MED-relevant topics and activities as well as circulate important related news among the project members.

7 Conclusions

The Management handbook defines how the project objectives are executed during the project period, defining an explicit project management structure with roles and responsibilities for all people involved with the project.

More specifically, this document will allow to guarantee adherence of work to overall project plans, available resources and timing and ensure an effective coordination of project activities and maintenance of contacts with PRIMA Managing Authorities representatives.

After each periodic review the deliverable will be updated if necessary according to the new information available and new versions of the document will be released.

8 Acronyms

[AB]	[Advisory Board]
[CA]	[Consortium Agreement]
[GA]	[Grant Agreement]
[PC]	[Project Coordinator]
[PCT]	[Project Coordination Team]
[WP]	[Work Packages]