



D1.3 DETAILED WORK PLAN

WP 1

March 30th, 2017



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SUMMARY

This document describes the overall operational procedures and tools to execute IoF2020. These procedures fit to the internal WP management procedures to ensure lean management. If necessary the document refers to those internal WP management procedures.

The document starts with an introduction about the overall project objectives and methodology. Next the project structure and management structure is explained. Chapter 4 describes the implemented lean management procedures.

This document will be reviewed on a regularly basis and updated when required.

1.INTRODUCTION

The main objective of the IoF2020 Large Scale Pilot is to foster a large-scale take-up of IoT in the European farming and food domain. This will contribute to a next huge innovation boost and consequently to a drastically improved productivity and sustainability. This overall aim will be achieved by accomplishing the following specific project objectives:

- Demonstrate the business case of IoT for a large number of application areas in farming and food
- Integrate and reuse available IoT technologies by exploiting open architectures and standards.
- Ensure user acceptability of IoT solutions in farming and food by addressing user needs, including security, privacy and trust
- Ensure the sustainability of IoT solutions beyond the project by validating the related business models and setting up an IoT Ecosystem for large scale take-up

IoF2020 embraces a demand-driven methodology in which end-users from the agri-food are actively involved during the entire development process aiming at cross-fertilization, co-creation and co-ownership of results. All technologies in the use cases have a value-proposition for end-users: e.g. improving safety, efficiency, quality, lowering difficulty, variability and costs. However, they are at a TRL 4-5 and their development was based on a large set of market and technical assumptions that have not been tested in a systematic way in their operational environment. Needs for end-users can be wrongly prioritized or key issues along the value chain can be unaddressed. IoF2020's innovative approach, the lean multi-actor approach tests these assumptions in real bottlenecks of end-users in their operational environment and value chain stakeholders. Feedback is translated into technical improvements that better meet end-user needs and better fit into the production environment and the value chain. Figure 1 shows that the process starts with initial deployment of technologies into their operational environment as the beginning of the use case and:

- Concurrent (i) measurement of use-case performance and evaluation of KPIs coordinated by the business chair of each use case and (ii) managing, facilitating and synthesizing feedback from end-users and stakeholders along the value-chain coordinated by the ecosystem chair of each use case,
- Translating key issues demanded by end-users and stakeholders into improvement, inserting or removing of technical features, coordinated by the technology chair of each use case.

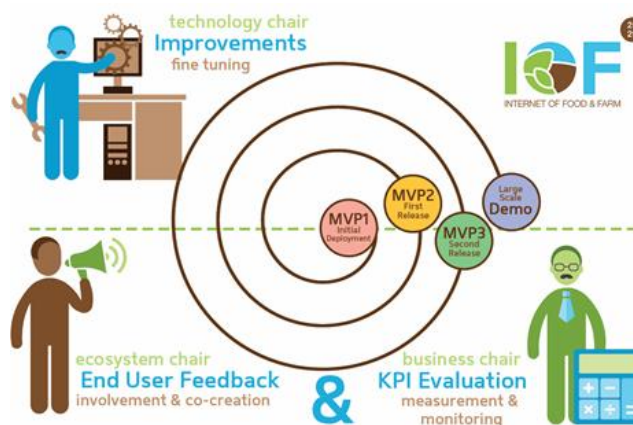


Figure 1 - Overall methodology of IoF2020

By passing through this cycle, the technology is altered with a new set of features and a new minimum viable product (MVP) compared to the beginning of the process. The choice of features is directly influenced by end-users and value-chain stakeholders, translating into a new and improved MVP (MVP 2) compared to initial deployment (MVP 1), delivering higher value for the end-user. This cycle is repeated again with the first release to test the new set of features and fine tune them to deliver higher value to the end-user, better fit into the existing production processes and satisfy food-industry standards. The result will be the second release, wherein the cycle will be repeated again. A large group of end-users will be engaged to demonstrate the technology in a wide array of productive environments: different types and sizes of farms across a wide geographic area of Europe; once again, technical aspects will be fine-tuned using feedback from a large set of

end-users. Finally, large-scale demonstrations will complete and qualify technologies. The products and services resulting from this iterative multi-step process will deliver value identified by end-users and fit into production processes of the value chain – thus demonstrating economic viability.

The lean multi-actor approach is a combination of the multi-actor approach and lean start-up methodology that overcomes major barriers to adoption of IoT technologies in European agriculture. It does this by fostering co-creation of technology. Results from a small step in product development are tested and measured in the operational environment to guide the next step, scaling up to a wide variety of productive environments and consulting with all stakeholders to address acceptability. The resulting products and services are appropriate for European societies, lower environmental footprints, and have a good fit into target markets.

2.THE OVERALL IOF2020 STRUCTURE

The IoF2020 trials are representing a demand-driven approach, incorporating all the technological and innovation elements, and as illustrated in Figure 2, are designed to carefully realize the tasks related to the use, application and deployment as well as the development, testing and integration activities. The major part of those activities is grouped in WP2 for the management of the trials. WP3 is supporting this from a more IoT technological perspective, facilitating the proper reuse of available approaches and technologies as well as to assure a supply-driven realization of synergies, assuring efficiency and effectiveness in the trials and subsequently their individual use cases. Integral part is WP4's business related support that is driven by demand and supply related business models to finally facilitate a market reach. WP5 is maximizing IoF2020's impact, while carefully supporting both, the internal and external collaboration. Accompanying, IoF2020 is based on a light-weight management structure that considers the project's complexity as well as enables flexibility and explicitly includes feedback mechanisms to allow adaptation and optimization of the technological and business approach.

Project management in IoF2020 goes beyond simple management structures, due to the amount of work and sheer number of partners involved. IoF2020 is combining a hierarchical top-down management model that is defined by related boards, committees and management groups, while at the same time, it allows a synergetic bottom-up management,

focusing on the trials in WP2.

Agile development

approaches in the trials and

related use cases will be

paired with a matrix

organisation that is grouped

according to the trial

topics/challenges (i.e.

arable, dairy, fruit, vegs,

meat) as well as the IoT

related topics (i.e.

technology enablers like

sensors, actuators, long-

range communication). This

was done to facilitate the

elaboration and validation of

business models as joint

effort of WP2 & WP4, as well

as to enable the

identification of synergies

and efficiency potentials

when realizing the required

technologies in WP2,

supported by WP3. On top

of that, it will also allow to

response to the trial needs

with a flexible and most

logical grouping of work that

will enable a reuse of technologies

and assures both efficiency and

effectiveness

of work to be accomplished. This

is also considered as a basic

prerequisite to follow a multi-actor

approach and

a demand-driven innovation through

involvement of the various actors

that is also consolidated in relation

to WP5. Therefore, the communication

will be facilitated between the

different project groups, sectors

and organizations as well as to

identify potential focus areas that

require special attention. Finally,

it will open

verticals to a horizontal discussion

and facilitates the open call

realization that specifically

searches for

synergetic and complementary

contributions.

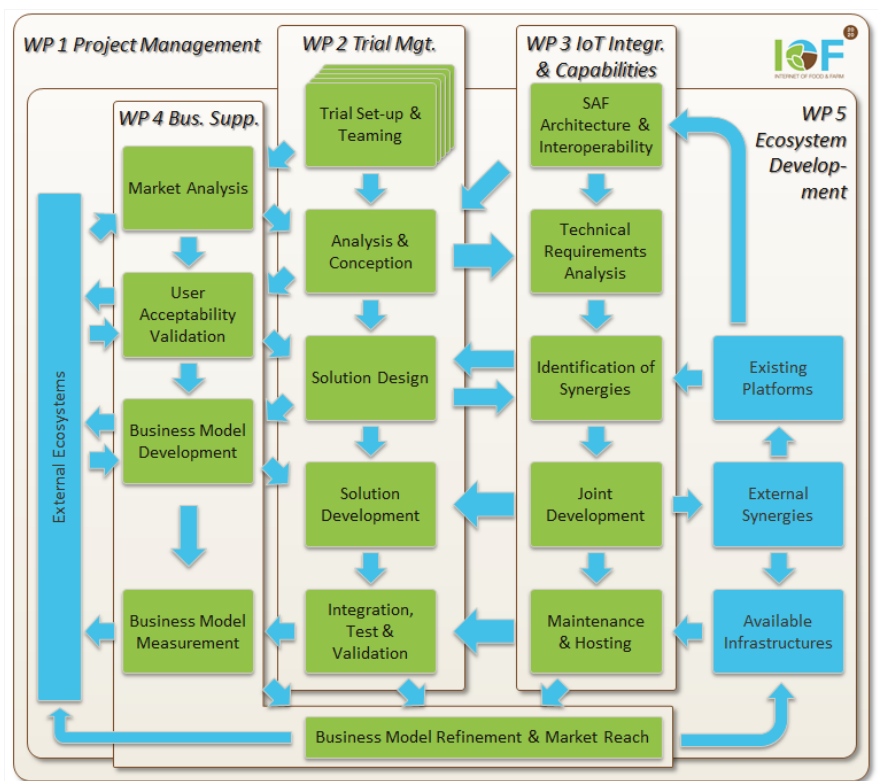


Figure 2 - Workflow and Dependency chart of the IoF2020 Work Packages

The structural breakdown of IoF2020 into Work Packages and Tasks is shown in the following Figure 3.

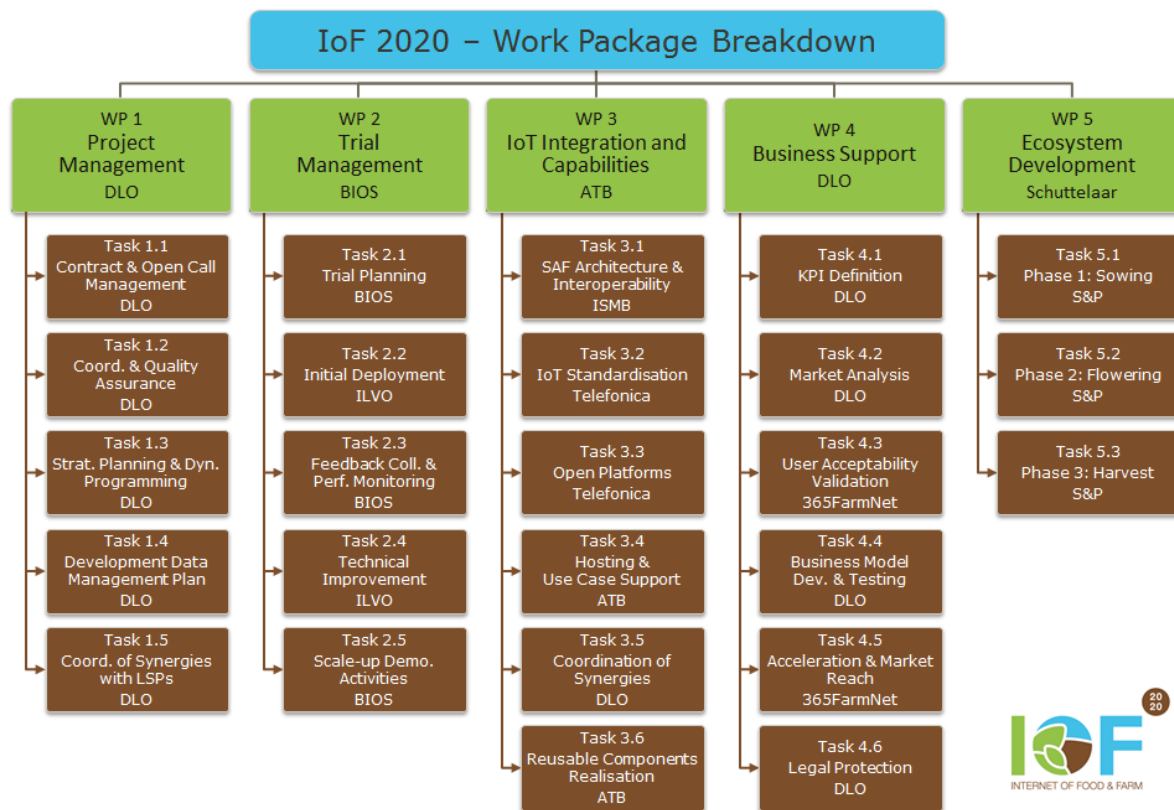


Figure 3 - Work Package Breakdown.

WP1 (Project Management) was described in more detail in Annex 1.

The overall Gantt chart of IoF2020 (Figure 4) is based on a demand-driven methodology in which end-users from the agri-food (i.e. WP2) are actively involved during the entire development process. At the same time IoF2020's innovative approach, the lean multi-actor approach tests users' assumptions in consultation with end-users in their operational environment and value chain stakeholders, generating feedback accordingly. By passing through this cycle, the technology is altered with a new set of features and new minimum viable products (MVP) compared to the beginning of the process.

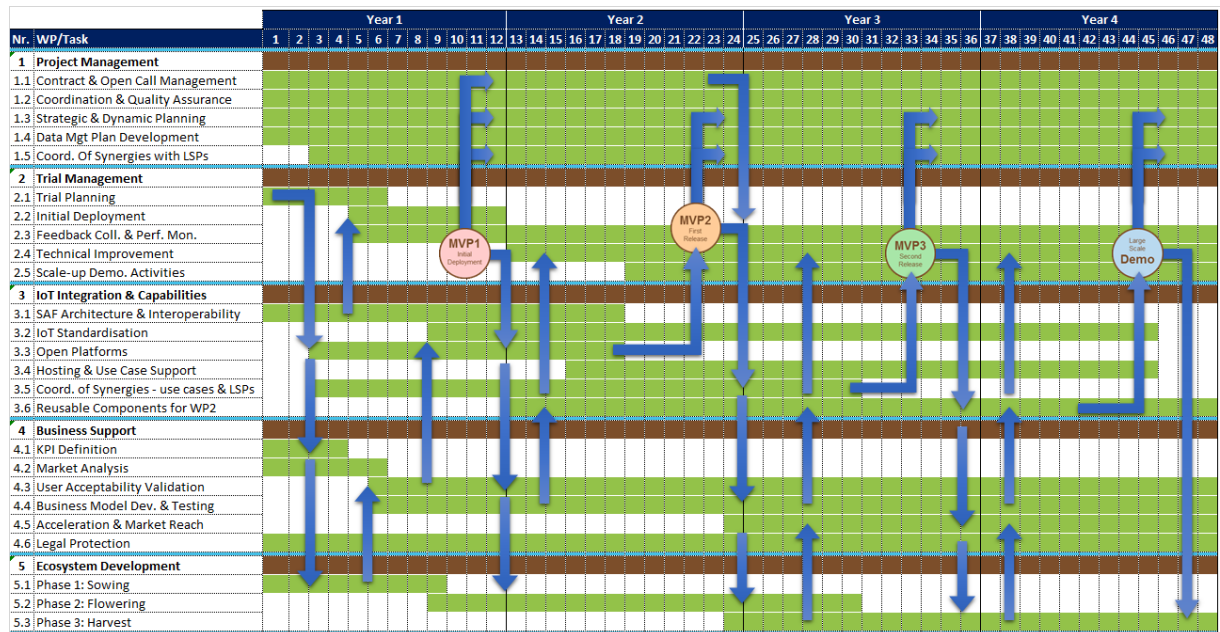


Figure 4 - Gantt chart

3.MANAGEMENT STRUCTURE

The project coordinator (PC) acts as the single point of contact to the European Commission and for a Steering Board of the IoT large scale pilots. The project's "Steering Group" (PSG) forms the umbrella for all Work Packages and Tasks. An overview on the project's management structure is provided in Management structure (Figure 5).

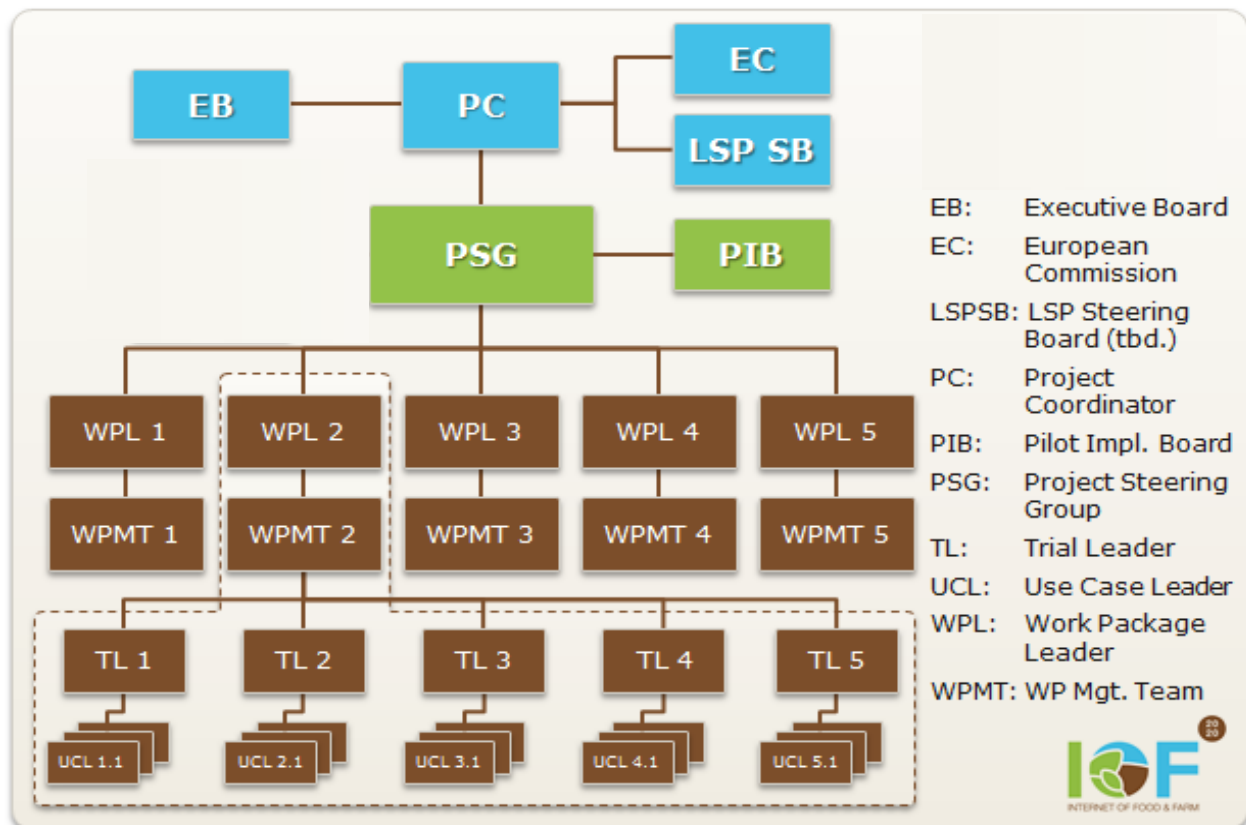


Figure 5 - IoF2020 Management structure

3.1 PROJECT COORDINATOR (PC)

The PC is the single point of contact between the EC and the Consortium. In this function the PC signs the Grant Agreement on behalf of the consortium as well as coordinate potential updates and amendments of the contractual documents (i.e. in relation to administrative, financial and technological matters). The PC coordinates the work with the other large scale pilots (LSP) and horizontal supporting projects selected in the call and substantially facilitate the collaboration in a related coordinating body.

Pursuant to the Grant Agreement, the PC is responsible for the following tasks and functions:

- Overall management of the project with the support of the different management bodies,
- Chairing the Project Steering Group,
- Preparation of the meetings and decisions of the Steering Group, timely collection and preparation of financial statements, including financial audit certificates, from the Parties for transmission to the Commission,

- Ensure prompt delivery of all deliverables identified in the contract, including reporting on achievements, hardware, software and data or requested by the Commission for reviews and audits in accordance to the contract general conditions, including the results of the financial audits prepared by independent auditors.

If one or more of the Parties is/are late in submission of project deliverables, the coordinator may submit the other Parties' project deliverables to the European Commission. To the extent that serious concerns regarding the financial soundness of one or several Parties exist, the coordinator has the authority to require the appropriate letter of comfort to prove that the corresponding Party is able to fulfil the financial obligations with regard to the Contract and the Consortium Agreement. Until this is provided, the coordinator is entitled to refuse the disbursement of the financial contributions of the Commission to this Party. Furthermore, the coordinator has the right to retain any payment if a Party is late in submitting or refuses to provide deliverables. With respect to the contractual management, the coordinator takes care for:

- Prepare a Consortium Agreement among beneficiaries;
- Administer Community financial contribution regarding allocation between beneficiaries and activities, in accordance with the grant agreement and decisions taken by the consortium;
- Support to keep records and financial accounts making it possible to determine at any time what portion of the Community financial contribution has been paid to each beneficiary for the purposes of the project, including distribution of financial resources to beneficiaries;
- Planning & preparation of meetings, including preparation of the minutes of general meetings.

3.2 EXECUTIVE BOARD (EB)

The Executive Board (EB) is composed of representatives of each beneficiary holding signatory power in their organizations and/or being authorized to commit her/his organization to the decisions of the EB. Meetings of the EB will be organized on demand of the PC, PSG or PIB. EB meetings will be organized by the PC, preparing all relevant information enable consensus EB decisions. EB decisions are documented, especially in case of contractual consequences for agreements. EB meetings can be organized as physical, online (e.g. TelCo) or offline (e.g. email) meetings or combinations thereof, responsible for:

- Support the PC in fulfilling all obligations towards the EC and to ensure that the work meets requirements;
- Fundamental changes of the planned work/deliverables that will also be coordinated with/proposed to the EC;
- Decide as the last instance for the resolution of conflicts or for a fundamental reorientation of the project, which cannot be agreed on the other project management levels and to decide major changes to the contract to be suggested to EC;

EB has a quorum when two third of all beneficiaries are present. Decisions of EB are expected to be taken by consensus. If consensus cannot be reached, decisions will be taken by a majority vote. In voting, each Party shall have a number of votes equal to the percentage that its Project share bears to the total of all the Project Shares of the Parties. In the event of tie, the vote of the PC will decide.

3.3 PROJECT STEERING GROUP (PSG)

The PSG consists of the PC and a representative from each Work Package (i.e. usually the WPL, DEM, BMM). The PC and the WPL of WP2 can also involve the trial leaders when appropriate. It has bi-weekly telephone conferences and meets at least every three months in a one-day face-to-face meeting and if necessary followed by a project workshop. Prime tasks of the PSG are to monitor progress, analyzing and approving the results, deciding on corrective actions proposed, recommending contractual changes, provision of proper administration of the project (providing project management support regarding technical, financial and/or

exploitation/ dissemination issues and, as appropriate, proposing changes in work shares and related budget). Moreover, the PSG is also responsible for:

- supporting the coordinator in fulfilling obligations towards the EC and ensuring that all work meets use case demand,
- monitoring the project's budget in accordance with the contract and reviewing and proposing to the partners' budget shifts,
- in case of default of a partner agreeing on actions to be taken against the defaulting partner, including a request to the European Commission for an audit, or for the assistance of the European Commission, and making proposals to the other partners to assign the tasks of the defaulting partner, and if appropriate to agree upon a new entity to join the project for that purpose.

Any decision that requires a decision on PSG level must be identified as such on the pre-meeting agenda. The PSG will decide by simple majority, document their meetings/decisions within minutes that are made available to all partners.

3.4 WORK PACKAGE LEADER (WPL) & WORK PACKAGE MANAGEMENT TEAMS (WPMT)

For each individual work package, a Work Package Leader is appointed. WPLs have been chosen on the basis of their specific expertise and their multiannual experience of team work at international level. WPLs manage and monitor the progress of the tasks of their WP through a continuous intermediation with the Task Leaders and specifically the Trial and Use Case Leaders in WP2. The WPL is chairing the Work Package Management Teams that will make WP related decisions and prepare input for the PSG.

3.5 DISSEMINATION AND EXPLOITATION MANAGER (DEM, WP5)

The DEM is incorporated in WP5 and coordinates and synchronizes the ecosystem development activities of IoF2020 and in particular harmonize all dissemination and communication activities both within the IoF2020 consortium as with external partners, also covering the set-up of the exploitation strategy for the project results and harmonization of exploitation plans between the partners in close collaboration with the BMM. The DEM identifies, contacts and invites small, medium and large companies to IoF2020 meetings as appropriate.

3.6 BUSINESS MODEL MANAGER (BMM, WP4)

The BMM is part of WP4 and balances the scope of IoF2020 with respect to the supply and demand sides to assure a demand-driven innovation. The BMM organizes regular reviews of the business models and the designed, specified, integrated and/or tested IoT solutions. The DEM is also involved in the management of IPR issues facilitating and promoting patenting and cooperating closely with the PC. Any mismatch of user expectations with technology potentials shall be raised to the PSG. This also includes identification of potential synergies to coordinate development in terms of efforts, teaming or reassignment. The BMM also coordinates the validation of user acceptability that will specifically address issues of trust, attention, security and privacy through pre-defined privacy and security impact assessments, liability as well as coverage of user needs in the specific real-life scenarios of the use cases.

3.7 PILOT IMPLEMENTATION BOARD (PIB)

The PIB represents the wider view for the project's stakeholders group (e.g. farmers, industry). From that perspective the PIB gives directions to the project on what is expected from a stakeholders' point of view, which will enlarge a broad support of the project. The decisions to be made by the PIB are specified in the Consortium Agreement and consist of approval of

- Open Call document (scope, procedure)
- Open Call realization
- Data Management Plan
- Data Management Plan and Support pack
- Consolidated report on Synergies with other IoT LSP's
- Policy Recommendations
- Guidelines for data governance and digital ethics
- Ecosystem building strategy
- Public outreach report

The Pilot Implementation Board monitors the effective and efficient implementation of the use cases within the Project. The Coordinator informs the Pilot Implementation Board on the progress of the Project within their scope, in general based on the outcome of the Physical PSG meetings. The PIB examines that information to assess the compliance of the Project with the Consortium Plan and, if necessary, proposes modifications of the Consortium Plan to the Project Steering Group.

3.8 LARGE SCALE PILOT STEERING BOARD (LSP SB)

LSP SB facilitates specifically the synergy for the 5 IoT LSP's on common issues and shared experiences. This will be supported by the CSA's). This cooperation should lead to a broad and coherent package of IoT deployment.

The aim is to organize collaboration, coordination and support for the 5 LSP IA projects (Smart Living for aging well: ACTIVAGE, Smart Farming and Food Security: IoF2020, Wearables for Smart Ecosystems: MONICA, Reference zones in EU Cities: SYNCHRONICITY, Autonomous vehicles in a connected environment: AUTOPILOT) and 2 CSAs (CREATE-IoT and U4IoT).

For each Focus Area Groups (Sustainability, Standardization, Accelerations, Trusted IoT, Evolution, Communication) one IoF2020 representative is appointed. The actual list of representatives is available on Basecamp (see 'Tools and Utilities').

3.9 TRIAL LEADER (TL) & USE CASE LEADER (UCL)

The TLs and UCLs coordinate the day-to-day work for the realization of the envisaged IoT solutions and their usage in real-world settings. This work goes beyond the coordination of a pure validation of technological choices, sustainability and replicability. They carefully explore and to harmonize the work defined in the initial plans with new industry and business processes and innovative business models validated in the context of the use cases. The UCLs report to the TLs that are providing required input, identified issues and change requests to the PSG.

4. MANAGEMENT PROCEDURE

IoF2020 management bodies are responsible for regularly monitoring and updating tasks, responsibilities and partner involvement. Overall project procedures fit to the internal WP management to ensure lean management.

4.1 QUALITY ASSURANCE AND CONTROL

The following quality assurance and control aspects are addressed to guarantee a timely accomplishment of all planned tasks:

- Preparation of an achievable and agreed statement of what the project is to produce, when and how it is to be produced, assigned to different WPs and partners.
- A detailed working plan for each WP at the start of the project. These plans indicated the WP structure, timing of the activities, responsibilities and contact points. A schedule of internal meeting is provided, as well as a list of action items. This working plan is updated on at least a yearly basis. The detailed WP work plan is made available on Basecamp, the internal communication platform (see Tools and Utilities).
- The decision making mechanisms and procedures allow a synergetic bottom-up management, focusing on the trials in WP2. Agile development approaches in the use cases will be paired with a matrix organization that is grouped according to the trial topics/challenges as well as the IoT related topics (i.e. technology enablers like sensors, actuators, long-range communication). This is done to facilitate the elaboration and validation of business models as joint effort of WP2 & WP4, as well as to enable the identification of synergies and efficiency potentials when realizing the required technologies in WP2, supported by WP3.
- Clear assignment of roles and responsibilities, documented in a master database (See Tools and Utilities) owned and maintained by WP1. WP leads provide WP1 with information about roles and responsibilities updates. After update of the master database, changes are published in Basecamp (at least bi-weekly).
- Communication formats: In cooperation with partner S&P of WP5, responsible for external communication, standardized documents and other formats/templates are developed which communicate the message of IoF2020 and are recognizable as such. These templates are published in Basecamp by WP5 to be used by all partners. All external communication will be checked by partner S&P to make sure the required standards are applied.
- Deliverable names: the deliverables will be named as listed in the deliverables list in Annex 1 to the Grant Agreement.
- Version management is performed within the deliverable name format:
 - <del.no> <del.name> v<document version number 99>
 e.g. "D1.3. Detailed work plan v01".
- Review and approval of project results and deliverables is performed:
 - WPL ensures that project deliverables will be reviewed in the responsible team according to the predefined procedures and criteria to ensure a standard high quality before delivery.
 - Task lead 1.2. Coordination and Quality Assurance also cross-checks the results/quality of the technical reports.
 - WP5, as responsible for external communication, checks all public deliverables for the appropriate layout and readability of the external summary.
 - The Pilot Implementation Board reviews and approves the following deliverables:
 - D1.4. Data Management Plan
 - D1.5. Data Management Plan and Support pack
 - D1.6. Consolidated report on Synergies with other IoT LSP's
 - D2.5. Open Call document (scope, procedure)
 - D3.10. Open Call realization
 - D3.4. Policy Recommendations
 - D4.4. Guidelines for data governance and digital ethics

- D5.3. Ecosystem building strategy
- D5.4. Public outreach report
- The Coordinator approves all deliverables before submission to the EC.
- All final documents are stored in Basecamp.

Quality control is performed continuously and summarized during physical PSG meetings, based on the WPL reports about the work progress.

4.4 RISK MANAGEMENT

In order to realize IoF2020 successfully, potential risks need to be anticipated up-front and precautionary measures outlined that can be applied immediately in case of problems and thereby allow an undisturbed continuation of the project for reaching its goals. In essence, risks related to successful performance of the project can be grouped in operational/functional, technical, management and validation type of risks, while specifically the latter covers the important large-scale validation of the pilot implementation.

Risk management and assessment will be performed continuously and summarized during the physical PSG meetings. The focus is on risks with a high probability of occurrence, in combination with a high impact on the project result if the risk occurs. The identified mitigation actions will be executed when necessary and its effect appropriately evaluated. If the mitigation action is judged to be not effective, the PSG will decide on other measures to be taken. Project management will store risks and mitigation updates, including their evaluation, in the risk register in Basecamp (see Tools and utilities).

4.3 PROJECT KEY PERFORMANCE INDICATORS

Project KPI's are measured every 3 months and evaluated during the physical PSG meetings. *Overall* project KPI's are described below. (Deliverable "D4.1 KPI Catalogue for each use case" (scheduled in M6) lists the business impact KPI's for use cases.)

Reusability

This KPI indicates the reusability of project results in use cases. IoF2020 is designed around potential synergies of use cases and to raise the ambition level of the use cases continuously. This KPI consists of three sub KPI's: The numbers of reused

- Technical components and Open platforms
- Business models
- Principles and guidelines for data governance and digital ethics

(The results themselves will be published in the corresponding deliverables.)

Overdue project tasks / crossed deadlines

This KPI is a calculated percentage of projects with crossed deadlines compared to all the completed project activities to get an overview of how many project activities are overdue. A high percentage of overdue tasks require project management intervention.

Unsuccessful risk mitigation action

This KPI is the sum of

- the number of unsuccessful preventive mitigation actions that results in the occurrence of a defined risk with high impact

- the number of unsuccessful corrective mitigation actions that results in high impact when the risk has occurred.

A number not close to zero requires improved risk management.

4.5 STAKEHOLDER MANAGEMENT

Multi-actor approach is the leading principle for adequate involvement of relevant partners and other stakeholders. An early stakeholder analysis will help identify the most relevant stakeholders and their viewpoints in relation to IoT technologies. WP5 takes the lead in stakeholder analysis and maintains contact with relevant stakeholders. Stakeholder issues will be discussed during the physical PSG meetings as. If applicable the project coordinator informs PIB about major topics after the Physical PSG meetings.

4.6 PROJECT MEETINGS

Meetings to identify possibilities for improvement and synergy and to identify contingencies and diversions on the plan are organized. Table 1 shows the 2017 meeting scheme; meeting schemes in successive years will be analogue.

To enable effective PSG decision making, the quarterly (within) WP meetings are organized timely before the PSG meetings to ensure reporting one week before the PSG meeting. The actual meeting dates are published at Basecamp-IoF2020.

Table 1 - General meeting schedule 2017

Meetings 2017	Frequency	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Physical PSG meeting	Quarterly	X	X				X			X			X
PSG Telecons	Bi-weekly	X	X	X	X	X	X	X	X	X	X	X	X
Consortium Meeting	Yearly		X										
PIB	2/year		X							X			
EB	2/year		X							X			
TC's UC, WP2-WP3	Quarterly				X				X			X	
BC's UC, WP2-WP4	Quarterly				X				X			X	
EC's UC, WP2-WP5	Quarterly				X				X			X	

Physical PSG meetings

The project follows a three-month cycle of coordination and follow-up procedures for monitoring progress and responding to changes. This cyclic approach enables the consortium, especially w.r.t. operational & financial management, the PSG and the PC, to monitor and control the interconnected dimensions of time, cost and quality. Project progress and achievements is evaluated at all levels based on a respective reporting scheme. On the agenda is at least:

- Work plan monitoring (and updates, i.a.)
- Deliverable quality
- Data management
- Consortium management

- Risk management
- Project KPI evaluation

To enable effective physical PSG meetings, each WPL ensures that task reporting is completed latest 1 week before the physical PSG meetings. The tasks report on formal aspects of the work (technology, costs, timing) and non-formal aspects. This procedure is done recursively through all sub-tasks, tasks and work packages and gives a qualitative picture on the progress of work. At the same time, risks arising out of deflections from the work plan can be identified at a very early stage and corrective measures initiated. The meetings are organized and facilitated by WP1.

PSG telephone conference

To enable continuous synchronization between all WPs, a bi-weekly PSG conference call is installed in addition to the physical PSG meetings, where each work package present the progress of their task, trials. All issues mentioned as the topics of the physical PSG meetings, if applicable, is discussed to prevent any project delay or damage. The meetings are organized and facilitated by WP1.

Consortium meetings

To facilitate continued interaction, a yearly meeting consortium is organized by WP1 where all partners are invited. These meetings are used to facilitate interaction between the use cases, trials and work packages. To avoid unnecessary traveling costs and time, other meetings (e.g. EB meeting) will be combined with the consortium meeting.

WP meetings

To enable effective PSG decision making, quarterly (within) WP meetings are organized at least 1 week before the PSG meetings to ensure reporting. The meetings are organized and facilitated by the involved WP, as documented in the WP specific management guidelines in Basecamp-IoF2020.

PIB meetings

The meetings of the Pilot Implementation Board are organized twice a year (or when required) and organized by WP1.

EB meetings

The EB meets every six month. The meetings are organized and facilitated by WP1.

Trial, TC and UC meetings

UC meetings are organized by UC coordinators. Trial meetings are organized by WP2 in close collaboration with Trial Chairs, while Technical Chairs meetings are organized by WP3, Business Chair meetings by WP4 and Ecosystem Chair meetings by WP5, as documented in the WP specific management guidelines in Basecamp. Detailed organization of these meetings is described in D2.1 Trial implementation guidelines.

4.7 TOOLS AND UTILITIES

The IoF2020 project has various tools in place to ensure a smooth running of day-to-day project activities and which are focused on internal communication.

Internal Communication Platform

IoF2020 uses the Basecamp on-line tool to manage the internal communication (<https://3.basecamp.com/3618432/projects>). Also all final documents are stored on Basecamp.

This tool is password protected and different levels of authorization can be assigned to each partner. The IoF Basecamp consists of a general part, thirteen teams (PIB, PSG, Trial Cases and WPs) and 19 Use Cases. Each sub-platform has six core tools available: To-dos for tracking work, a Message Board for posting announcements and updates, a Campfire chat room for quick casual chats with the team, a Schedule for posting meetings and events, Docs & Files where relevant documents are archived, Check-ins to get insights from the team on a regular basis. An Basecamp instruction guide is available in Basecamp.

Roles and responsibilities master database

A database has been developed to administer each participant's details and keep track of their respective roles. WP1 is responsible for keeping track of all participants. The data stored will be made available to all partners on Basecamp.

Conferencing tools

Skype of business is used for the online bi-weekly PSG meetings and the PIB meetings. In cases where more visual interaction is required document presentation and video-conferencing is also available within this tool.

E-mail Inbox for management support

The management support team uses a central e-mail box (IoF2020@wur.nl), which allows for quick responses to all incoming emails.

4.8 MANAGEMENT SUPPORT TEAM

The lead partner WR is responsible for monitoring and coordinating the project. A management support team is in place to support overall project management in legal, financial and administrative matters, for preparing progress reports and for the organization of project-wide workshops and meetings.

4.9 EXTERNAL MONITORING AND REPORTING

Project monitoring in IoF2020 will also comprise external (to the European Commission) monitoring. The external monitoring will be based on the review of the reports and of the deliverables which are to be submitted by the project coordinator on behalf of the consortium. In addition, in accordance with the contract, review meetings will be organized.

Description of the work package WP1

Work package number	WP1	Start Date or Starting Event				Month 1				
Work package title	Project Management and Coordination									
Participant number	1	2	3	4		8	9	23		72
Short name of participant	WR	ATB	BIOS	S&P	CopaCo	IFOAM	CEMA	Wireless	ETP-ALIC	SINTEF
Person/months per part.	150	48	18	18	3	3	3	3	3	3

Objectives

- The objective of WP1 is to achieve the project goals on time and within budget.
- Ensure adequate coordination between the work packages and between work packages and use cases in the trials.
- Initiate and facilitate responsiveness in the project to maximize the use of new opportunities emerging in technology as well as in business opportunities during the project life time.
- Ensure transparent and effective decision making; using new opportunities and based on use cases' feedback.
- Assure the application of multi-actor approach as leading principle for adequate involvement of relevant partners and stakeholders.
- Create a Data Management Plan, describing the lifecycle and sustainability of all data collected, generated and processed within IoF2020.
- Cooperate with the other IoT LSPs and coordinate interaction with use cases and related synergies.

Description of work

Task 1.1: Contract & Open Call Management (Leader: WR; Participants ATB, Duration: M01-M48)

Main activities in this task are:

- Preparation and updating detailed work plan
- Execution of the consortium agreement
- Monitoring the project progress and identify contingencies and diversions on the plan and define actions to be taken
- Financial management, making payments to the partners
- Preparing and delivering the periodic reports (progress and financial) and final report to the Commission. The periodic reports are suggested to be delivered in M14, M32 and M48.
- Contact point for relevant Commission Services
- Coordinate the administrative and contractual matters of the IoF2020 open call.

Task 1.2: Coordination and Quality Assurance (Leader: WR; Participants: ATB, BIOS, S&P; Duration: M01-M48)

Main activities in this task are:

- Organization of the Executive Board (EB) meetings when needed and minutes of the EB meetings.
- Organization and preparing minutes of the Project Steering Group (PSG); per year 2 physical meetings and 2 meetings by teleconference. For each meeting the WP leaders provide progress report on their WP to be discussed in the PSG and if necessary in the EB
- Monitoring WP progress and work plans on consistency with overall work plan and interaction with other WP's. The progress will be monitored on the KPIs as defined in section 1.
- Assessment of the quality of the technical reports. Primarily a task for WP leads; also cross-checking results/quality.
- Organizing kick-off meeting of the consortium, mid-term and closing event.

Task 1.3: Strategic Planning and Dynamic Programming (Leader: WR; Participants: ATB, BIOS, S&P, Copa Cogeca, IFOAM, CEMA, ETP-Alice, Wirelessinfo, Sintef; Duration: M06-M42)

Main activities in this task are:

- Identify opportunities for synergy in the portfolio of use cases by monitoring the work plans of the use cases on technology and business development aspects.
- Collect and analyse signals and triggers from the IoT field or in the agri-food sector that might offer new opportunities for the use cases to keep track with the state of the art.
- Preparing proposals for adjusting the work program by the PSG
- Organize Pilot Implementation Board (PIB) meetings for deciding on adjustment of the work program.

- Executing amendment procedures
- Implementing changes in the work program

Task 1.4: Development Data Management Plan (Leader: WR; Participants: ATB, BIOS, S&P; Duration: M01-M36)

Under this task the project's Data Management Plan (DMP) will be developed, outlining:

- how research data will be collected, processed or generated within the project;
- what methodology and standards will be adopted;
- whether and how this data will be shared and/or made open;
- and how this data will be curated and preserved during and after the project.

The DMP aims to ensure that IoF2020 activities are compliant with the H2020 Open Access policy and the recommendations of the Open Research Data pilot. The DMP will furthermore explain how the project will be connected with the EIP-Agri, as well as the European thematic aggregator of agINFRA in order to disseminate its research outcomes to the relevant European and global channels (such as OpenAIRE, CIARD, Global Open Data for Agriculture and Nutrition and Big Data Europe). Under this task an Open Access Support Pack will be developed translating the generic H2020 requirements and recommendations into specific guidelines and advice that can be applied in the project. The application of the DMP by all IoF2020 partners will be monitored under this task.

Task 1.5: Coordination of Synergies with other LSP's (Leader: WR; Participants: ATB, BIOS, S&P; Duration: M01-M48)

Main activities in this task are:

- Participation and contribution in horizontal activities cross cutting the LSP's
- Interaction with other LSP's for synergy on common issues and sharing good practices