

## Integrity Platform - proof of geographic provenience and product availability

### Organic Services



**Project code: 773785**

**Project acronym: Smart Food Supply Chains**

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**Internal template:**

**Template for good practice cases**

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**WP leader: CBHU**

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<b>Dissemination Level</b>		
<b>PU</b>	<b>Public</b>	
<b>PP</b>	<b>Restricted to other programme participants</b>	
<b>RE</b>	<b>Restricted to a group specified by the consortium</b>	
<b>CO</b>	<b>Confidential, only for members of the consortium</b>	<b>CO</b>

**1. Title of the case description**

Integrity Platform for Short Food Supply Chains.....

**2. Indicate your role in the Smart Food Supply Chain:**

- individual member of the chain:
- chain operator:
- network operator:
- association:
- technical, scientific, or management expert:
- advisor:
- policy maker:
- other: .....

**3. Indicate the region (if applicable):**

Applicable to any kind of product chain:

- Local, regional, global independent of length and number of operators within a supply chain
- Single, multiple company supply chains
- Consortia, e.g. PDO, PGI
- National product/ commodity sector
- Across standard/ regulatory programmes
- Across any auditable/ audited company internal criteria/ programmes
- ...

#### 4. WP2 Cross-reference table

Please indicate with an X in the relevant box of the matrix for which needs and the steps / functions of the supply chain the described innovative solution is applicable

		Individual steps of the SFSC							Short food supply chain as whole						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Needs of the consumers (citizens)	food safety														
	food quality														
	trust	X	X	X	X	X	X	X	X	X	X	X	X		X
	ethical aspects	X	X	X	X	X	X	X	X	X	X	X	X		X
	accessibility														
Needs of the chain actors	fair price														
	increased negotiating power														
	shared use of available resources														
	product development support	X	X		X				X	X	X	X	X		X
	access to markets and consumers	X	X		X				X	X	X	X	X		X
	access to infrastructure														

**1: Farming**

**2: Primary production**

**3: Transport**

**4: Processing and packaging**

**5: Storage**

**6: Logistics**

**7: Sale**

**8: Product integrity, authenticity, transparency**

**9: Marketing concepts**

**10: Food chain management and networking for enhancing cooperation among chain actors**

**11: Business modelling**

**12: Policy environment**

**13: Legal requirements**

**14: Labelling**

## 5. Short description of the innovative solution

- **Describe the specific need or problem being addressed by the case and please explain what is the novelty of this innovative solution**

- A. Complex product traceability: It is very difficult to be sure that truffle from other origins is not sold as local product. There are no labels.
- B. The cooperative must strengthen the marketing strategy and trade capacity and build a closer relationship with the customers.

The innovation suggested combines elements of

1. protecting the uniqueness of agricultural products and foodstuffs through geographic indication (even if not necessarily formalised) under two schemes that are codified in Regulation (EU) No 1151/2012: Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) with
2. modern digital tools that map (possibly inspected and certified) farm and acreage data respectively data from wild collection areas as prerequisite for
3. mass balancing based on estimated or real yield.
4. Finally, appropriate analytical methods, e.g. microscopic determination of spores or isotope testing are complementing elements of such innovative solution.

Such approach will be the base for a coherent market strategy and to build closer relationship with customers.

- **Describe the enabling function(s) and the practical benefit(s) - (e.g. for which types of problems and opportunities is used and can it be used, and how)**

To be certified PDO, the product must be “produced, processed and prepared in a given geographical areas using recognised know-how.” To be certified PGI, the product must be “closely linked to the geographical area. At least one of the stages of production, processing or preparation takes place in the area.”

Following a set of defined procedures, new product names can become registered and added to the list. Nominating an authority/control body (e.g. a cooperative) is also part of the process. This body conducts inspections in accordance with the standards that have been set out for the product or foodstuff. After the initial inspection, follow-up inspections are to be conducted once every three years. As part of these schemes, traceability is an important element. EU rules require that operators “be able to identify:

- the supplier, quantity and origin of all batches of raw material and/or products received;
- the recipient, quantity and destination of products supplied;
- correlation between each batch of inputs and each batch of outputs.”

Taking the time to develop a PDO or PGI or TSG is an investment and measures are needed to ensure that this investment is protected, especially

considering that these products and foodstuffs have an estimated worldwide market of €54.3 billion (2010) , showing the vested interest these specialty supply chains have in ensuring that their goods are traceable back to the source. With the premium price that one can get for these goods, motivation can be found to counterfeit them; however, there are consequences to such actions because it is a violation of intellectual property rights.

Even if such authority/ control body (e.g. a cooperative) decides not to formalise under PDO or PGI, the mechanisms as such can be used for underpinning the provenience, proof of quantities and thus a marketing and price strategy.

This includes the need for incorporating tools into the geographical indication system that help to protect its integrity and thus its value. Establishing a database of certified producers, processors, traders and other relevant supply chain actors, and linking this data to production and inventory data is essential for achieving supply chain integrity.

- **Describe the method/procedure/technology/solution implemented. (Please explain, whether the innovative method is a product / service / process / marketing or organisational / management innovation) After completing the description, please indicate, whether this innovation is a technological or non-technological one.**

Check X is a flexible, modular cloud-based supply chain integrity solution that brings together audit/ certification and supply chain data, enhancing supply chain integrity on two levels:

1. Audit/ certification level - data is stored in Check X and comes directly from the auditors themselves, who ensure its accuracy.
2. Supply chain level - the movement of goods along the supply chain is documented. Supply chain integrity is enhanced by documenting product movements via transactions along the supply chain.

Keying in on these two datasets brings greater transparency to supply chains and is unique to Check X. Check X provides an organisation with the types of solutions needed to enhance supply chain integrity in real time.

technological

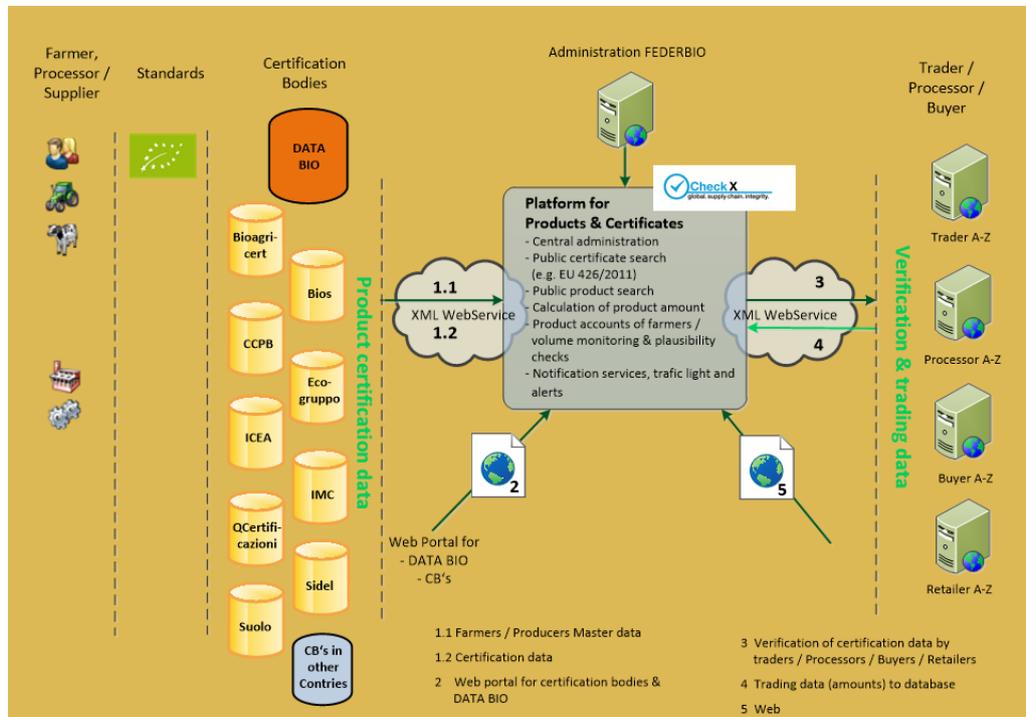
non-technological

- **Describe the business, which implemented the innovated solution (size, country, region, location, type of food)**

FederBio, the Italian organic and biodynamic umbrella organisation has implemented an IT project (2016-2018) capable of managing the acreage and the traceability of production and transactions for organic raw materials for feeds, cereals and grains.

The project completes the work started by ACCREDIA for the realization of DATA BIO, a database of all Italian organic companies and the related certification documents.

FederBio Integrity Platform (FIP) systematizes all the certification documents, the acreage and production data obtained and the transaction data along the supply chain, from the producer to the first processor, for all accredited certification bodies authorized to operate in the organic sector, increasing guarantees and reducing costs for both companies and for the control activity of certification bodies.



- **Describe the distribution channels of the product(s)**

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- **Describe what makes the innovation work.**

An authoritative body/ organisation, e.g. a cooperative, need to decide to implement an integrated verification and traceability system. An assessment must be made which of the necessary data are already available and if not, on how to collect this data. The organisation must contract a service provider, e.g. for Check X, and start to implement the system.

- **Describe the specific prerequisites for the business related to the implementation of the method and/or related to the location, method, procedure, solution**
  - a: **List the relevant necessary resources (including the estimated cost) for the specific innovation.**  
Please list the relevant ones only (list is annexed)

HUMAN: The organisation must take a strategic decision and provide the necessary human resources for implementing such system. The economy of

these resources must be determined in each specific situation as such resources depend on the already available structure and data. In case of a cooperative whose members are known, their collection/ growing area is defined, yields are registered, staff time investment will be kept in a limit (estimation 0 - 10 000 Eur/ 10 001 - 50 000 Eur depending on size of the organisation). Once established such system will help to reduce administrative costs as transparency assist the management of the organisation.

**TECHNOLOGY:** The cloud-based solution is ready-to-use, no need to tie up resources during a long software implementation process.

**FINANCIAL:** Implementation fee 2 500 Eur one time, mass balance and supply chain module annual fee 4 950 plus per additional user annual fee 295 Eur (user is not a single farmer, but the organisation). In case of using additional tools, e.g. satellite data, GIS systems other costs may apply.

**b: List the relevant necessary capabilities for the specific innovation. Please list the relevant ones only (list is annexed)**

Trust

**6. Describe the results, achievements and typical failures**

Once the system is up and running, transparency on real-time situation (member data, acreage data, yield data, transaction data, mass balance verification data, etc.) is established on which a marketing (and price strategy) can be built.

Two possible failures: the organisation is half-heartedly implementing the system; data cannot be established due to lack of participation of members or any other reason.

**7. Summarize what makes the case to a good practice for the members of the SFSCs (e.g. lessons learned)**

The majority of SFSCs have issues with establishing credibility and trust. Advanced data technology and system assist to establish the proof that a claim made is true.

The social factor is important in SFSCs but need to be underpinned by structure and proof, especially when sales move away from person to person relationship. Even in person to person relationships there is often no way for the buyer to verify what a producer does, e.g. in animal feeding, using of medication, etc. or if a certain production promise (e.g. organic) is kept.

**8. Aspects, methods for transfer of methods for other SFSC members**

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**9. Recommendations for members of other SFSCs for further applications**

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**10. More information is available at (web), if it is relevant**

[www.check-organic.com](http://www.check-organic.com) (related: [www.group-integrity.com](http://www.group-integrity.com) for audit data management).

## **Annex**

### **1. Checklist for necessary resources (tangible and non-tangible):**

- materials (access to: raw materials/ ingredients - including volume, land – including size, packaging materials)
- human: labour force: size, knowledge & skills (production, technical, marketing, managerial, ICT, financial, etc.)
- technology: patents, know-how, trademarks, copyrights, trade secrets
- infrastructure, equipment, facilities, - size, minimum volume of production/sales, IT infrastructure
- information, reputation, brand, trust
- financial\*

\*: estimated cost:

0 -	10 000 Eur
10 001 -	50 000 Eur
50 001 -	100 000 Eur
100 001 -	300 000 Eur
300 001 -	1 000 000 Eur
1 000 000 Eur above -	

- other specific necessary resources for the application of the specific innovation

## 2. Checklist for the necessary capabilities

- **food safety:**
  - basic skills to comply with the EU food safety regulations
  - ability to understand what makes the product safe (the key controls, which ensure the safety of the product – biological, chemical and physical hazards, providing the safety shelf life of perishable products)
  - food safety culture (motivation, responsibility for food safety) and basic skills for the implementation of HACCP
  
- **food quality:**
  - ability to define the target segments of consumers for SFSCs
  - ability to define the product characteristics which are (tacit) basic requirements for the target segment(s) of consumers;
  - ability to define which product attributes/levels and augmented services represent an added value for the target segments of consumers;
  - food quality culture (motivation, responsibility for food quality);
  - production experiences which help to provide the expected quality reliably, uniformly;
  - ability to provide distinguishable quality which meets the needs of the targeted consumer segment;
  - meeting (local) legal requirements, application of the labelling rules;
  - ability to access the consumer willingness to pay for specific products of SFSCs.
  
- **trust:**
  - ability to ensure product integrity, authenticity and transparent information for the consumers (including systems, tools);
  - ability to access external trust enhancers (third party certification, internal certification system, participatory guarantee systems);
  - application of the labelling rules and branding (mandatory and voluntary);
  - ability to meet third party certification requirements
  
- **ethical aspects**
  - ability to understand consumer needs for ethical behaviour related to the specific product(s) of the SFSCs;
  - culture for ethical food production and supply;
  - ability to implement necessary measures to ensure ethical food production and supply;
  - ability to access the consumer willingness to pay for products meeting ethical aspects
  
- **accessibility to consumers:**
  - ability to organize logistics efficiently and to exploit innovative solutions and distribution channels;
  - efficient, innovative sales methods;

- ability to develop and implement new business models for ensuring access of consumers to products and augmented services;
- **fair price:**
  - collecting marketing information;
  - ability to enhance and maintain cooperation among chain actors including the combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management;
  - ability to define, develop or maintain unique quality of products and augmented services;
  - ability to develop and implement new business models;
  - ability to access the consumer willingness to pay for fair price
- **increased negotiation power:**
  - collecting marketing information;
  - ability to enhance and maintain cooperation among chain actors including the combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management, cooperation culture;
  - ability to define, develop or maintain unique quality of products and augmented services;
  - ability to develop and implement new business models;
- **shared use of available resources:**
  - ability to enhance and maintain cooperation among chain actors including the shared and combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management, cooperation culture;
  - the level of value chain management culture;
  - ability to access the consumer willingness to pay for food with reduced environmental impacts

- **input for R+D:**
  - ability to monitor, research, evaluate, and understand the needs and wants of customers and consumers;
  - ability to develop new products, processes, packaging, preservation techniques, systems and access to new markets, including in other categories;
  - access to innovative technologies; distribution and marketing solutions and methods. management systems;
  - access to local input for R+D covered by other aspects
  
- **access to markets: and market success**
  - effective promotion, customer service, efficient and innovative sales methods;
  - ability to understand consumer's needs;
  - ability to organise logistics efficiently and to exploit innovative solutions and distribution channels,
  - unique value propositions;
  - ability to develop and implement new business models for ensuring access of consumers to products and augmented services, develop the market accessibility for the suppliers.
  - stock control;
  - ability to access to required raw materials within a restricted geographical area
  
- **access to infrastructure:**
  - ability to use existing own infrastructure in a focused way to serve consumer needs or to combine it with complementary infrastructures of other SFSC actors, cooperation culture;
  
- **management:**
  - to implement management systems for vision, planning, implementing), coordinating, controlling, monitoring, continuously;
  - improving; ability to motivate, authorize staff;
  
- **production, processing:**
  - management system, production experience, specific controlling, monitoring, continuously;
  - willingness to consider and ability to evaluate the adoption of TECI and NTI in the current production processes;
  - any additional specific resources necessary for the application of the specific innovation.