







Consumer Awareness: Milk Quality and Animal Welfare Tracking Management

## CHALLENGE

4.2

Many farmers already monitor their animals by using different smart devices which collect data in a scattered way. However, they often miss an overall vision of the most important animal welfare and milk yield indicators. In addition, processing companies are interested in data relating to the milk's quality levels while consumers want more transparency regarding the food they eat. However, data is not exchanged between actors in the supply chain. The challenge is therefore to optimise the flow of this information.



## AIM

The pilot aims to integrate the data collected from the breeding farm and from the processing company in order to optimise the flow of information between the actors within the milk value chain. By using open and standardbased technologies, it will allow actors of the milk value chain to get an overview of animal welfare and insights on the quality of milk, that is strictly connected to the health of the animal. The data collected will be acquired by a traceability system, to improve communication between actors right up to the consumer, increasing food liability and trust.

## HOW

New wearable devices for animals will be installed and their data will be integrated with data coming from sensors already existing on the pilot farm in order to implement an information flow optimisation and optimise processes. Devices will be installed to allow automatic milk composition analysis and to guarantee the traceability of milk collected. Deployed solutions will adopt standards protocols and DEMETER data formats to enable interoperability.

## BENEFIT

The implementation of standards-based and interoperable elements will enrich the overview of the animal welfare and milk yield indicators, easing the extension of the information flow to new data sources and optimising the availability of scattered data in a single access point. This will result in a higher quality of milk and a fairer price for producers. It will lead to greater transparency on milk production and animal health for farmers and processors. For consumers, it will deliver improved transparency on product nutritional values, origins and animal welfare.