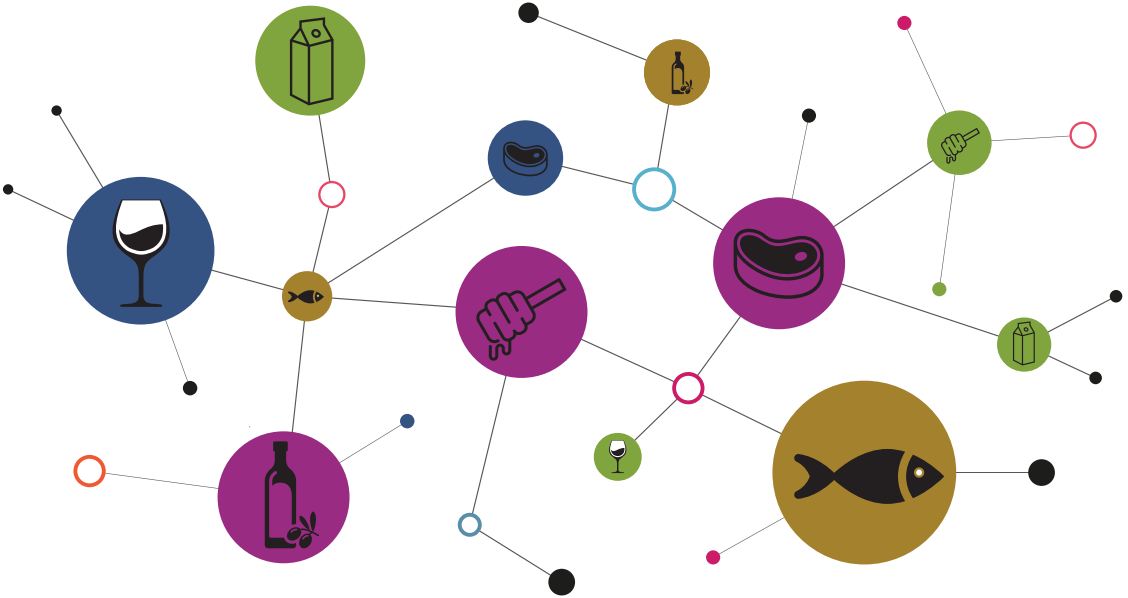
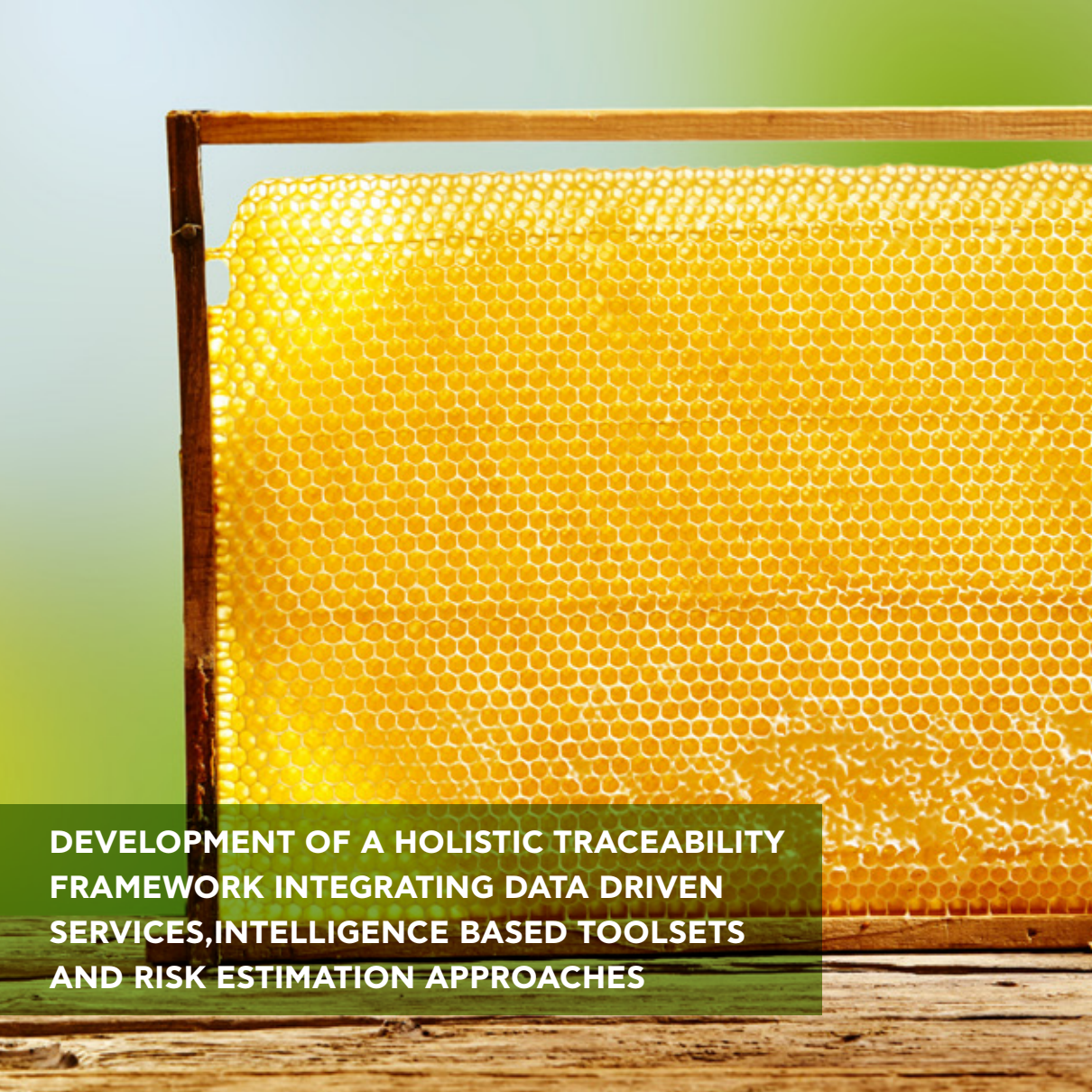


watson

A holistic framework with Anticounterfeit and intelligence-based technologies that will assist food chain stakeholders in rapidly identifying and preventing the spread of fraudulent practices.





**DEVELOPMENT OF A HOLISTIC TRACEABILITY
FRAMEWORK INTEGRATING DATA DRIVEN
SERVICES, INTELLIGENCE BASED TOOLSETS
AND RISK ESTIMATION APPROACHES**

Watson aims to make the EU food system sustainable by increasing food safety and reducing food fraud through systemic innovations that improve transparency in food supply chains; equip food safety authorities and policy makers with data, knowledge and tools; and increase consumer awareness on food safety and value.

A HOLISTIC TRACEABILITY FRAMEWORK

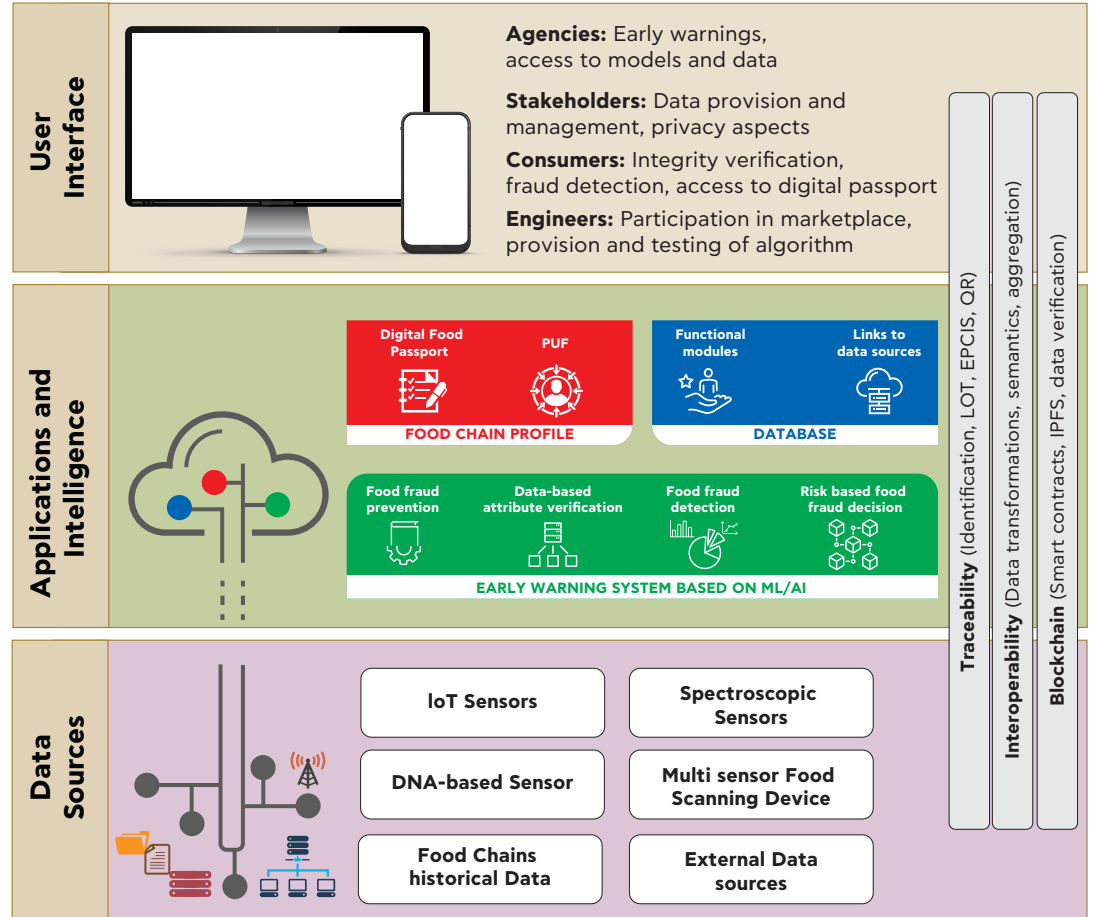
Watson develops a holistic traceability framework that will integrate data-driven services, intelligence-based toolsets and risk-estimation approaches

AN INSPECTION AND CONTROL CAPABILITY

Watson will advance the inspection and control capabilities of food safety authorities through robust, reliable and rapid methods based on emerging digital technologies

PUBLIC FOOD POLICY AND EU REGULATIONS

Mainstream project results towards relevant policy making organizations and standardization bodies

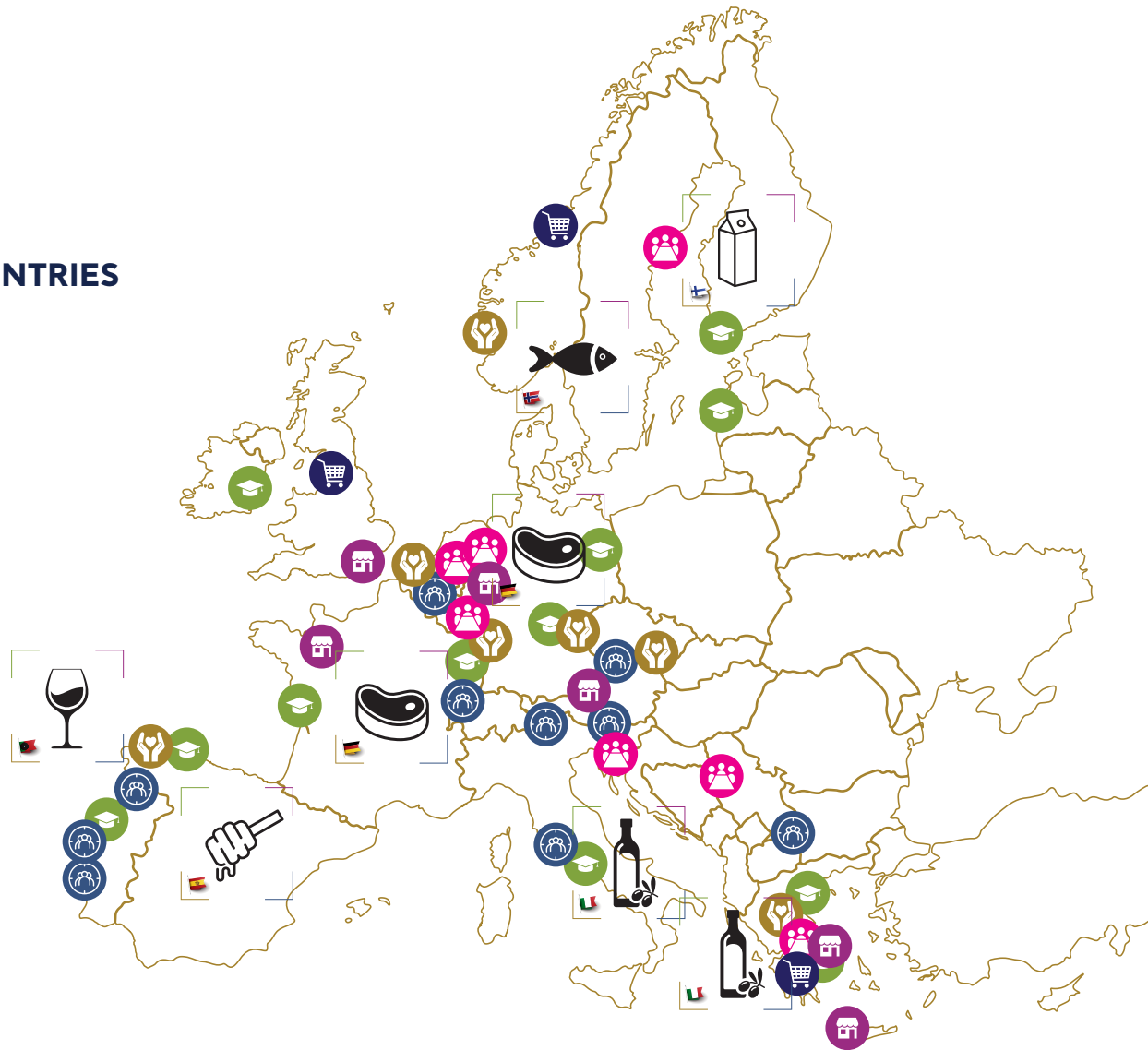


44 PARTNERS ACROSS 19 EU & NON-EU COUNTRIES

Watson is organized around 6 agriculture sectors:
wine, honey, olive oil, meat, dairy, and fish.

Watson's Digital Technology will be tested in six European countries considering different operational procedures and diverse environments.

-  RESEARCH INSTITUTES AND UNIVERSITIES
-  LARGE ENTERPRISES & SMES
-  STAKEHOLDERS' ASSOCIATIONS
-  RETAILERS
-  NGOs
-  ADVISORY BOARD EXPERTS



Tackling counterfeiting of wine



This pilot focuses on a blockchain-based platform that enable consumers to access all the information related to the wine they purchase (full history of dates, locations and sensor data). Technologies will cover secure data sharing, real-time data collection from IoT sensors, reliable and secure data access through non-copyable labels.




Preserving authenticity of PGI honey



This pilot explores the usefulness of implementing low-cost, portable/miniaturised devices based on near-infrared spectroscopy and hyperspectral imaging technologies combined with chemometrics in order to provide fast, non-destructive, easy to use, real-time results and low-cost analysis to stakeholders.





Ensuring
authenticity and
traceability of
extra virgin
olive oil

This pilot aims to obtain DNA profiles of extra virgin olive oil products using low-cost and portable DNA based devices combined with machine learning and AI techniques to process data, resulting in the creation of a digital DNA fingerprint'. The collected data will be accessible to stakeholders via a QR code on the product label.





Identifying possible manipulations at all stages of the meat chain

This pilot develops a methodological framework to detect and prevent meat mislabelling. Analytical tools include molecular methods such as DNA biochip, DNA barcoding, DNA metabarcoding as well as mass spectrometric methods with rapid sample preparation and short chromatography runs.





Improving traceability
of high value products
in cereal and dairy chain

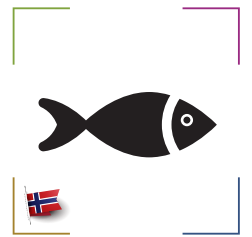
This pilot targets the weak points of the dairy chain that deal with the use of ingredients, shelf-life and origin of the product. An item-level track and trace solution will be implemented which can track and trace items and their raw materials on product level, act as a call for action for consumers and verify the quality of the item.





Combating of fish counterfeiting

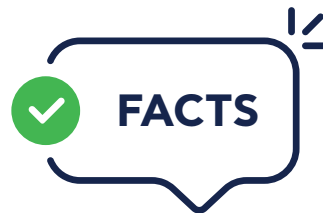
This pilot implements a blockchain-based platform that support real-time data collection from IoT sensors and enterprise systems collecting data throughout the fish supply chain. Printed or electronic labels (QR Codes, NFC tags, RFIDs) will be developed to enable access to detailed product information through the digital product passport.



PARTNERS



Supported by



Funding scheme: HORIZON-CL6-2022-FARM2FORK-01-11

Contribution of the European Union: € 9.744.008 million

Total cost: € 11.093.884 million

Duration: 3 years, March 2023 – February 2026

Consortium: 44 partners across 19 EU & non-EU countries

Pilot sites: 6 Use cases on agri-food value chains

Advisory Board: 7 Experts including EIT-FOOD

Project Coordinator: University College Dublin

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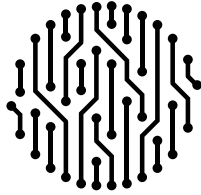
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Watson has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement no. 101084265



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