

# METRO FOOD-IT

## JOINT RESEARCH UNIT METROFOOD-IT

### The Italian Node of METROFOOD-RI

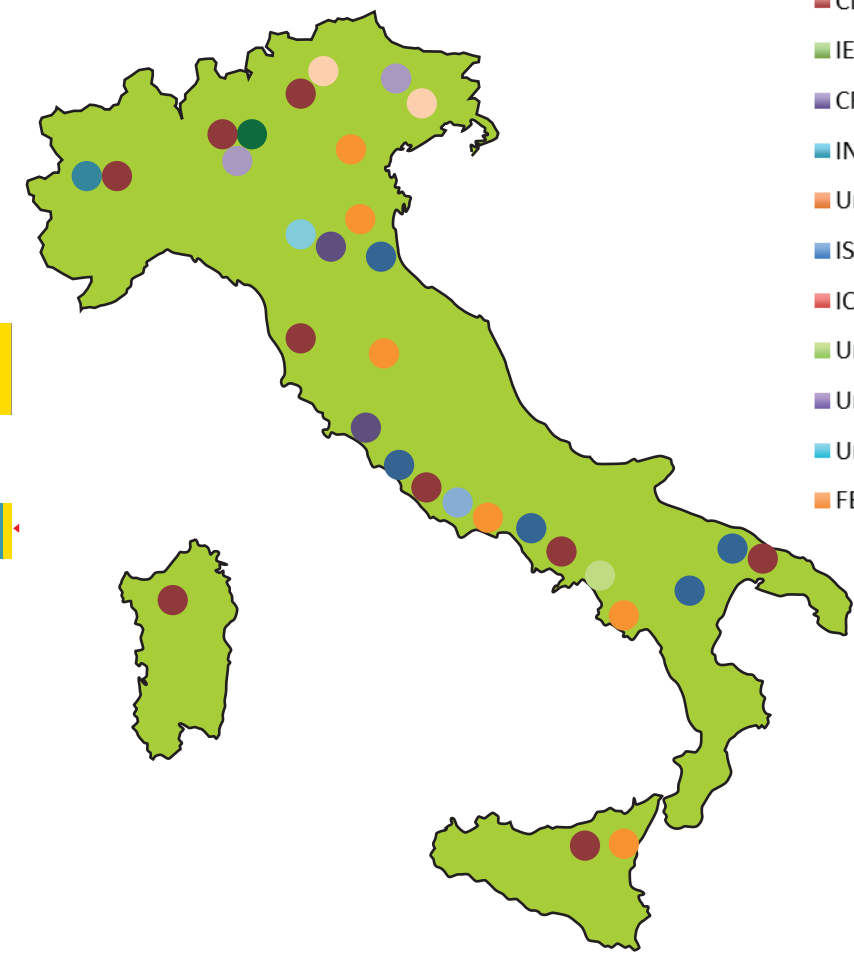
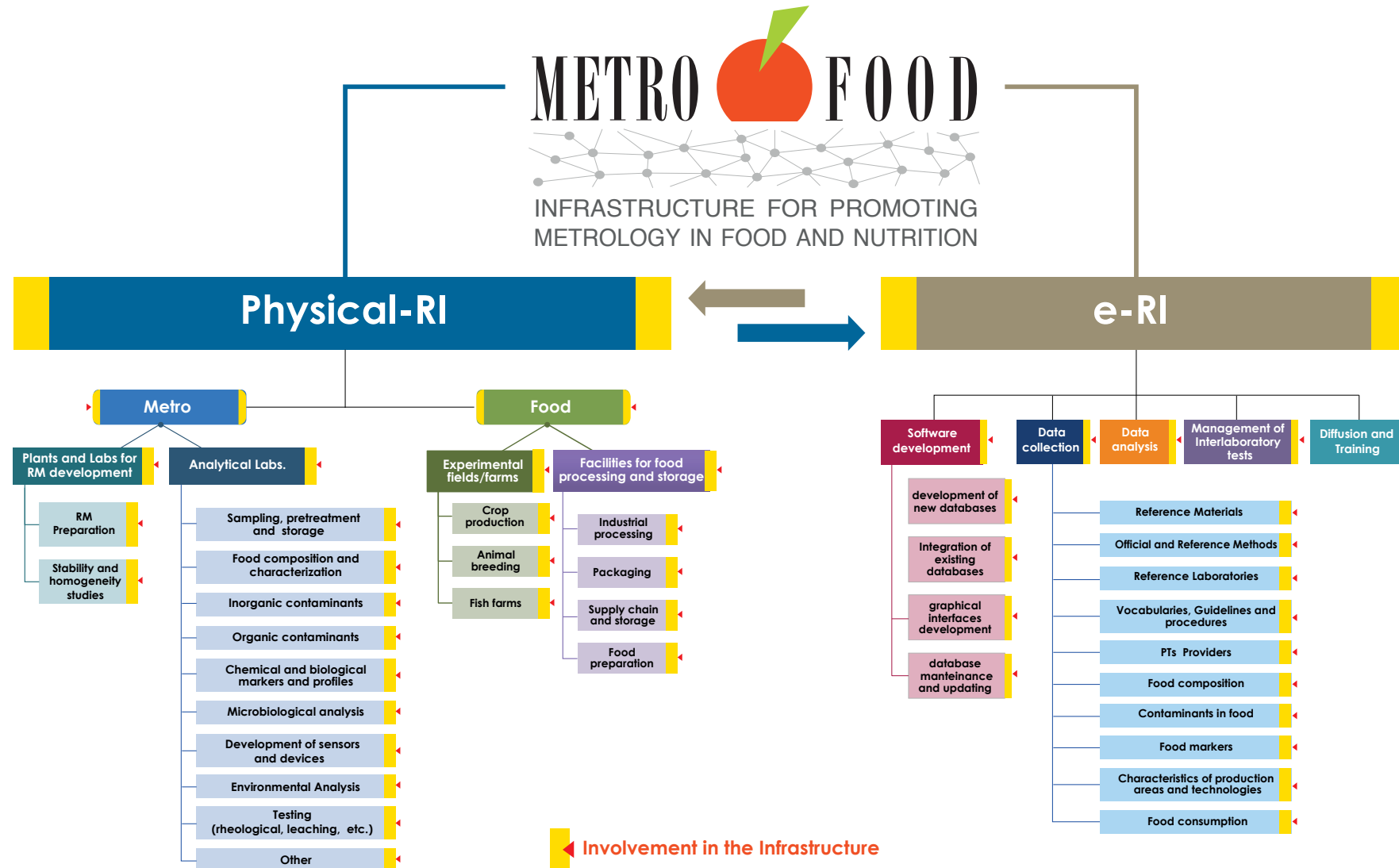
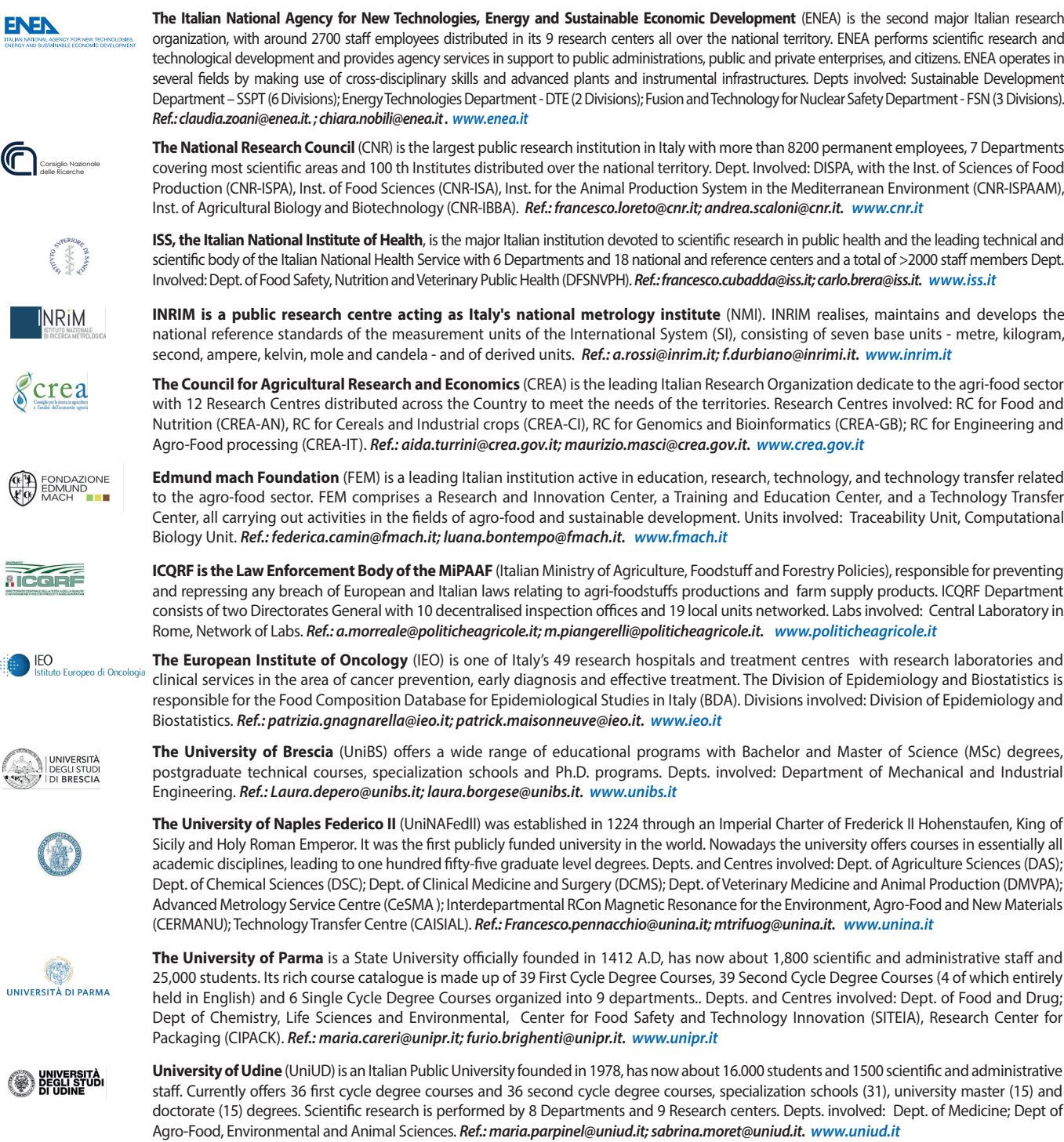
To enhance quality and reliability of measurement results

To make available and share data, information and metrological tools

To enhance scientific excellence in the field of food quality & safety

To strengthen scientific knowledge, promoting scientific cooperation and integration

#### PARTNERS



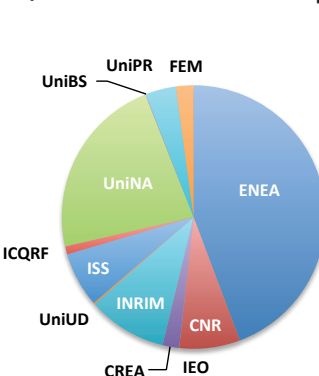
■ ENEA  
■ CNR  
■ IEO  
■ INRIM  
■ UniUD  
■ ISS  
■ ICQRF  
■ UniNa  
■ UniBS  
■ UniPR  
■ FEM

#### MINISTERIAL SUPPORT

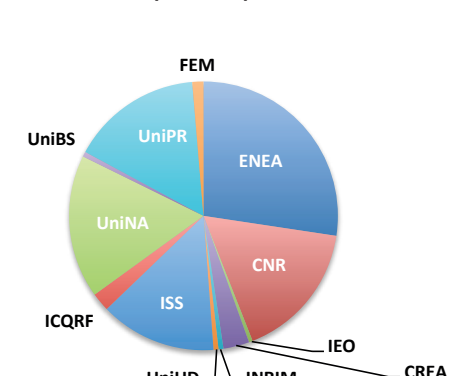
- Ministry of Research (MIUR)
- Ministry of Health (MinSal)
- Ministry of Agricultural (MPAAF)
- Ministry of Environment (MATTM)
- Ministry of Economic Development (MISE)
- Ministry of Foreign Affairs (MAECI)

The six Ministries participate to the IT InterMinisterial Group and the representative from MIUR is involved in the EU-IMG.

Overall  
Pre-existing value: 132260 k€  
(at METROFOOD-RI disposal)



Overall  
Staff Involved: 672 units  
(64 FTE)



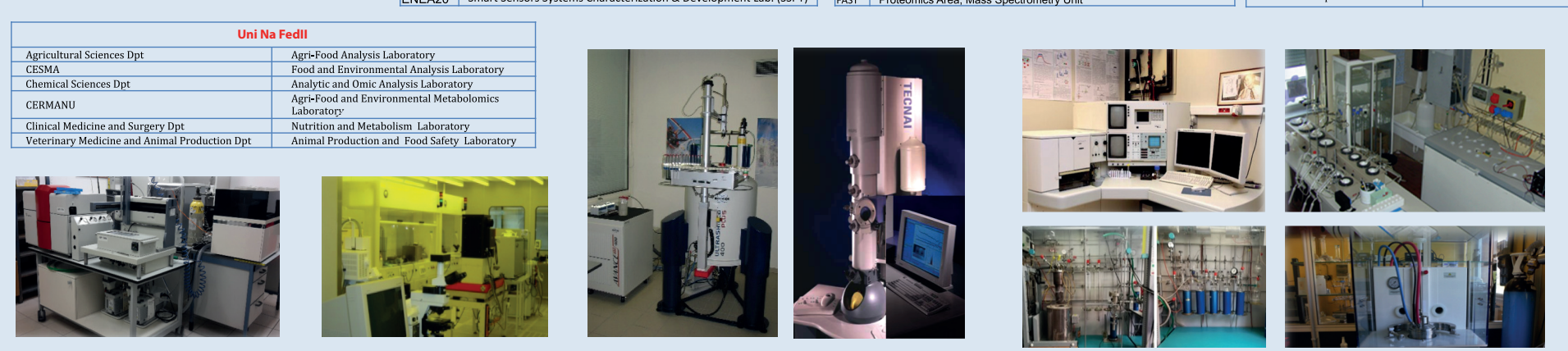
Involved in the National Joint Research Unit METROFOOD-IT

#### Physical Facilities

#### Analytical Labs

UNIBS  
Chemistry for Technologies Laboratory  
ICQRF  
Central laboratory of Rome

ANALYTICAL CAPACITIES									
MATERIALS	AGROFOOD SYSTEM	NUTRITION	AUTHENTICITY/TRACEABILITY	FOOD QUALITY	FOOD SAFETY				
Chemical analysis of raw materials and products	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control
Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control	Food safety and quality control



#### RM Plants

Agrifood Reference Material Integrated Platform (ENEA)  
Primary measurement standards for ionizing radiation (ENEA)



#### Food

Primary production (terrestrial)  
Open fields (ENEA, CNR, FEM, UniNaFedII)  
Olive Trees Collection (ENEA)  
Greenhouses (ENEA, CNR, FEM, UniNaFedII)  
Experimental animal husbandry farm (UniNaFedII)



#### Growth Chambers (ENEA, CNR, FEM)

Mesocosms and aquaria  
Marine experimental farms (ENEA)  
FOOD PACKAGING  
Materials and technologies for Food packaging (ENEA)  
Facilities for Packaging of Fruit and Vegetables (CNR)  
Food Packaging Lab. (UniNaFedII)



#### FOOD PROCESSING

Food processing, storage, by-product and waste treatment (ENEA, CNR, CREA)  
Centre of Food Innovation (UniNaFedII)  
Facility for Microbial Starters (CNR)  
Calliope gamma irradiation plant (ENEA)  
HTST pasteurizer (CNR)  
Postharvest facilities (CNR)



#### Hardware

(ENEA)  
High Performance Computing infrastructure  
ENEAGRID/CRESCO  
Databases  
Microbiome  
Food Innovation  
Scientific Publication  
TDS  
Archive Food Controls  
SIAN  
Food Consumption  
Food Composition  
Food Labelling  
Genetic Data Collection  
Biological Sample Cataloguing  
Metabolomics and Proteomics MS Data  
Microbial Agrifood culture collection database  
Reference Materials and Methods  
Epidemiology  
Marine Environmental Data  
Posidonia oceanica  
Climatological atlas  
SBT data  
Marine malacofauna  
Underwater marine image

#### Electronic Facilities

(ENEA; CNR; ISS; CREA; UNIParma; UniUD; UniNaFedII; ICQRF; IEO; FEM)

MODELLING  
Climatic projections and simulations  
Scenarios and simulations of air quality  
Software for food quality and optimization of production cycles  
Software for indirect traceability  
Software for LCA and similar  
Information systems about fluxes of resources  
Risk Analysis (Profiling)

CALCULATION  
IBM SPSS® Statistics Academic Software; MATLAB® (MathWorks)  
Solid Works 2012 Premium University Research  
NBI Works Advanced finite element structural analysis  
FEM High Performance Computing  
Genomic, Multiscale MS and Bioinformatic tools  
NMR Computing Platform

#### Software

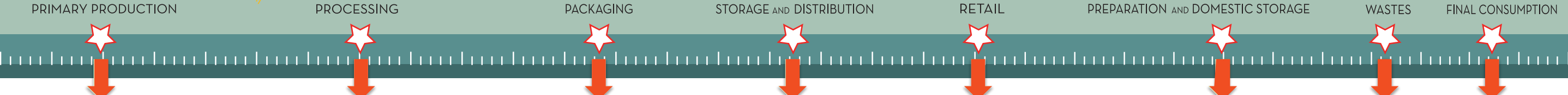
Web-GIS and Web Platforms for data sharing

Data Base / Data Calculation / Data Processing / Modeling / Data Integration / E-learning platforms / Other e-facilities

e-learning platforms, training tools and guidelines

#### Metadata

#### Food Chain Data



#### Food Quality & Safety Data

#### Data