



Livestock Environment Opendata

La zootecnia diventa digitale

LEO: A National-wise open big-data facility on livestock

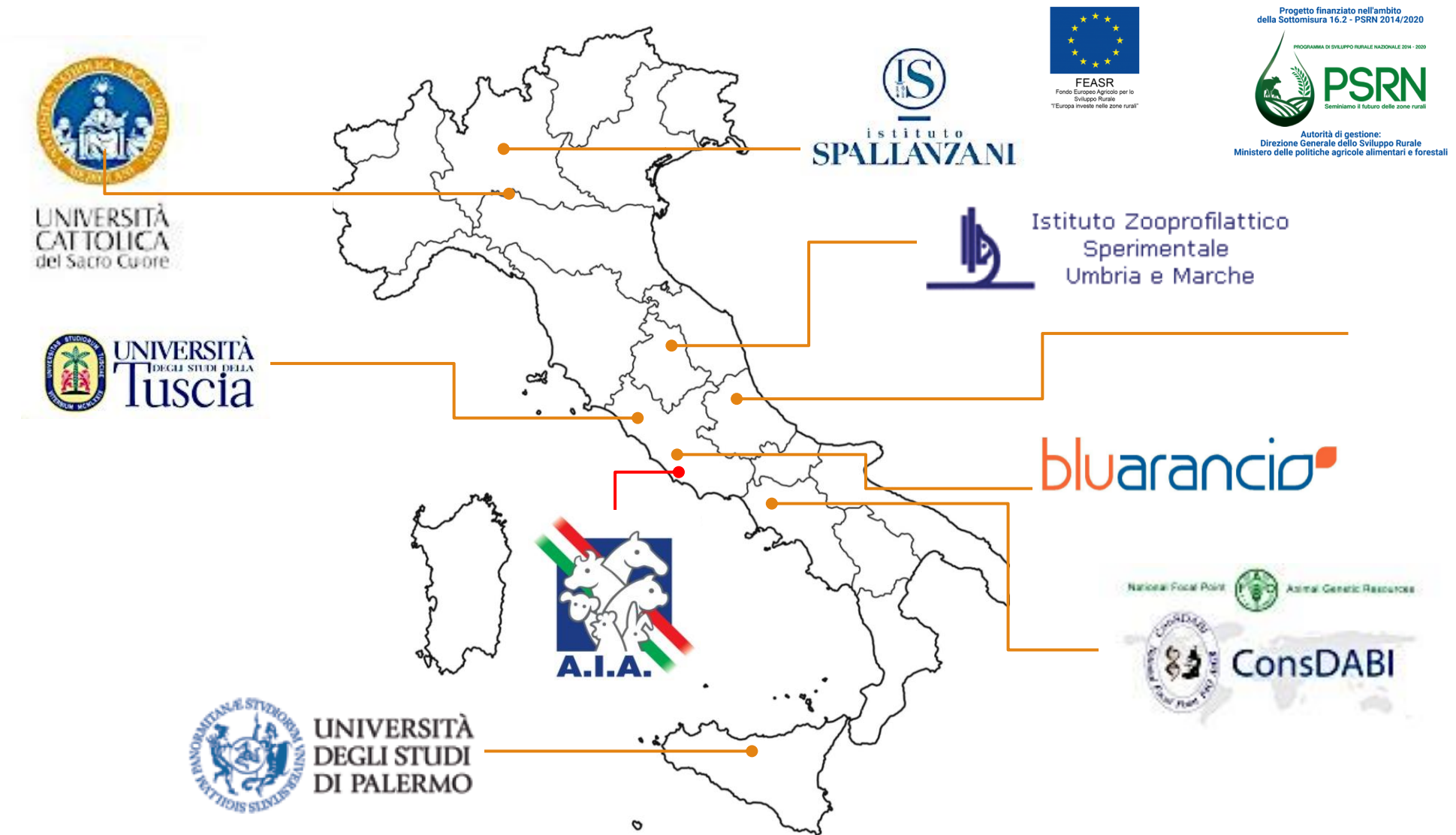
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Collecting info and Merging data sources



LEO consortium



LEO WP plan and timeframe

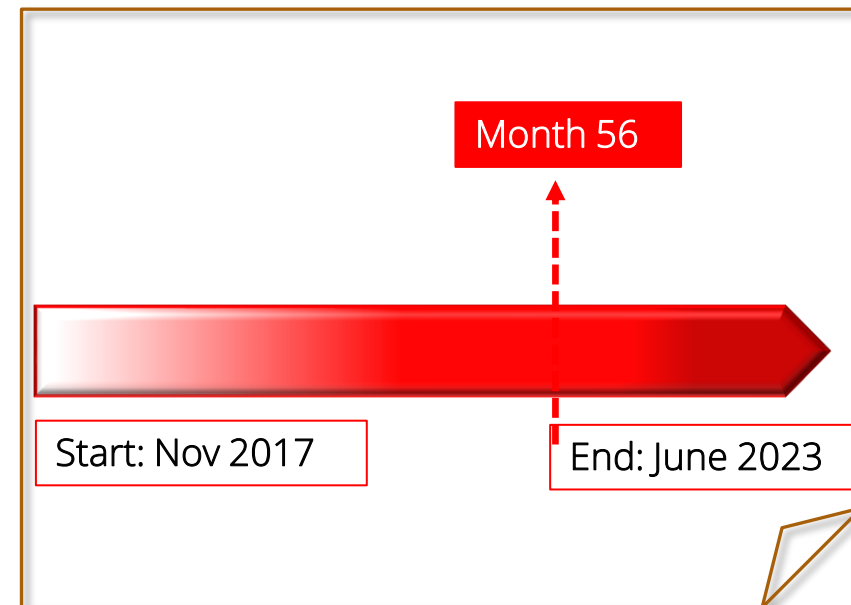
WP 1 : Selection and validation of novel parameters

WP2: On-field large-scale data collection

WP3: Data QC

WP4: Development of LOD platform

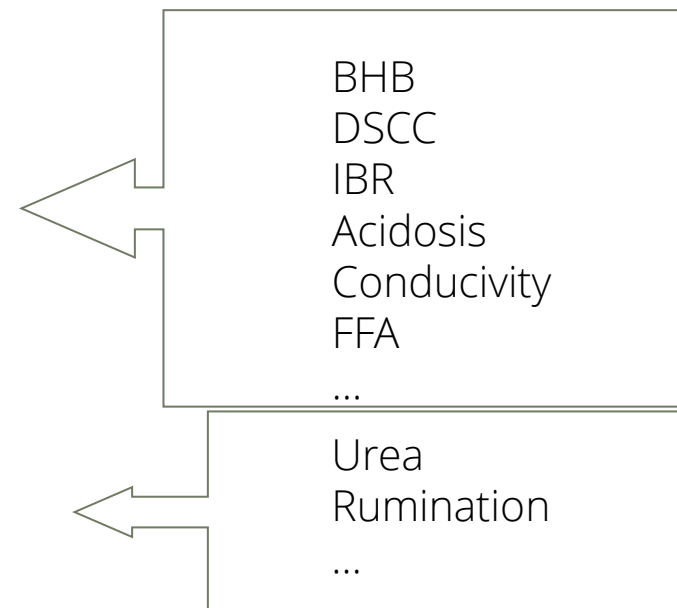
WP5: Dissemination and knowledge transfer



LEO data collection

100 Identified and described
78 validated and in collection

Category	Reviewed	Validated and in collection
Health and welfare	51	31
Extension services	36	35
Farm and animal identification	6	6
Environmental sustainability	7	6
TOTALE	100	78

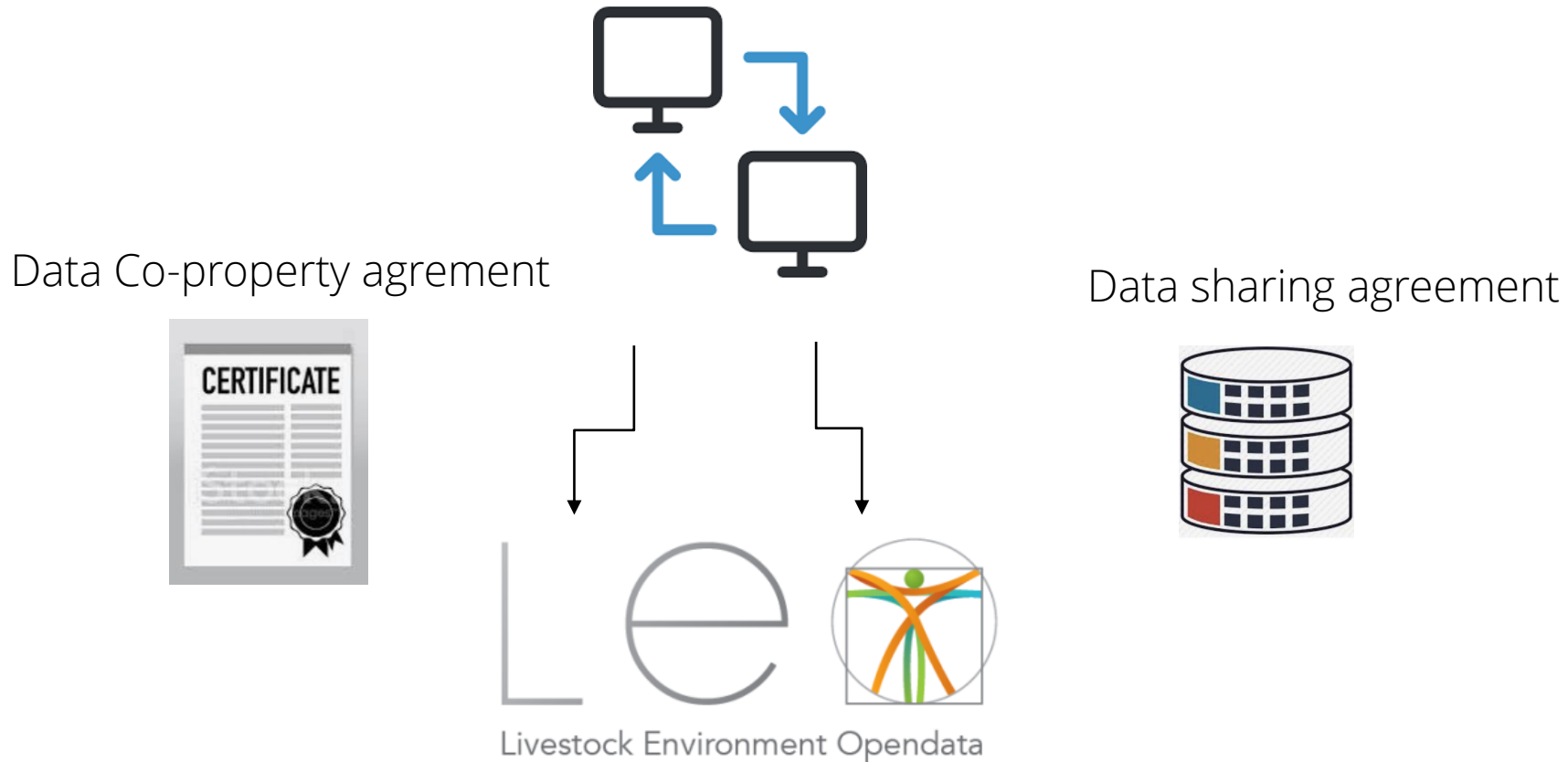


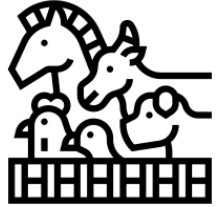
LEO farmer's engagement



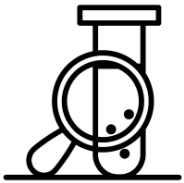
Up to now almost **18,000** geo-located farms involved

9 national wise database linked to LEO

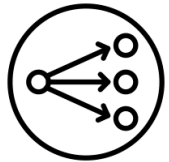




Animals: **Almost 5M animals**
among which 500,000 from local breeds



Lab: about **90M** analysis

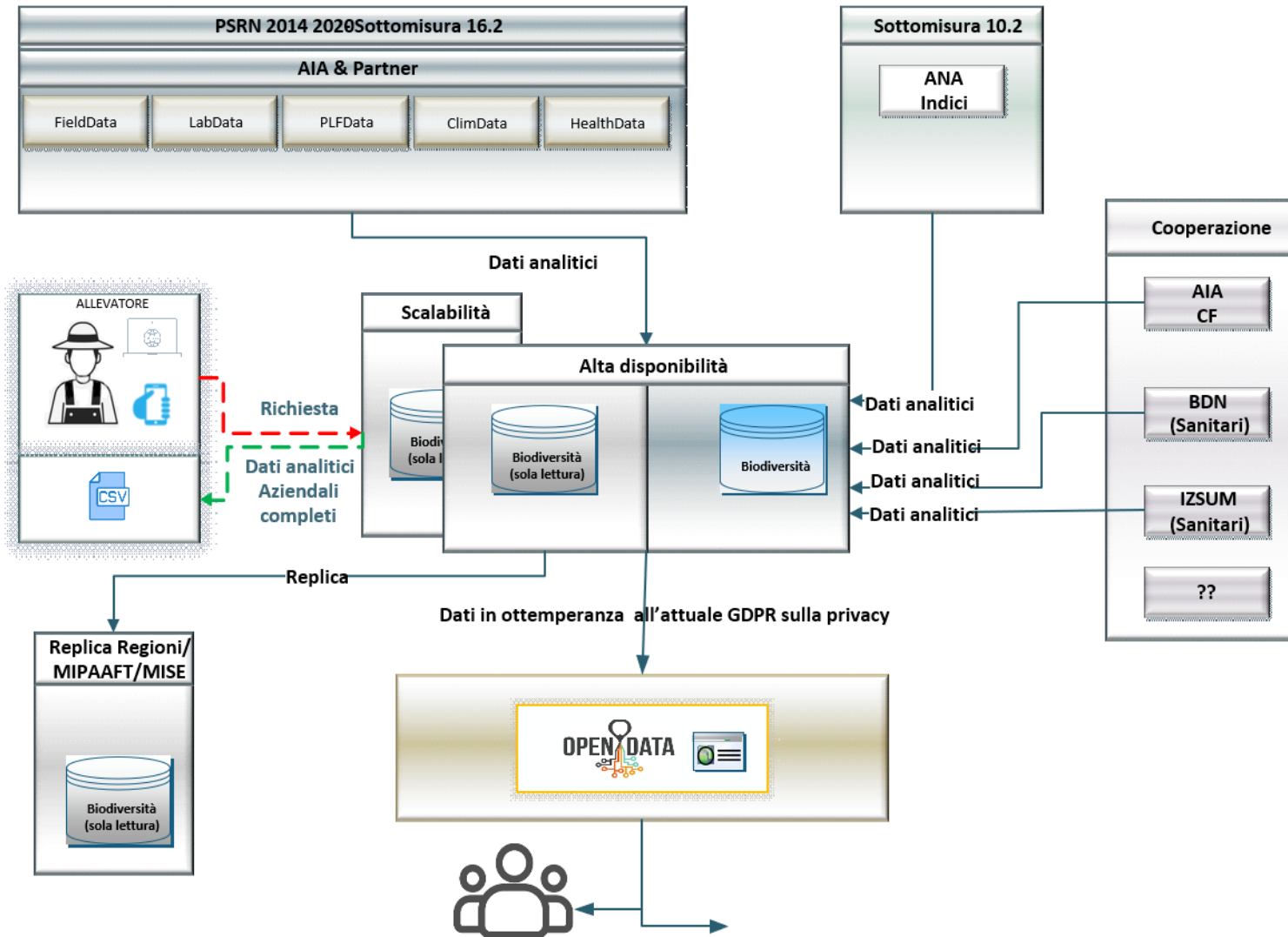


Dataflow: more than **40M** data and info recorded per year

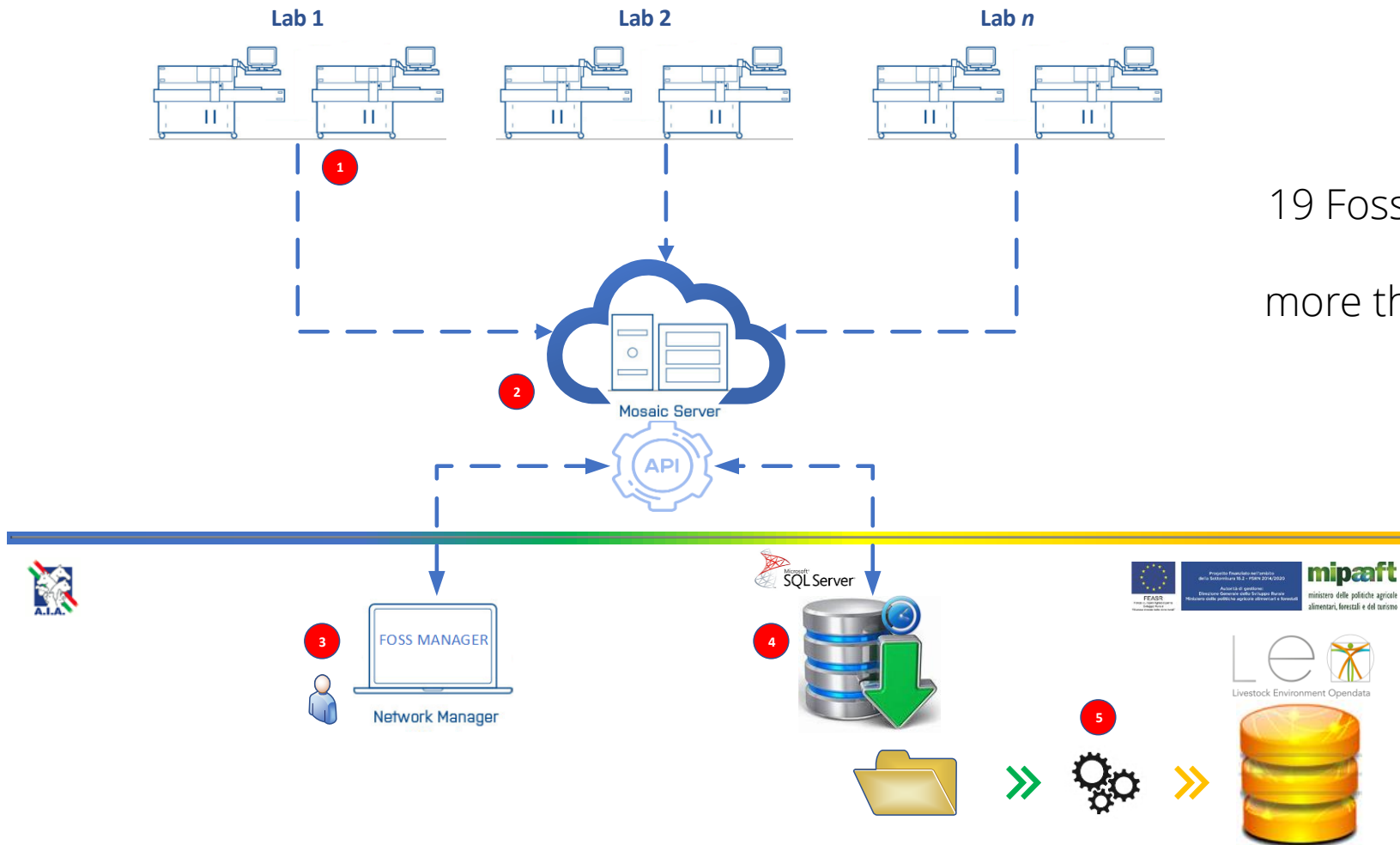


LEO database (**3:53 PM may 25th**): **2,925,401,419** records

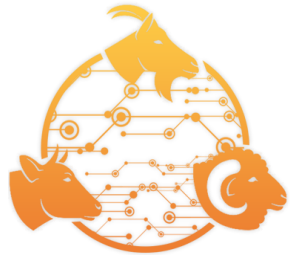
LEO informatic architecture



LEO: MIR spectra collection

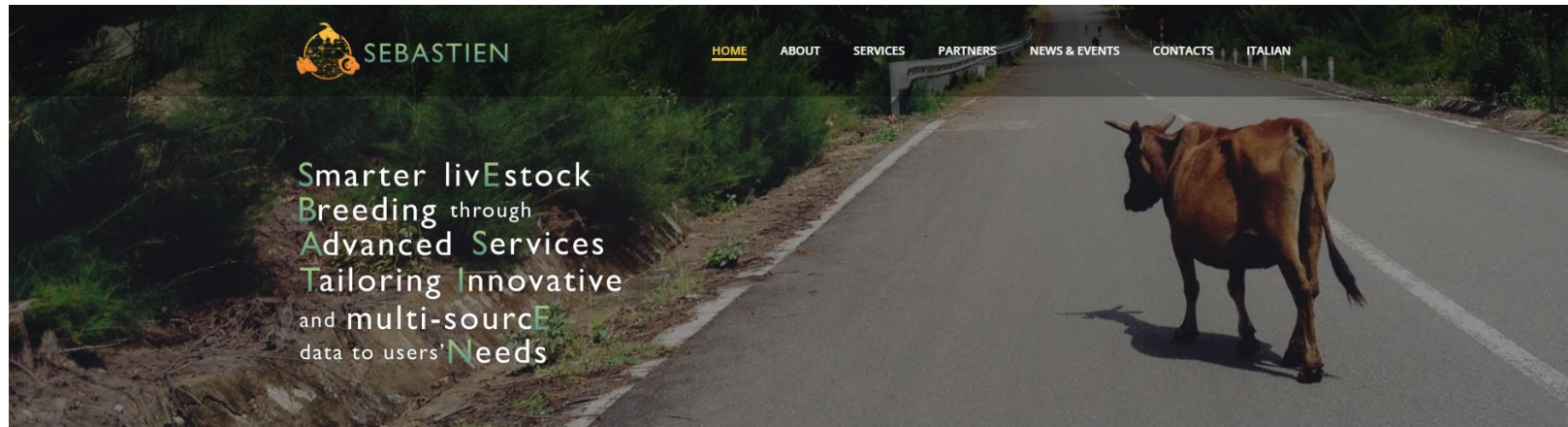


19 Foss lines connected through Italy
more than 25M spectra already stored



SEBASTIEN

The main goal of the **project SEBASTIEN** is to deliver a **Decision Support System (DSS)** for a more efficient and (economically and environmentally) **sustainable management**, and consequent valuing, of the livestock sector in Italy and in particular cattle, sheep and goat breeding.



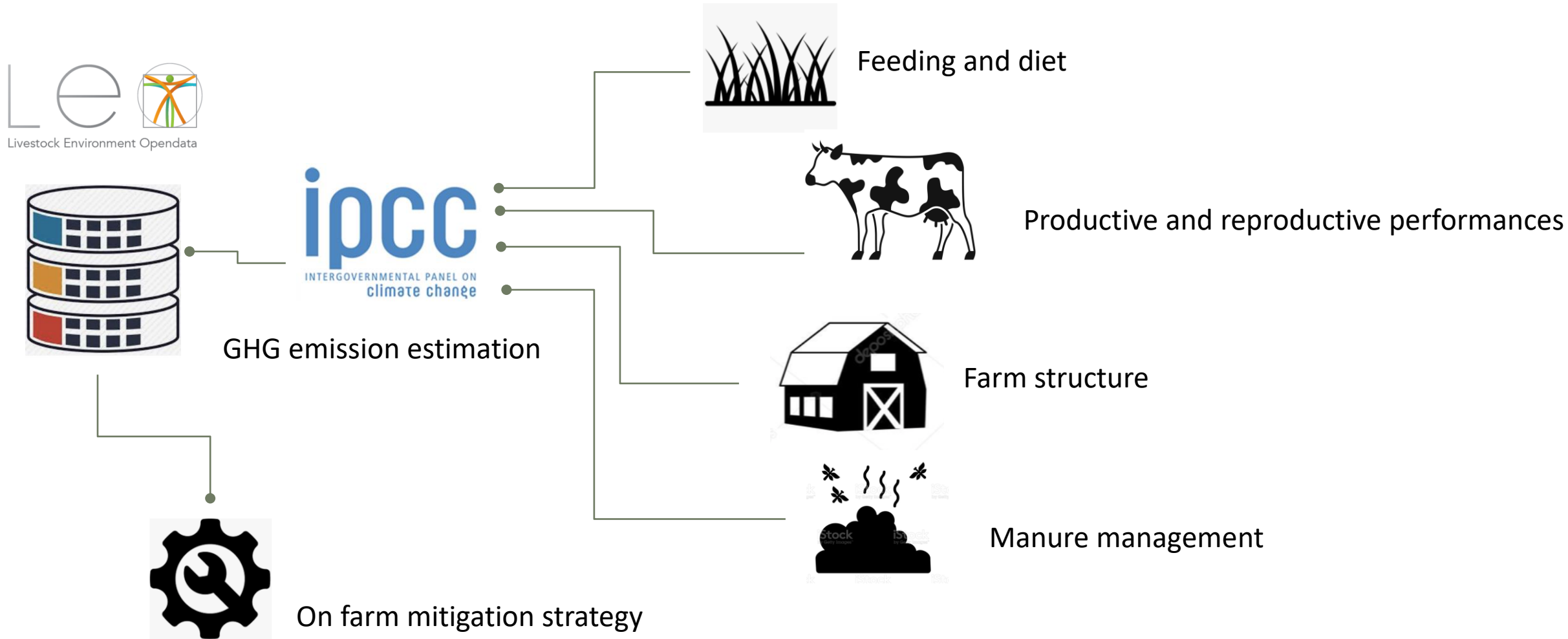
www.sebastien-project.eu/

The Project

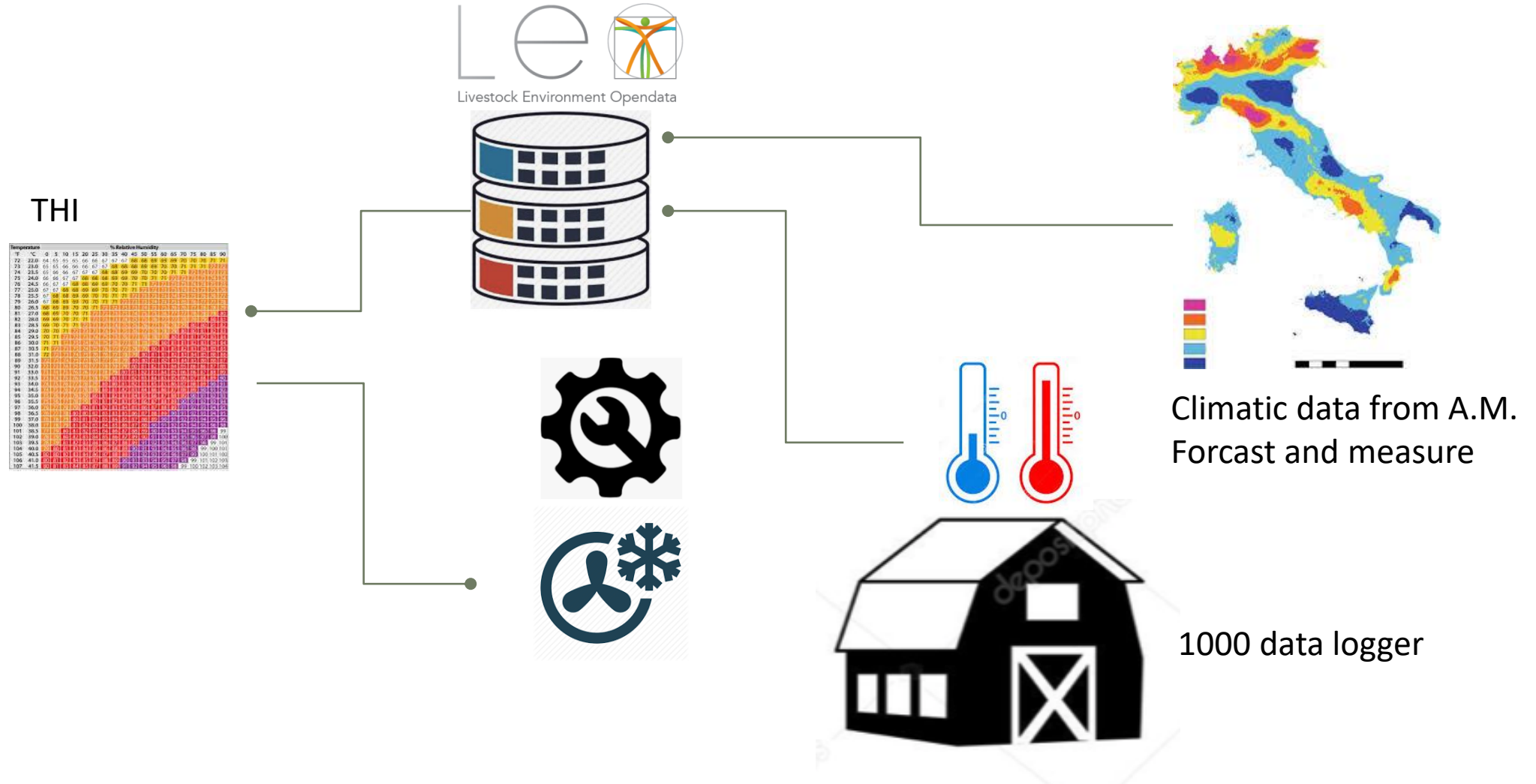
SEBASTIEN wishes to implement large-scale ICT-



Mitigation of Environmental impact



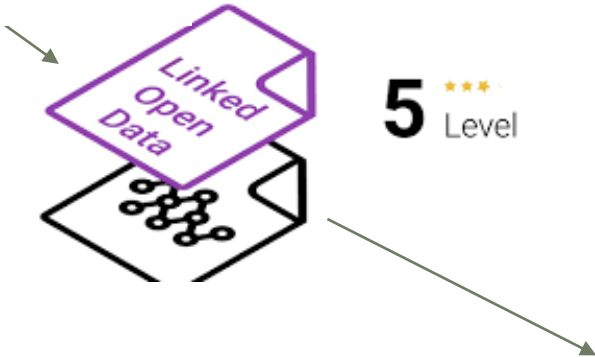
LEO next DATA: Climate



LEO data accessibility

Free access

Authorized User



LOD data



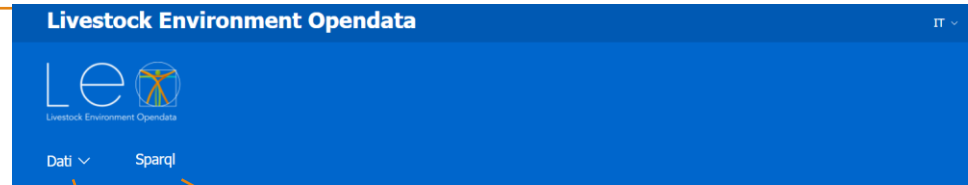
Complete data

OPEN DATA for everyone.....



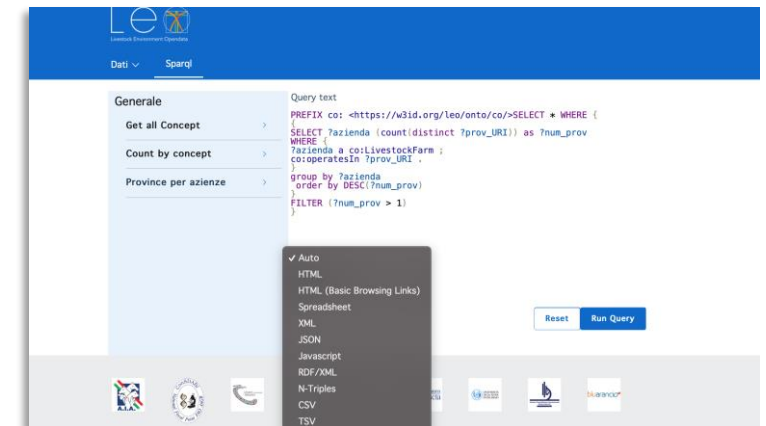
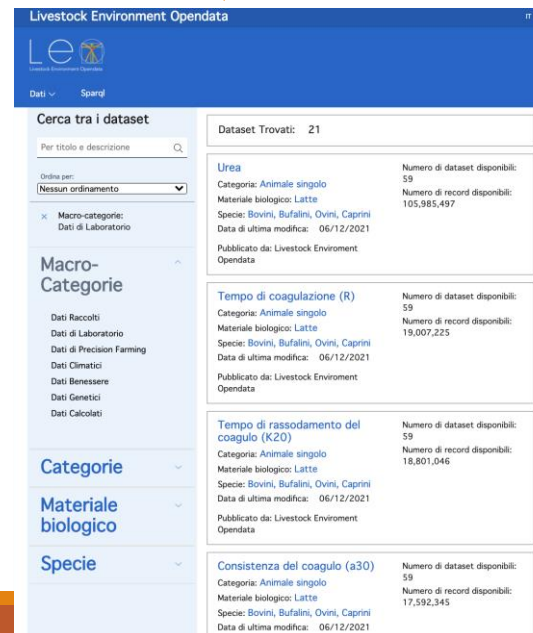
ACCEDE AGLI OPEN DATA

www.leo-italy.eu

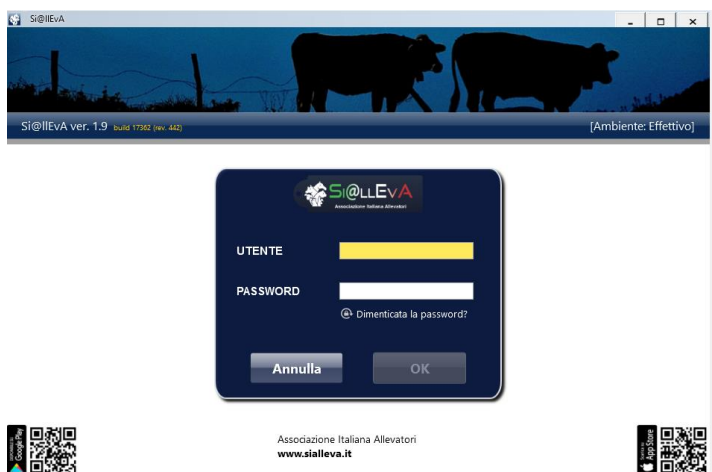


Cerca nei metadati

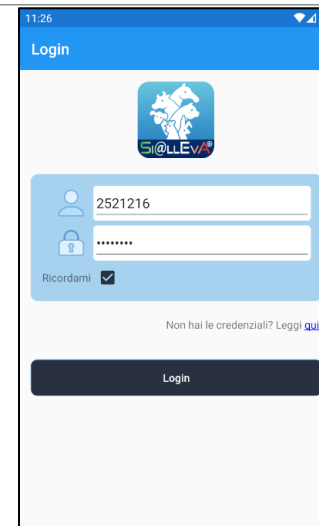
Naviga i dati per categoria tematica



Authorized access for extension services



PC desk



Mobile

LEO: shared with breeders for novel selection purposes

Adaptation to climatic changes

Resistance resilience to novel and less novel diseases

Environmental sustainability/efficiency

Antimicrobial reduction and welfare

Nutraceutical components

Management traits (e.g. automated milking, behavior ...)

