

D.T1.1.1 WP1 OPERATIONAL METHODOLOGY TO ASSESS PF STATUS & REQUIREMENTS WITHIN REGIONAL S3

In this document we are going to resume the operational methodology of the activities provided in the WP1. Take into consideration that the aim is to assess the Precision farming (PF) state of the art and its requirements within the regional S3 framework.

The regional S3 strategy consists in the Innovation Strategy in the Smart Specialization (RIS3), which is implemented in every European region with the purpose to systemize the research and innovation policies applied in that specific area, avoiding a fragmentation of them. In more detail, the specialisation segments selected are the result of the industrial, scientific, and technological sectors (Key Enabling Technologies, KETs), and the main fields of work where to apply them are:

- Smart Agrifood,
- Smart Manufacturing,
- Creative Industries,
- Sustainable Living.

The Transform 4.0 Interreg project deals within the Smart Agrifood field of work. It is structured in different work packages (WP) and its implementation follows this scheme:

- WP1: Benchmarking precision farming potential in each pilot region and delivery of 1 transnational business plan
- WP2: Pilot actions to bring precision farming innovations, designed in a collaborative transnational environment
- WP3: Addressing R&D regional agenda (RIS3) to increase investments & specialisation in precision farming

The first packages deal will the goal of profile PF potential in 5 central Europe (CE) regions. The methodology operational process of this package should be planned considering the following pattern of blocks, performed in a day by day preparation, by each project partner:

- Preparation of the status of the regional specialisation towards EU 2020 manufacturing goals,
- Evaluation of the innovation potential of PF,
- Evaluation of the requirements needed in agriculture by each pilot region,
- Setting up of the goals and business plans to enhance linkages and cooperation in CE PF.

To reach this, the project partner shall select the methodology that he/she considers the most appropriate, as defined in the application form. Additionally, the methodology should reflect existing information sources, the need to search for additional information as well as the scope of the planned interventions.

An overview of the intended methods and techniques of evaluation, including the planning and structuring of the evaluation, conducting interviews and surveys, and data collection and analysis of the information is provided in the following paragraphs. The proposed methodology mix should consist of both desk-based research and interviews with relevant stakeholders. Targeted interviews are considered important and should include representatives of the Programme management bodies, RIS3 managers, farmers associations, lead partners and project partners, end users and/or multipliers of project outcomes, among others. The evaluator shall describe the methodology including the envisaged format of presenting the results in detail in an inception report.

Preparation of the status of the regional specialisation towards EU 2020 manufacturing goals

In this first step, a precision farming policy and economic review (D.T1.1.2) is planned to be done by each partner per every region of interest of the project. This analysis has the scope to catch the role and impact of the subsidy schemes and policy support (% investments, type of subsidies, € dedicated ERDF financial priorities) on PF in every region.

Each partner should perform a background analysis of contest, trying to report the key aspects that affects the policy and subsidy schemes. To do this, it is necessary also to plan a consultation with RIS3 managers (D.T1.1.3), preparing a proper survey to get all possible information, which can help in the review of this aspects for every region. A final target should be a report where all these aspects are produced.

An analysis of other innovation systems present in EU and in other countries such as Israel and USA will be performed by CREA, FJ and ARRSA partners to bring external and extra-EU know-how about the PF status. This will be performed via a study visit in place where it will be given the possibility to meet different companies or institutions that are done business and researching on PF (D.T1.1.4). The occasion will be also an opportunity to organize a tech-transfer workshop where the experiences of Central Europe PF implementation will be presented and introduced (D.T1.1.5).

Finally, a seminar with innovation players and S3 managers will be organized to create the assumptions for a possible collaboration that could bring useful contents for the project (D.T1.1.6). This could be organized during the second steering committee meeting in Linz, where each partner could invite their PF representatives.

Evaluation of the innovation potential of PF

In this block of activities, the end goal will be to deliver a final report where Central Europe emerging industrial clusters and specialisations in PF is displayed (D.T1.2.3).

Firstly, a review of the industrial excellence nodes in PF presented in Europe will be performed by each PP for each region (D.T1.2.1). A template with the methodology to follow for each PP will be provided by Improvenet. In few words, the research could be performed trough the interviewing of companies that deals with PF that are present in the territory, trying to define which are the most relevant companies or institutions in terms of performances. The screen of the companies and institutions could be done via web or trough national agencies and universities that could have direct contacts with them.

In addition, the review of European or national projects that deals with PF could be a useful source of contacts. In particular, this will be important also for the organisation of a transnational capitalization seminar where PF performers should be involved to collect important information from previous experiences (D.T1.2.2). A final report of all these activities is expected.

Evaluation of the requirements needed in agriculture

In this part the aspects related to the farmer requirements expected by the introduction of PF must be analysed. It is important, in fact, to catch the expectations of the primary sector in terms of technological innovation that could drive in the proper direction the industrial processing of PF. A pool of at least 200 farmers (50 per region) should be interviewed to verify posture of innovation (D.T1.3.1).

Successively, a SWOT analysis must be performed to highlight criticalities and assets in precision farming uptake (D.T1.3.2). This must be performed again for each region of interest following the standard methodology required by this kind of analysis (Strengths, Weaknesses, Opportunities, and Threats).

Successively, farms associations and EIP operational groups should be interviewed to learn how tech trajectories of PF are influencing them and how they could be led to catch the farmers needing (D.T1.3.3).

This could be done via local meetings of the farmers representatives where a proper survey is prepared and submitted. The information has to be catch and resumed in a minute of the meeting.

A final report of all the performed activities and knowledge gained is expected (D.T1.3.4).

Setting up of the goals and business plan to enhance linkages and cooperation in CE PF

In this final part of the WP it is necessary to collect all the industrial nodes that have demonstrated excellence in PF (see D.T1.2.1). A catalogue with all industrial nodes individuated will be prepared by ARRSA (D.T1.4.1). It will be necessary to list them. This transnational catalogue will be useful then for the preparation of a geo-referenced webmap, where all the excellence pools of PF in Central Europe are grouped. A web site with the map is expected (D.T1.4.2).

In this final part will be also provided a training for the cluster managers and PF specialists to set scenarios of open innovation (D.T1.4.3). It will be performed by ARRSA and it can be done via webinar. The training contents should be focused on what is emerged from the previous deliverables, especially about the innovation potential emerged and the farmer requirements for PF. From the information got, open transnational innovation can be implemented.

A final set-up of the completion activities (pilot actions) and its related business plans are expected (D.T1.4.4).