



## The Belgian Node of METROFOOD-RI



### PARTNERS



Sciensano's expertise is focused on the identification and characterization of hazards and risks to public health. We host official control laboratories for medicines and food safety reference laboratories for the analysis of pesticides, food contact materials, natural toxins, nanomaterials and heavy metals.

[www.sciensano.be/en](http://www.sciensano.be/en)

External cooperations / In view to join



The Food Pilot as part of the research institute ILVO, offers customized scientific advice, pilot trials and laboratory analyses. Semi-industrial food processing lines are available. Analyses (mostly BELAC accredited) are available to solve issues such as quality, authenticity, shelf-life or safety.

[www.foodpilot.be/en](http://www.foodpilot.be/en)



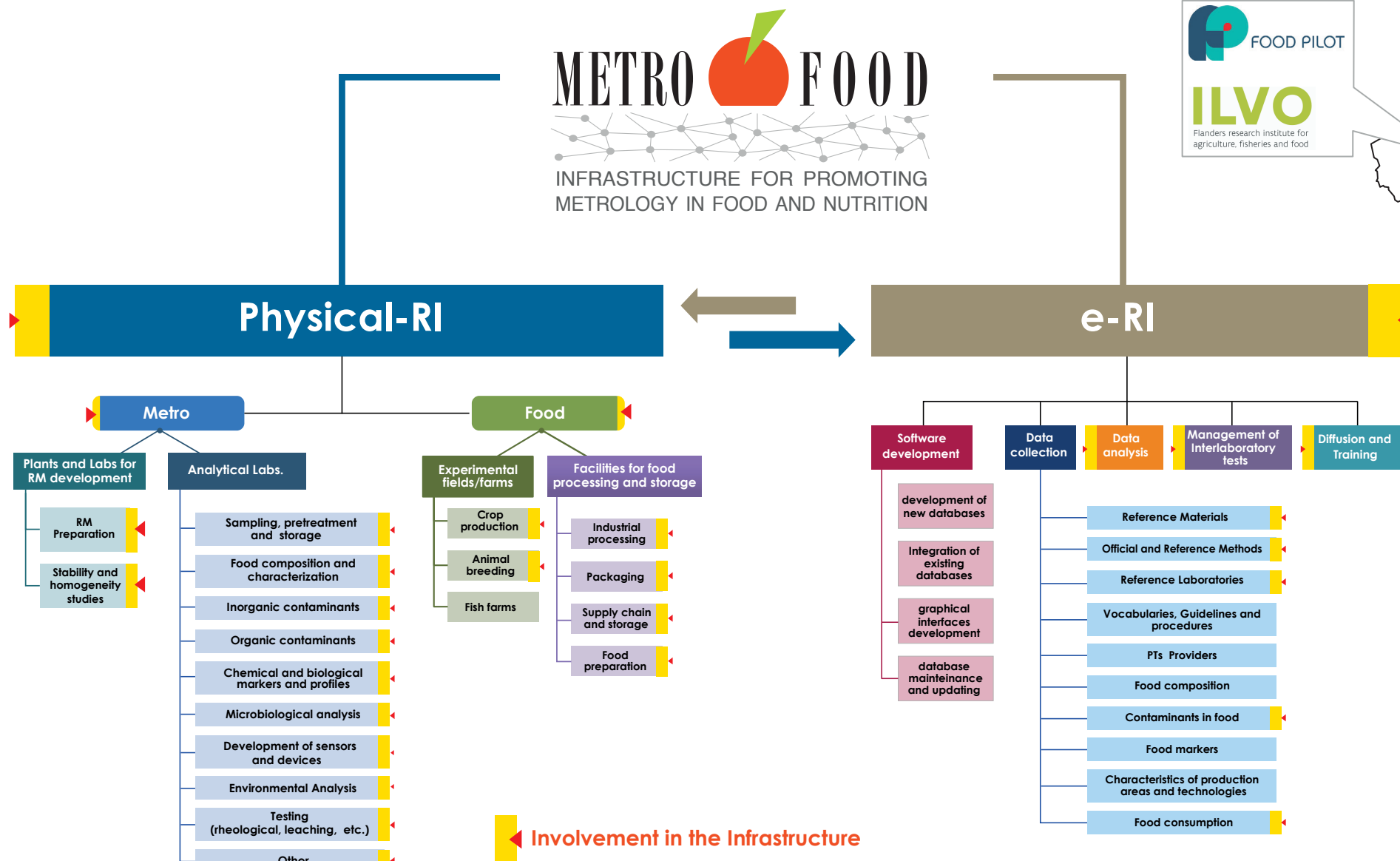
SMD is the National Metrology Institute of Belgium. We provide measurement traceability through realization of national standards and calibration services. Our R&D aimed at regulatory purposes and process improvement, is focused on the measurement of engineered nanoparticles (ISO17025 accredited).

[economie.fgov.be](http://economie.fgov.be)



CER Groupe develops ISO17025 accredited analysis of vet drug residues and contaminants in food, feed and biological samples through immunoassays (ELISA, flow cytometry) or physicochemical methods (UHPLC, APGC, GC-MS/MS, UHPLC-HRMS). CER also produces antibodies and performs animal studies.

[www.cergroupe.be](http://www.cergroupe.be)



Pre-existing value:  
• 1273 k€ at Metrofood-RI disposal (overall)

Involved researchers:  
• 3 Belgian institutes  
• 1,6 FTE at Sciensano

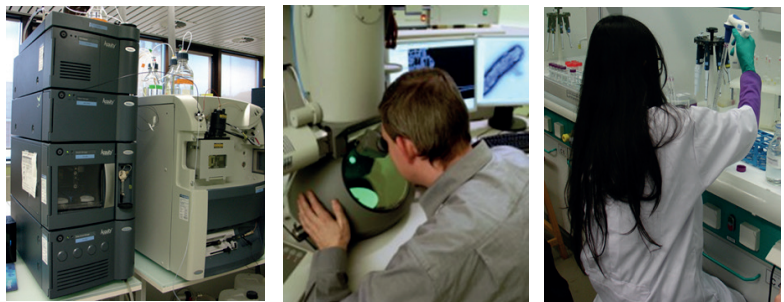
Research Areas:  
• food analysis and safety  
• production of reference materials  
• metrology in food & feed  
• pilot plants for food processing and production  
• Nanoparticle additives

## Physical Facilities

### Analytical Labs

#### Sciensano

- BELAC accredited (ISO 17025 & 9000)
- National reference laboratories for pesticides and other food contaminants, food contact materials, toxins (plant, marine and mycotoxins), nanomaterials and heavy metals.
- Electron microscopy, LC-(HR)MS, LC-UV, LC-Fluorescence, LC-ELSD, GC-(HR)MS, GC-FID, GC-ECD, ICP-MS, ICP-AES, AMA

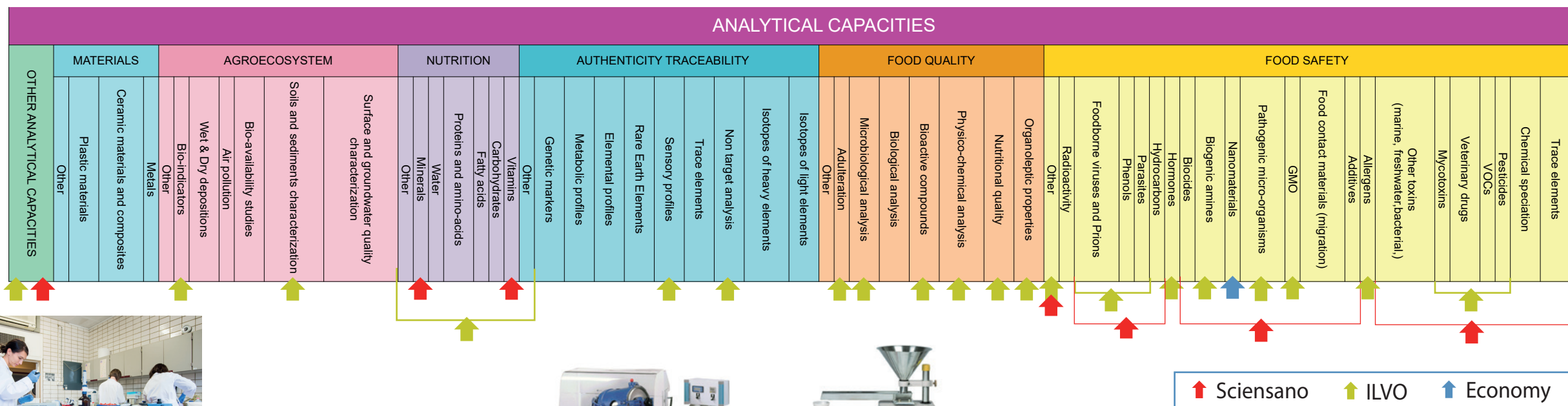


#### ILVO

- Food safety research: veterinary drugs, mycotoxins, allergens, PAHs, oxyPAHs, PCBs, pesticides, biogenic amines, GMO's, pathogenic micro-organisms, microplastics
- National reference laboratories: plant health, milk and dairy products, veterinary drugs, water content in poultry, GMO's and allergens
- laboratory analyses for quality, authenticity, shelf-life of food products
- BELAC accredited lab for plant and soil analysis, with experience in the organisation of international ring tests.

#### SMD-Economy

- Atomic Force Microscopes, Multi Angle Light Scattering, UV detector and Field Flow Fractionator accredited according the ISO17025 norm for the measurement of spherical nanoparticles.



### RM Plants

#### Sciensano

- Production of matrix reference materials: mycotoxins in food and feed matrices (PT accredited ISO 17043), food products spiked with heavy metals, additives, supplements, pesticides
- Organisation of national and international proficiency tests
- Professional homogenisation, sample preparation and distribution; homogeneity & stability testing

#### ILVO

For the dairy industry: ISO 17043 accredited proficiency testing. Reference series: raw milk, evaporated milk, skimmed milk, cream and hard cheese for the parameter fat, protein and dry matter

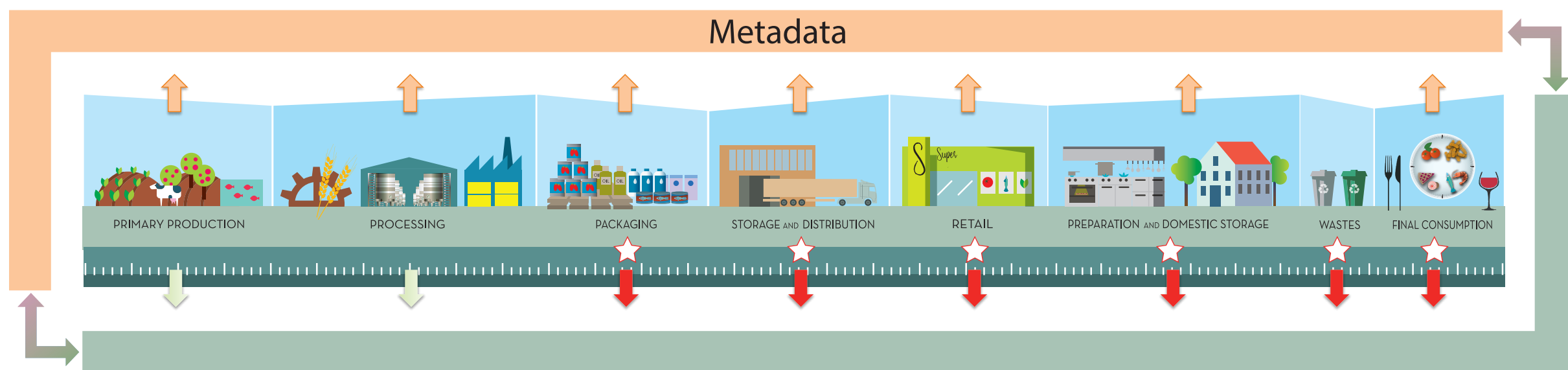
### Food

#### ILVO

- experimental fields (200 ha)
- glasshouses (15.000m<sup>2</sup>)
- experimental animal housing (>20.000m<sup>2</sup>).
- The Food Pilot: Processing using semi-industrial scale production lines; product quality is analysed in the laboratory. Food products or ingredients are processed under fully controlled conditions and can therefore be used as reference material. For more information see [www.foodpilot.be](http://www.foodpilot.be).



Food Chain Data



Food Quality & Safety Data