Interregional pilot business case on
Digital Platform for agritech solutions

Dr. Els Van de Velde (Expert, IDEA Consult)

Fabio Boscaleri (Policy Officer, Tuscany Region)

Pilot action 2018-2019

The pilot action will accelerate the work done within the TSSP
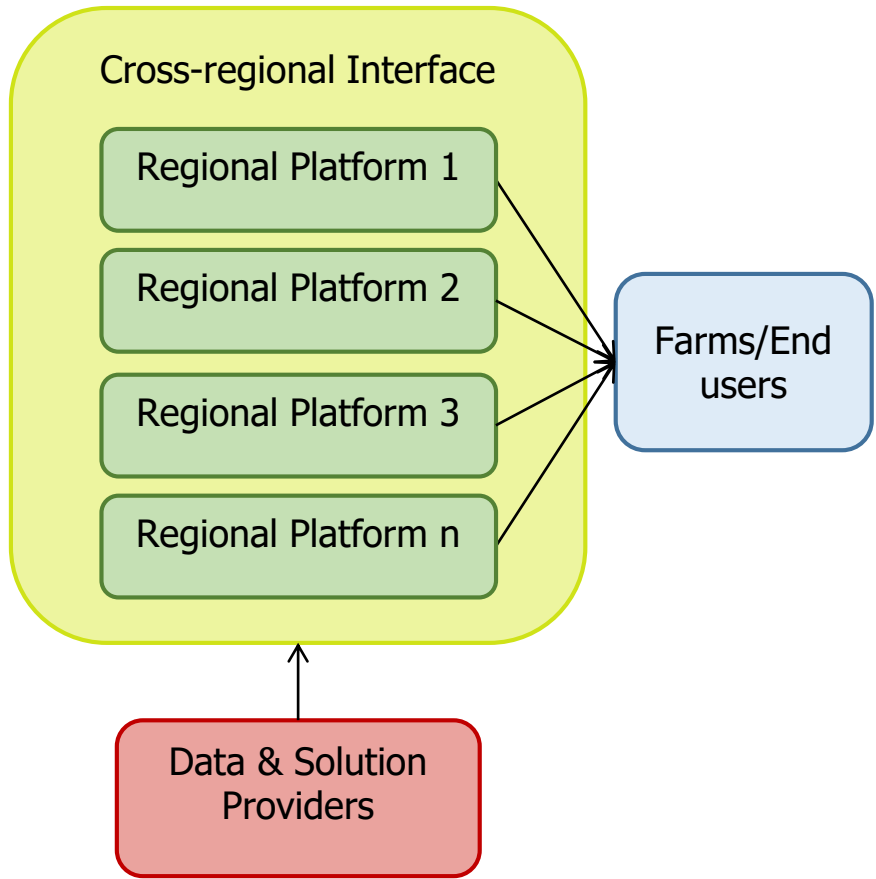
The focus will be on projects on higher TRLs (>5/6 TRL)
The results will feed the EC's discussions for 2021-2027

The purpose of the pilot action is:

- to focus on commercialisation and scale-up;

- to attract private investment;

- to explore and strengthen synergies.

DG Regio would like to have a draft business plan ready by the end of June, including the goal, total investment value (CAPEX, OPEX), impact, and EU added value of potential interregional innovation investment within the broader activities of the partnership as the basis for discussion with potential financial providers (public and/or private).

- Timeline:

1. 3 April 2019: specific partnership meetings with dedicated Commission services

2. Feb- end April 2019: accessing support services

3. April 2019: Review and define projects [e.g. clarify portfolio, market failure, private sector engagement, specific project(s)...] (deliverable)

4. Mid-June–end July 2019: review/feedback

5. End June 2019: partnerships (draft) financial plans (deliverable)

6. July-December 2019: review support needs, deliver partnership plans

7. December 2019: final reporting

Cross-regional Interface

Regional Platform 1

Regional Platform 2

Regional Platform 3

Regional Platform n

Farms/End users

Data & Solution Providers

Regional Platforms should involve:

- Demo farms (to run test/experiments) with standardised Farm Management Systems (to adopt the same procedures)
- Regional Geographic Info Systems (mapping + data)
- Political commitment (Regional funds)
- Other actors

Joint Undertaking

Cross-regional Interface

- Service oriented
- Public-Public / Public-Private
- Access to relevant data (but not personal/sensitive ones)
- Fee based services
- Business accelerator/incubator???
- Each Platform acting as service node/hub
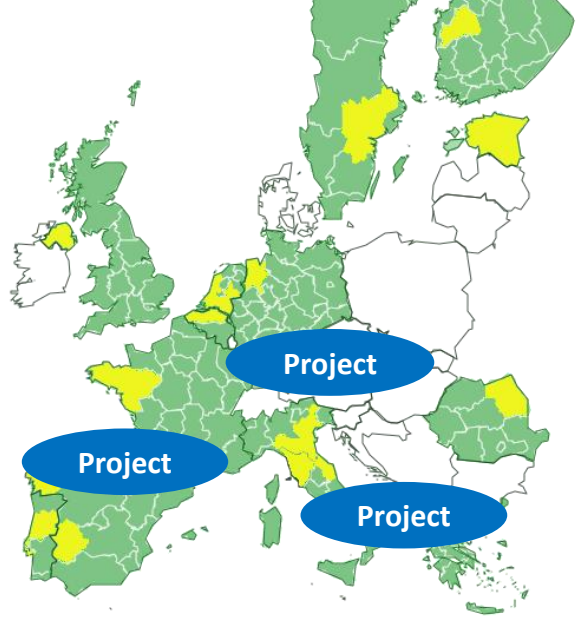
Main issue at this point:
Identifying **interregional projects** (already running or potential) to define and test the actual role of the cross-regional interface

Project

Project

Project

Progress made in 2018 - 2019

Identification of concrete interregional projects:

FreshFruit demo case

- The Fresh Fruit project is being implemented in 5 geographical locations across Northern Greece, covering two cultivations: table grapes and kiwis and involving 4 producers groups as well as individual farmers

- Promising technologies currently being hosted by AFS:

  ▸ Photonics for fruit ripening management from Italy (public research institute)

  ▸ Photonics for DNA identification from Portugal (private firm)

  ▸ Farm management software from Portugal (public research institute)

  ▸ Multi-modal telecommunications gateway from France (private start-up)

  ▸ LoRa telecommunications network from Greece (university spin off, start up)

  ▸ Weather stations from Greece (start- up)

Progress made in 2018 - 2019

Possible expansion of FreshFruit demo case

- Other promising technologies:

  - AGRIEFESTO and AGRIDUINO (CNR IBIMET - Tuscany)

  - Siti4Farmers (ABACO Group - Italy)

  - Photolines (Bretagne)

  - Tomato case (Bretagne)

  - Integrated Solutions for smart irrigation and fertilization management in fruit crops (Extremadura/Cicytex)

- Other demo farms:

  - Alberese farm (Tuscany)

- Possible expansion of demo case to:

  - Minimization of the usage of power by remote sensors communicating with LoRaWan protocols

Progress made in 2018 - 2019

Identification of concrete interregional projects: POULTRY DUST REDUCTION (PODUR) case

- Several solutions have been identified that can be tested in experimental farms/poultry houses

- Promising technologies provided by S3 HTF partners:

  - Reducing dust emissions in poultry houses with application of ionization and monitoring results (East NL)

  - Ground cleaning with Tibot robot technology (Brittany)

  - Algorithm/ artificial intelligence to analyse data (Brittany)

  - Sensors and data analytic of the poultry behavior (Brittany)

  - 3D-scanning and thermal imaging (South Ostrobothnia)

- Experimental test farms identified in East Central Sweden, East NL and Brittany

Actions in 2019

Further development of the digital platform for agritech solutions

- Development of a business model for the creation of the platform

- Development of the services to be offered at cross-regional interface

- Compilation of overview of the regional platforms

- Definition of the governance of the digital platform

- Identification of the funds available to support the implementation and management of the digital platform

Focus on developing the FRESHFRUIT and PODUR case as they provide crucial insight in order to develop the digital platform for agritech solutions.

- Tailored made EU funding for cross-regional investments

- Expert that offer technical advice on interoperability

- Expert to develop relevant infrastructure in demo farms

- Data and IPR experts with expertise at cross-regional level

Bilateral meeting with EC on 3 April 2019

The business case should encompass the following items:

1. Scope

- Coverage: Scope (application/angle), sector(s)/Area(s), Maturity (TRL/MRL/etc.)

- Ambition: Vision/Mission, (economic) target(s)/objective(s),

- Market: State of Demand, characterisation (Growth/Niche vs High-volume/etc.), challenges addressed (customer needs), innovativeness (compared to state of the art) and market failure

2. Activities

- Project description: Description of tasks, milestones and deliverables (incl. exploitation plan when available as well as time-to-market)

- Operations: Break-down of costs per activity/partner organisation, team to be involved (can be anonymised but affiliations should be clear)

- Planning: Phasing per task/activity

- Operational Targets and KPI: Forecast of targeted improvements for participating organisations and regional ecosystems, incl. Key Performance Indicators associated to the process (from start to end)

- Risks: Anticipate on key risks and mitigation measures which can for instance be linked to the newness of your investment case, its complexity, etc.

Bilateral meeting with EC on 3 April 2019

The business case should encompass the following items:

3. Basic financials

- Costs: Breakdown of costs per activity/partner region/organisation undertaking the work

- Income: Revenue streams (who, how much, when) – mapping income/cashflow supporting the project, such as user fees, investments, etc.

- Revenue Generation Model: Baseline Business model (at least assumptions on how the business case will generate Returns on Investment – RoI)

- Impacts: Targeted/expected impacts on partner organisations (cashflow, turnover, profits, market share, etc.)

- Funding and financing: Assessment of the share of debt/equity/quasi-equity finance possible to gather (based on information currently available) – highlighting funding sources (regional level incl. private/public sources – investment banks, etc.) and associated ratios

- Private sector contribution: Amount and characterisation (share of financial vs in-kind contribution, etc.)

Bilateral meeting with EC on 3 April 2019

The business case should encompass the following items:

4. Organisational modalities

- Partners: Organisations involved and regional affiliation

- Structure: Consortium/portfolio organisation of the investment case (roles/responsibilities/organisational chart)

- Timeline: Clear description of implementation phases, mapping the spread of activities

- Quality: Control measures foreseen for implementation (supervision of the business case implementation)

5. Cross-regional added value

- Additionality: Highlight the remaining gap justifying public support ("in the bigger pie", an estimate of how much should be covered by public support and why)

- Hurdles: Obstacles/challenges encountered in the development/deployment of the business case – incl. IPR, GDPR, etc.

- Cross-Regional Added Value (CRAV): Relevance, value added by cross-regional collaboration, type of CRAV and possible replications/market deployment