# Food supply chains in Europe

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#### About ERNACT

ERNACT, or European Regions Network for the Application of Communications Technology, is an international network for European cities and regions. that work together to access European Union digitalisation programmes and funding for the benefit of their area, companies and universities.

We have developed an approach for optimising cooperation in European projects to meet regions smart specialisation and digital transformation needs. We share knowledge by implementing international innovative projects related to: Digital innovation hubs; disruptive technologies artificial intelligence (AI), virtual includina reality/augmented reality (VR/AR), and Internet of Things (IoT); open innovation for multiple areas and sectors such as public services, energy, environment tourism, food, and smart communities.





#### Short Food Supply Chains in Europe



Source: EIP-AGRI

A Short Food Supply Chain (SFSC) is a value chain with no more than one intermediary that promotes social and economic cohesion and fairness through cooperation and transparency between those involved in the exchange.

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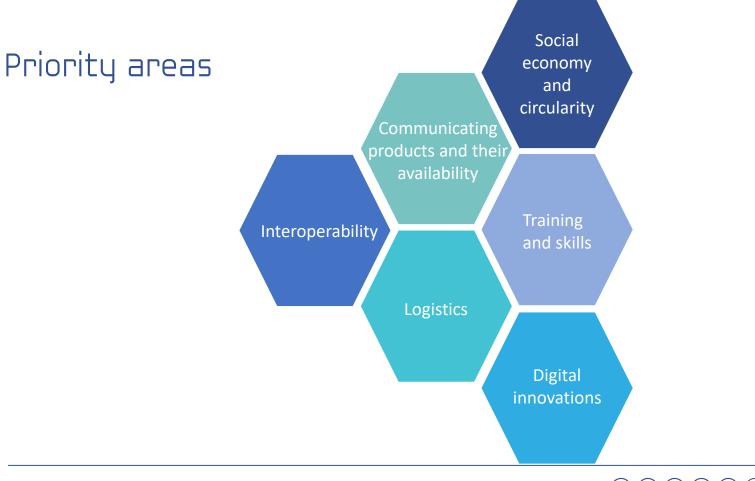
#### SFSC challenges

- Product range, volumes, regularity and consistency of supply, management of complex financial transactions and logistics chains
- Highly fragmented value chain and predominance of micro-enterprises
- SME digital inclusion and skills were also highlighted as issues where lack of investment (or inability to invest), lack of coordination (and of compatibility/interoperability between the solutions)
- Urban-rural gap: lack of appropriate support measures, language and cultural barriers to absorb place-based good practices (urban-rural gap)
- Circular practices of re-use and recovery dependant on public and philanthropic investment

#### **Digital technologies**





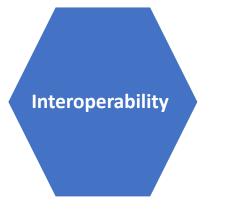


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## Priority areas - Interoperability



- Existing platforms (B2B, C2C and B2C)
- Data lakes or warehouse
- Centralisation of data on producers and products





# Priority areas – Communicating products

Communicating products and their availability

- Raising awareness of the products on offer (availability both in real time and seasonally)
- Provide information and communication on producers B2B + B2C

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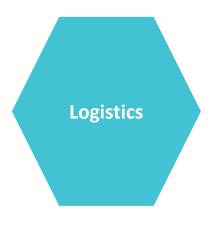
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#### Priority areas - Logistics



- To improve the logistics chain for food products with multiple small suppliers, multiple logistics providers with different delivery capacities, and multiple customers/sales outlets
- Helping producers to deliver their products to clients in the fastest and more efficient way (not always compatible), reducing fuel consumption, time wasting and emissions.
- Improve the matching of requirements to products/producers/product availability
- Optimizing logistics for the recovery of surplus and unsold products and their re-use in complementary social food networks





## Priority areas – Social economy and circularity



- Distribution of surplus products both primary and secondary and including food produced by nonprofessionals
- Potential for food recovery and subsequent processing into, marketable products and subsidised sale or free distribution through recognized social food outlets



## Priority areas – Training and skills



- Training/education of short supply chain actors in the use and application of digital tools and services
- Skills bank (at appropriate territorial level matching skills availability with needs)



## Priority areas – Digital innovations



- Digital or connected lockers (look at the potential for expansion and sophistication)
- Innovation as a Service and Brokerage (for short supply chain innovations)
- A participative financing platform (crowdfunding)
- Content portal (recipes, health advice nutrition, etc.) to promote the use of local/sustainable/fresh products
- Provide better information on the benefits of circuits





### Digital technologies potential

Field of application	Technologies
Food production and supply chain relationships	Data integration; AI; IoT
Enhanced Traceability and Transparency	Blockchain; IoT
Smart logistics	IoT; dataloggers; smart lockers
Value chain interoperability	Manufacturing Execution Systems (MES); Open standard with product, business and technical ontologies
Improved market access	Online marketplaces (B2B and B2C)
Consumer engagement	Mobile apps; Al
Food recovery and re-use	Online marketplaces; blockchain; mobile Apps



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