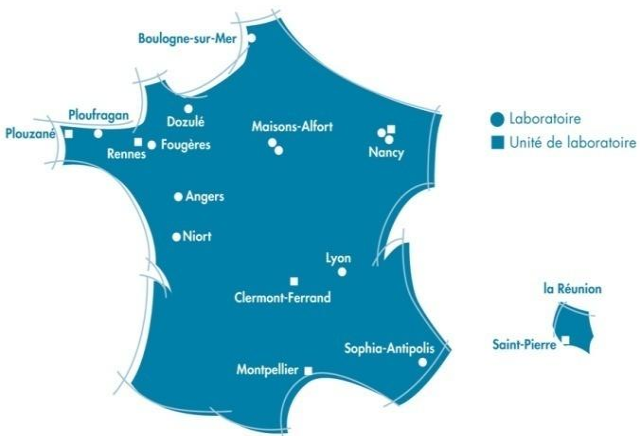




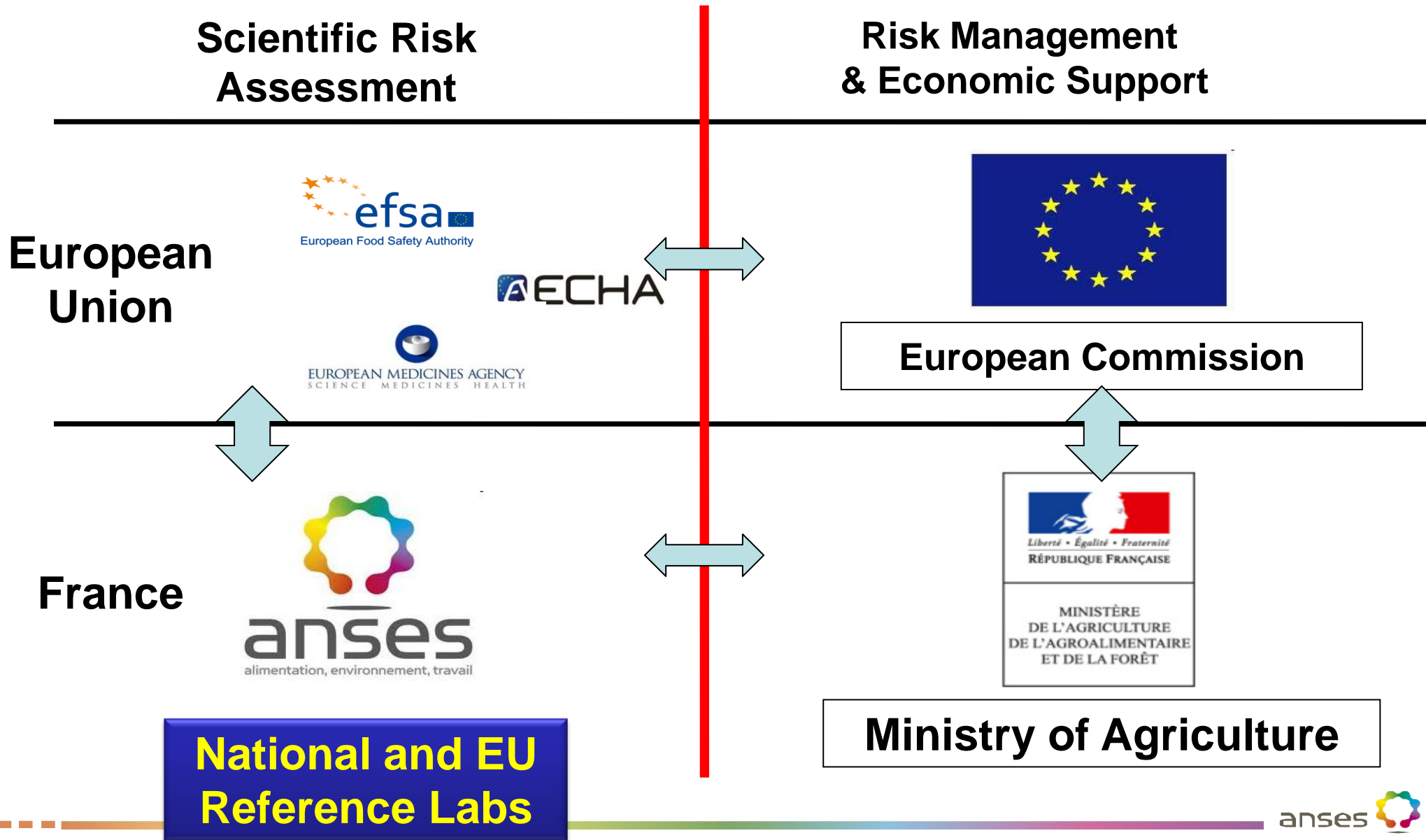
## Elements & measures in crisis situation

# The role of the national & European reference laboratories



**Dr Pascale Parisot**  
**Scientific affairs dpt**

# Anses and Institutions involved in food safety

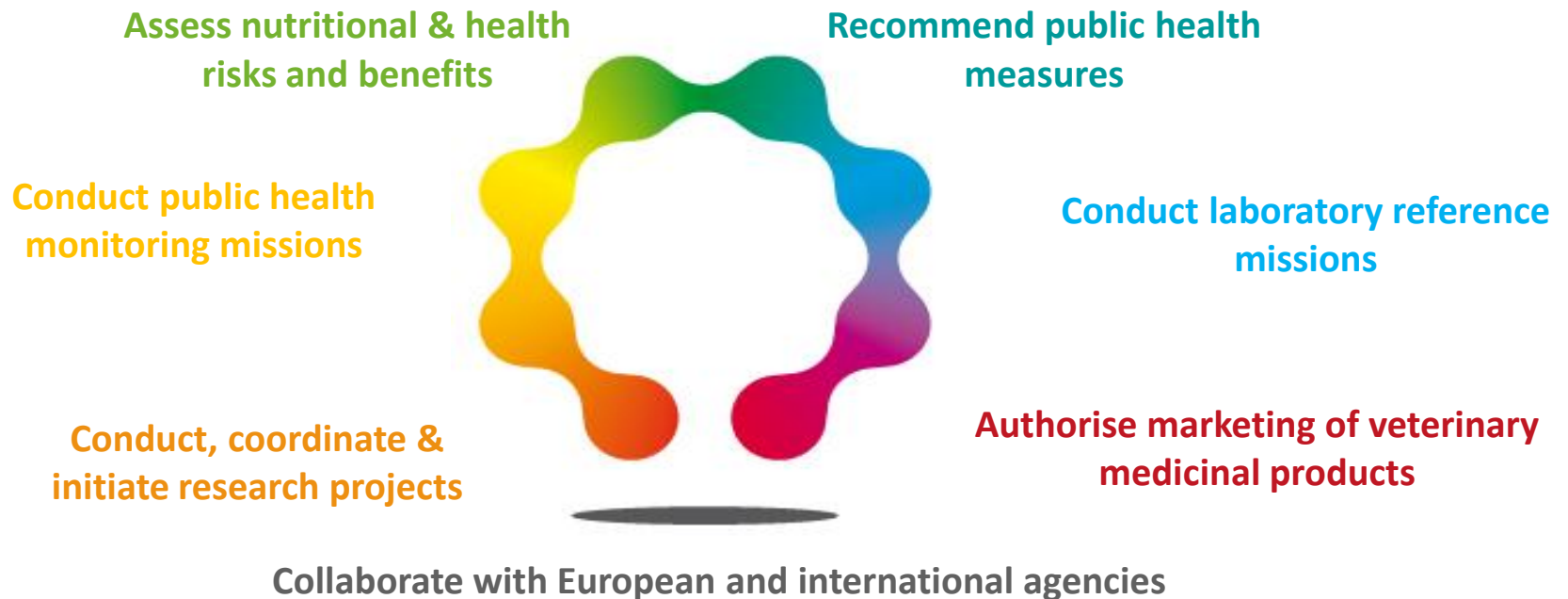


# ANSES

- ANSES was created on July 1<sup>st</sup> 2010 by merging the agency in charge of **food safety** with the agency in charge of **occupational & environmental health safety**
- Agency reports to five ministries

## ANSES contributes to :

- ensuring **human health & safety** regarding **environment, work & food** *as well as*
- protecting **animal health & welfare**
- protecting **plant health**



# ANSES Key facts & figures

- ✓ **1350 staff**
- ✓ **800 external experts**
- ✓ **Annual budget: 130 million Euros**
- ✓ **Over 8,000 Opinions issued since 1999**
- ✓ **11 laboratories in 16 locations**
- ✓ **67 National Reference Laboratory mandates, 9 EURL mandates, 19 international mandates**



# Reference for analysis performance

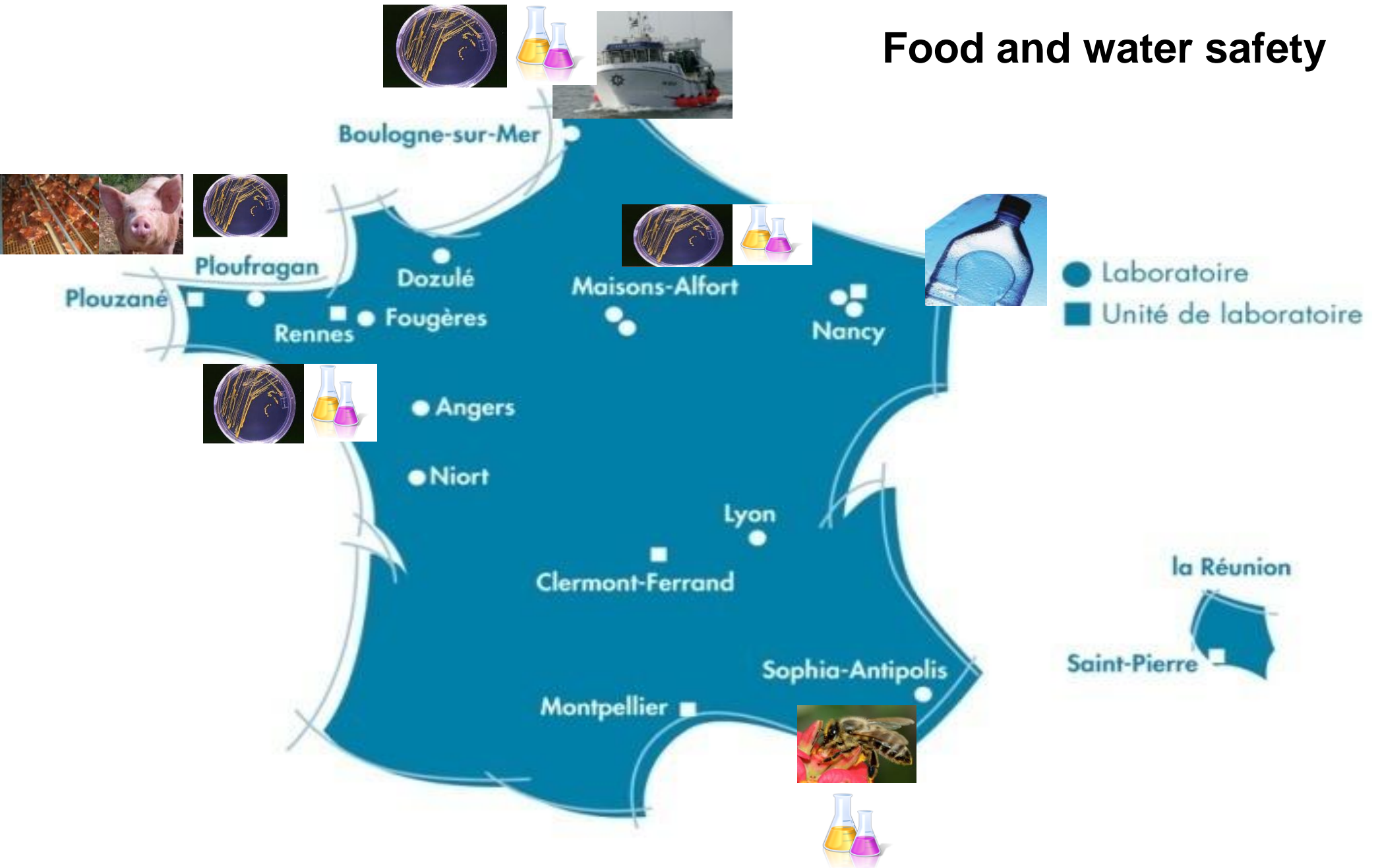
## Reference activities

for official analysis performance

within Anses, in France, in the EU



# Food and water safety



# Food and animal health



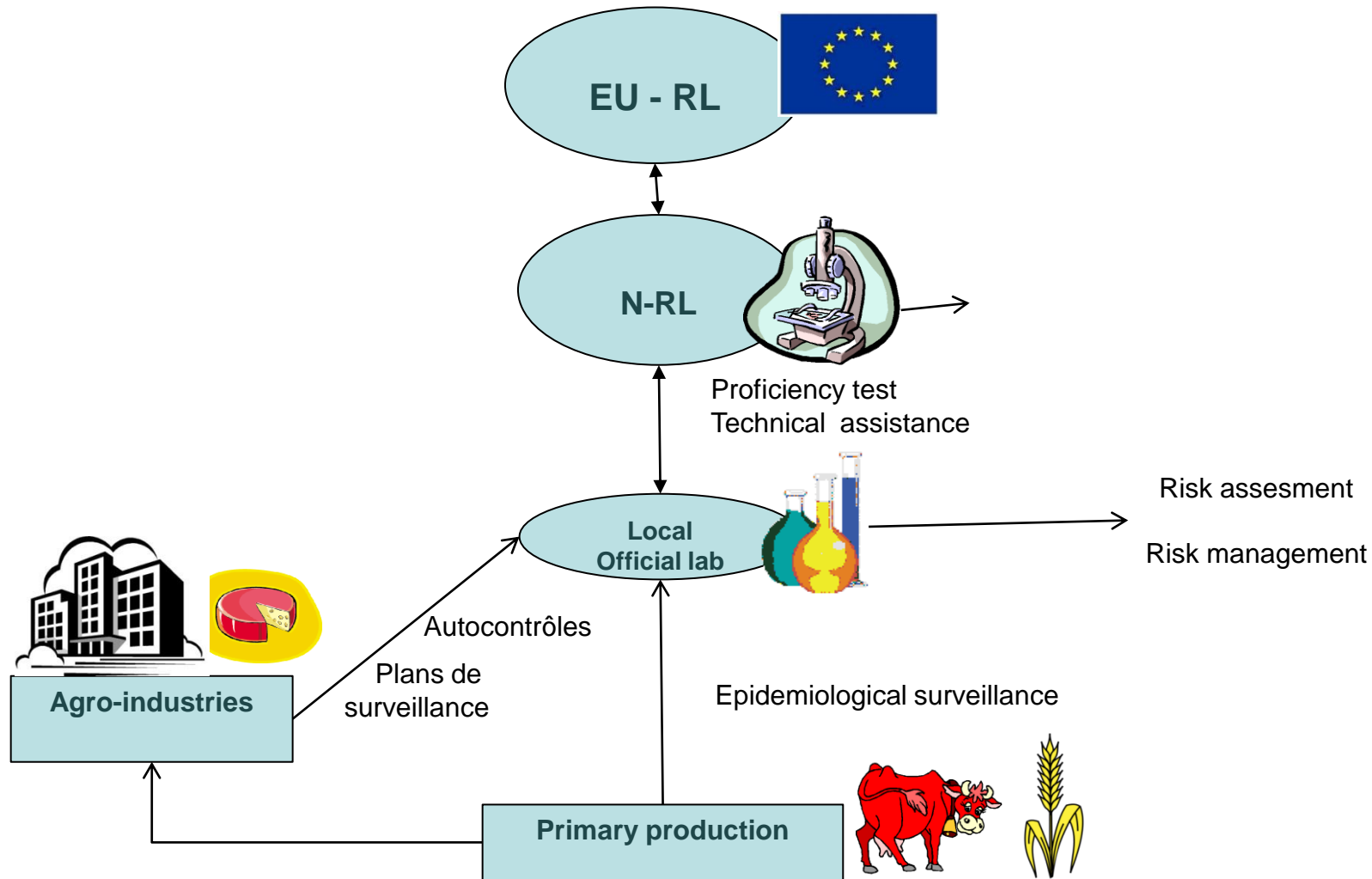
# Main tasks for the Anses reference labs

- **Reference**
- **Research**
- **Scientific and technical expertise**
- **Surveillance and Epidemiology**





# Reference framework (Reg 882/2004 EC)



# Reference activities ,



## National mandates (67)

including brucellosis for human health

## European mandates (9)

milk products;

**Staphylococcus toxins**

***Listeria monocytogenes***

rabies (serology and virology)

bees health

equine diseases

**vet medicines residues** and dyes

**brucellosis**

## OIE mandates :

rabies , brucellosis, blue tongue, FMD, ...

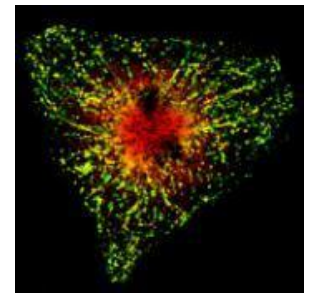


# Reference activities



Reference = (*Regulation 882/2004 EC*)

- ✓ **Methods** development (→official methods or standards)
- ✓ **Proficiency tests** under 17043 QA system (not mandatory)
- ✓ **Trainings, technical advice**
- ✓ **Results Confirmation** (under ISO 17 025 accréd)
- ✓ **Biological materials and kits** production and validation



# Reference activities and outbreaks



Reference organization

=

**Official** laboratories **network** at EU and national level  
(*OIE/WHO*)

+

official method with known and **shared performance  
criteria**

+

**Competences**



**confidence**



# Research end reference

## Research in reference laboratories

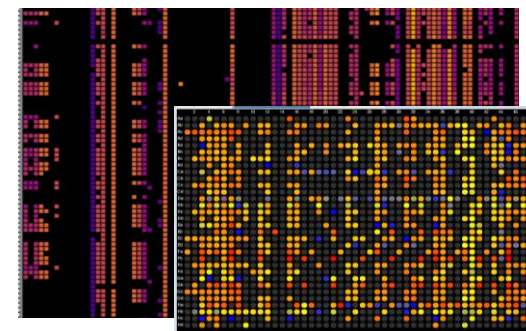
### → « risk evaluation oriented » :

- ✓ Host/pathogen interactions, pathogen virulence, toxin-producing mechanisms, contaminants toxicity, bio-accessibility
- ✓ vectors
  - Epidemiology, Prevalence and distribution
  - Modelisation of bacterial behaviour



### → « reference oriented » for methods development

- ✓ highthroughput qPCR and genomics dvpts :
- ✓ pathogenicity,  
resistance characterizations
- ✓ Toxicity investigations and chemicals identification



# Research activities and outbreaks



Research in Reference labs

=

**International scientific network**

Reference materials, MS, and strains

+

High level **technologies dvpt and mutualisation**



**Anticipation and  
reactivity**



# Scientific and technical expertise in routine and during outbreaks

To the relevant authorities ([EU], national and local levels):



**On site expertises**

« On text » advice

**On line consultation**



# Reference **and** surveillance

What happen if we link reference laboratories networks and surveillance networks ?



→ Samples collection



Strains characterization  
and identification

contaminants  
identification





# Surveillance linked to reference activities and outbreaks



Reference labs

=

National and EU (+*international*) surveillance **potential network**

+

methods of analysis and database shared **criteria (potential guidelines)**



**New** EU and global approach of outbreaks understanding and management

# As a conclusion about the role of reference laboratories

The EU [*and international*] **reference activities system** in outbreaks situations **brings**

→ **Confidence** between actors



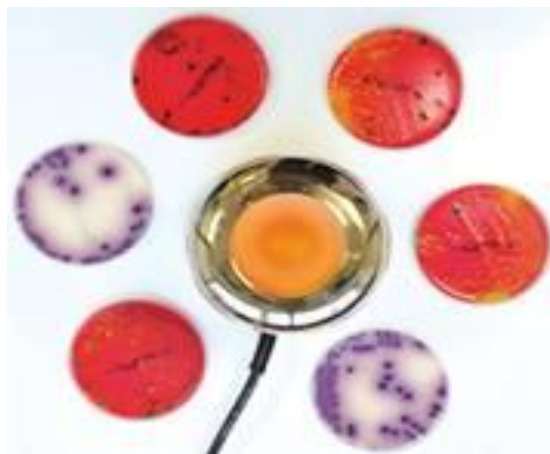
Linked with **research activities** it adds

→ **Reactivity and anticipation**



Linked with **surveillance** involving **stakeholders and international partners**, it should improve

→ **Global understanding and prevention of outbreaks**



**Thank you for your attention**

[www.anses.fr](http://www.anses.fr)