



# Residues of Pesticides in foodstuffs of animal origin : Monitoring programs in France



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**French Ministry of Agriculture**

# AGENDA



**Legal framework**

**Characteristics of the residue monitoring**

**French organization**

**Results and follow- up**

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# LEGAL FRAMEWORK

## Balances



Trade

Protection of the  
honest user of  
pesticide (GAP)

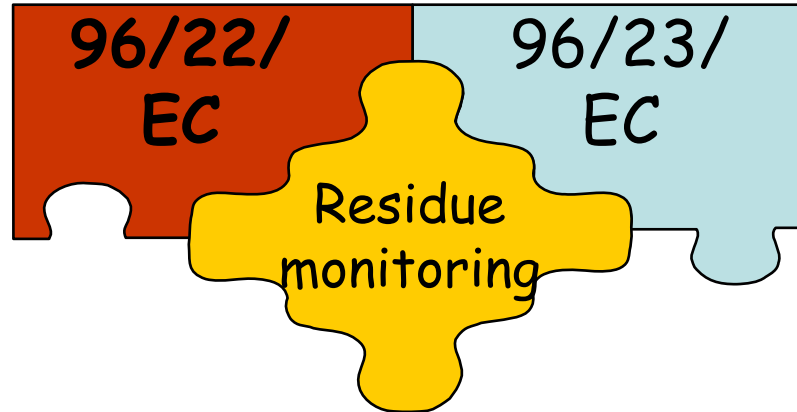


Food  
Safety

Animal  
health and  
welfare

# LEGAL FRAMEWORK

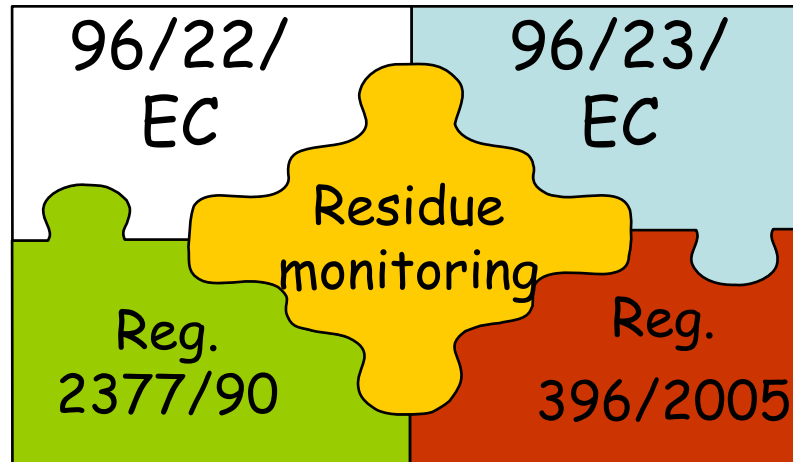
## Monitoring in foodstuffs from animal origin



- **Directive 96/23/EC** = measures to monitor certain substances and residues in live animal and animal products (= residue monitoring plans)
  - Establishes substances, species or products covered and sampling requested
  - Covers Member States and third countries
- **Directive 96/22/EC** = Ban on the use of hormones as growth promoters

# LEGAL FRAMEWORK

## Monitoring in foodstuffs from animal origin



- **Regulation 396/2005** = Establishes MRL for Pesticides.
- **Regulation 2377/90** = Establishes **Maximum Residue Limits (MRLs)** for substances and animal species (veterinary medicines)

# LEGAL FRAMEWORK

## Reg. 3962005 : new legal framework



- Why ? :
  - Complexity of present legislation :
    - 4 parents Council Directives
    - Complicated lists of MRLs, both at national and at Community level
    - Problem for the international market and for the importers
  - Lack of harmonisation
  - Role of EFSA (Reg. 178/2002)

# LEGAL FRAMEWORK

## Reg. 3962005 : new legal framework

- Regulation clear and transparent :
  - one list of MRLs (accessible database with information)
  - Information to consumers about risk arising from pesticides, results of national monitoring
- Clear procedure for application :
  - MS - EFSA- Commission),
  - Codex LMRs considered
- Complete harmonisation : no more trade problems, Import tolerance



# LEGAL FRAMEWORK

## Regulation 396/2005 - Annex



### Condition for the application of the regulation

- **Annex I → List of commodities** (Reg. 178/2006)
- **Annex II → EU MRLs** (existing MRLs)
- **Annex III → Temporary MRLs** (harmonisation of national MRLs)
- **Annex IV → List of active substances for which no MRLs are required** (low toxicity)

Will be developed later :

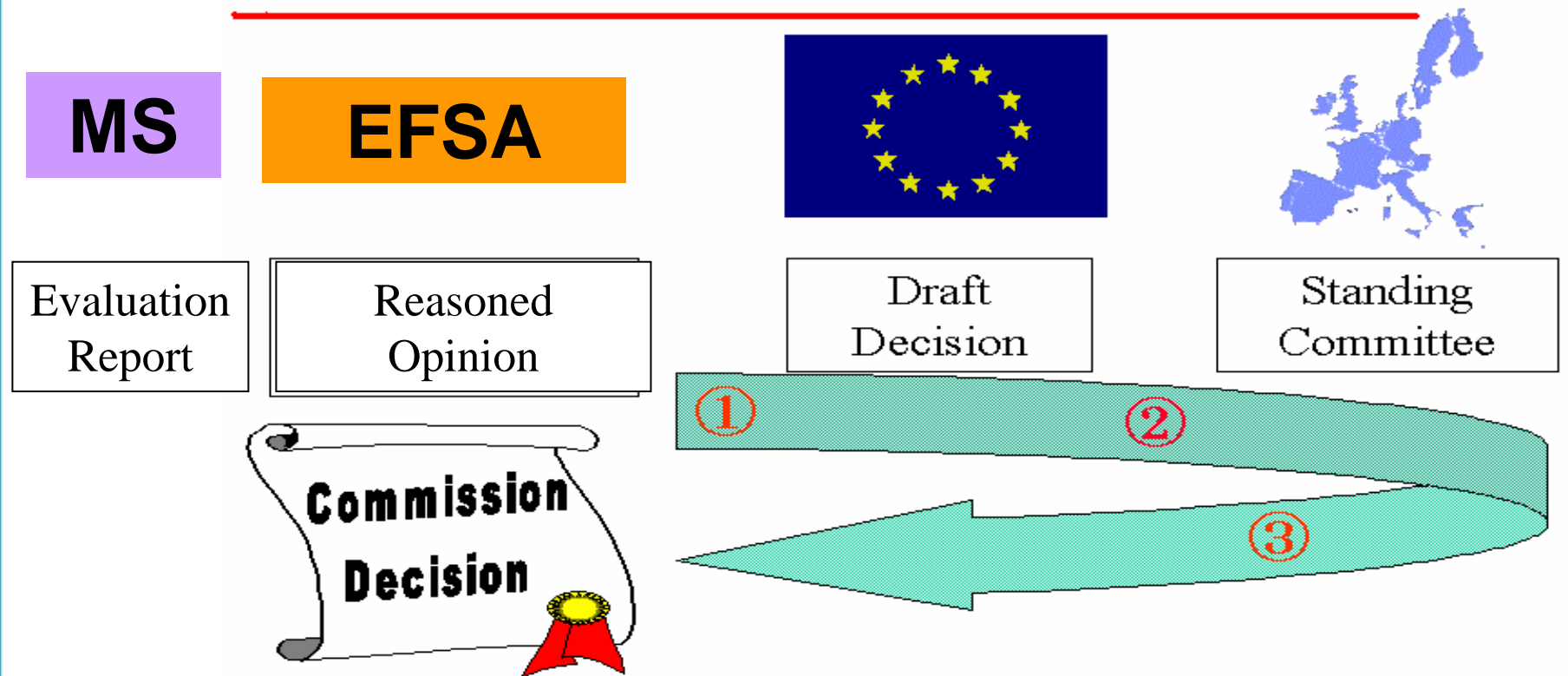
- Annex V → Substances for which a default MRL applies
- Annex VI → Processing factors
- Annex VII → Fumigants

# LEGAL FRAMEWORK

## Procedure



### Decision Making Process General Scheme



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# RESIDUE MONITORING

## Directive 96/23



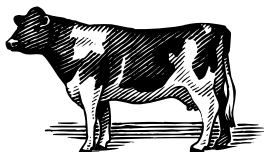
- Harmonized approach : **Directive 96/23**
- **Coordination** by the European Commission
- Member States **Report** on previous results and current plans
- Different national **organizations**

# RESIDUE MONITORING

## Animals and products concerned



Bovines



Aquaculture



Milk



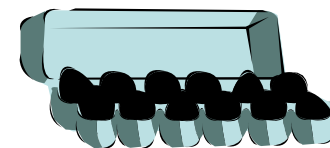
Poultry



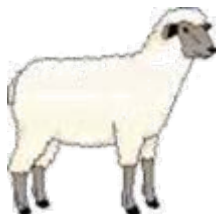
Farmed game  
Wild game



Eggs



Sheep/goats



Horses (food)



Honey



# RESIDUE MONITORING

## Classification of substances



- **Forbidden substances (Group A)**

- Hormones, Beta agonists, etc...
- Forbidden veterinary products : Annexe IV LMR (chloramphenicol, dimetridazol)



- **Veterinary medicines (Groups B1, B2) with LMR**

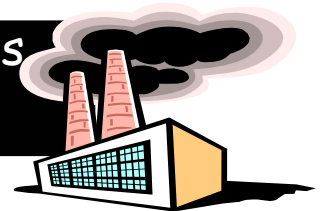
- Antibiotics (B1),
- Anthelmintics, etc...



- **Contaminants (Group B3)**

- PESTICIDES, dioxins,
- Heavy metals...

Reg. Contaminants  
Reg. Pesticides



# RESIDUE MONITORING

## Frequencies and level of the control



Species	Number of controlled animals (% of annual production)	Group A		GROUP B
Bovine	0.4%	0.25%	50% live animal	0.15% (30% for groups B1)
			50% slaughterhouse	
Porcine	0.05 %	0.02%		0.03% (30% for group B1)
Sheep and Goat	0.05 %	0.01%		0.04%
Equine	In relation to the problems identified			
Poultry (broiler chicken, turkeys)	1 per 200 tons of annual production (minimum : 100)	50% of samples		50% of samples (30% for group B1)
Aquaculture products	1 per 100 tons of annual production	33% of samples		67%
Milk except sheep and goat milk	1 per 15000 tons of annual production	70% for veterinary medicament and 30% for B3		
Eggs	1 per 1000 tons (equivalent ton)	70% for groups A6, B1, B2b and 30% in relation to the problems identified (B3a )		
Honey	10/300 tons (3000 tons) + 1/300 tons	50% for groups B1 and B2c and 40% for groups B3a, B3b, B3c		



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# FRENCH ORGANIZATION

## Risk assessment-Risk management



Political decisions

Legal texts

Control coordination

Enforcement

Sampling

Investigation / Inspection

Scientific risk  
assessment

Control confirmation

NRL, CRL

Official analysis

Ministry of Agriculture

*Risk  
management*

Departmental Directions

French Food  
Safety Agency

*Risk  
assessment*

Laboratory for pesticide residues

Official laboratories

# FRENCH ORGANIZATION

## Risk policy and management



**One leading Ministry**

Ministry of Agriculture and Fishery

**One competent Direction**

General Directorate for Food (DGAL)



## Elaboration of residue plan each year

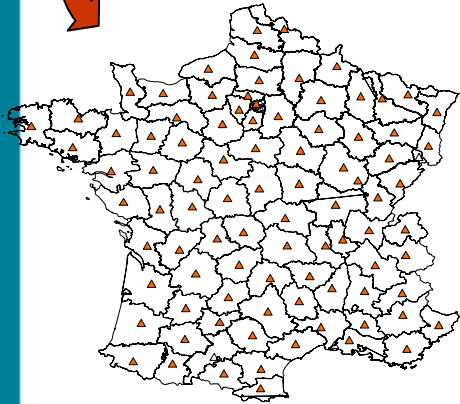
- Determinate scope : group of residue (previous results,)
  - Determinate number of samples for each department, each species each sub-groups of residue
- Target criteria : local production, number of slaughtered animals

# FRENCH ORGANIZATION

## Local implementation



- Departmental Directions for Veterinary Services



- Sampling (slaughterhouses etc...)
- Investigation (food production, farms etc...)
- Sanctions (prohibited substances etc...)

# FRENCH ORGANIZATION

## Risk assessment

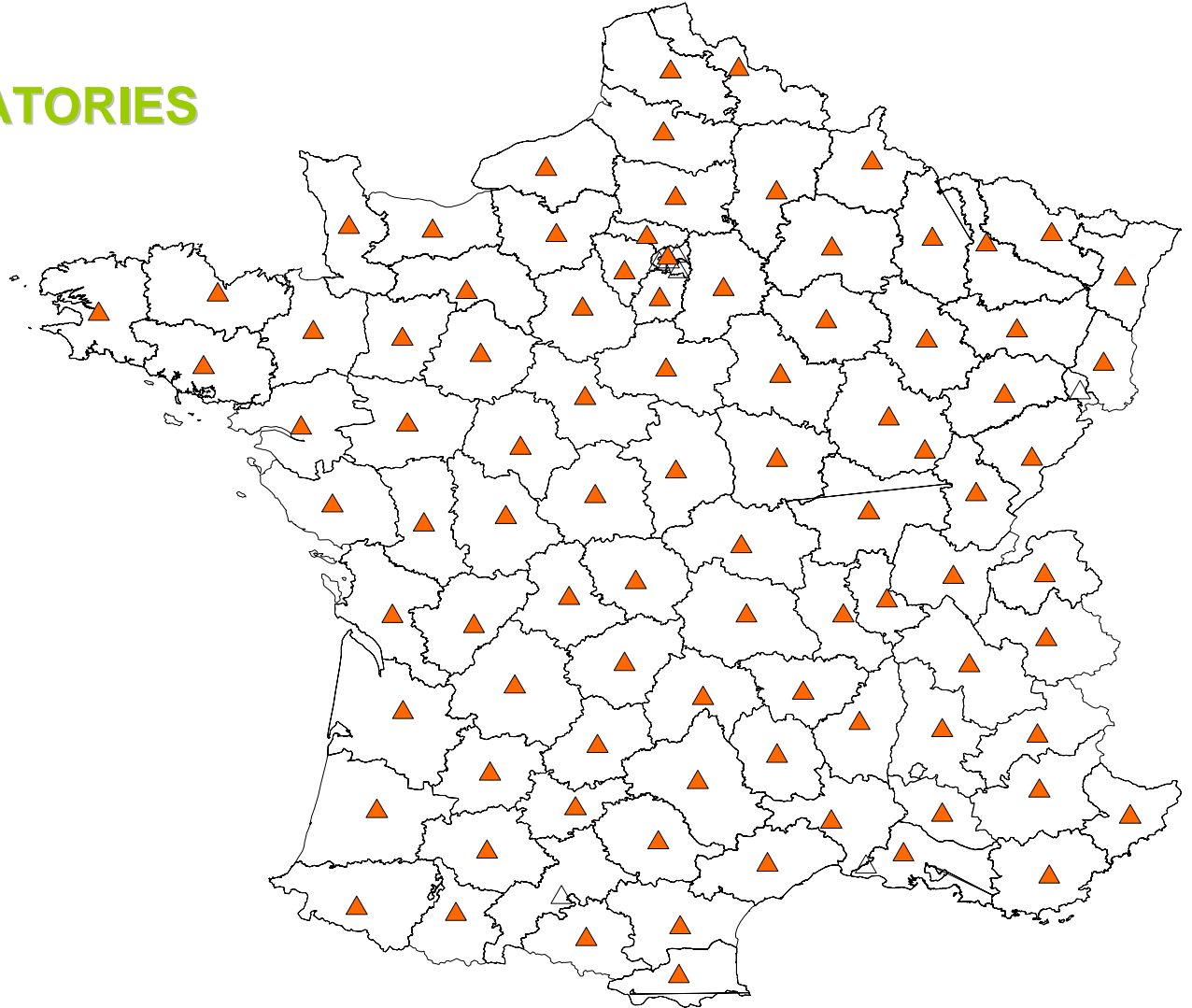


- **1998** : clear separation between risk management and risk assessment
- **French Food safety Agency:**
  - Risk assessment
  - Scientific opinions
  - Studies on the basis of Residue monitoring plans

# FRENCH ORGANIZATION

## Official analysis : network of laboratories

### OFFICIAL LABORATORIES



# FRENCH ORGANIZATION

## Official laboratories



- **Minimum requirements**

- Suitable qualified staff, equipment , buildings and
- Guaranty of confidentiality, impartiality and independence
- Accreditation on NF EN ISO/CEI 17025 standard delivered by the COFRAC
- Approval by General Division for Food
- Permanent maintenance of their competences (trainings, participations in ring tests,...)



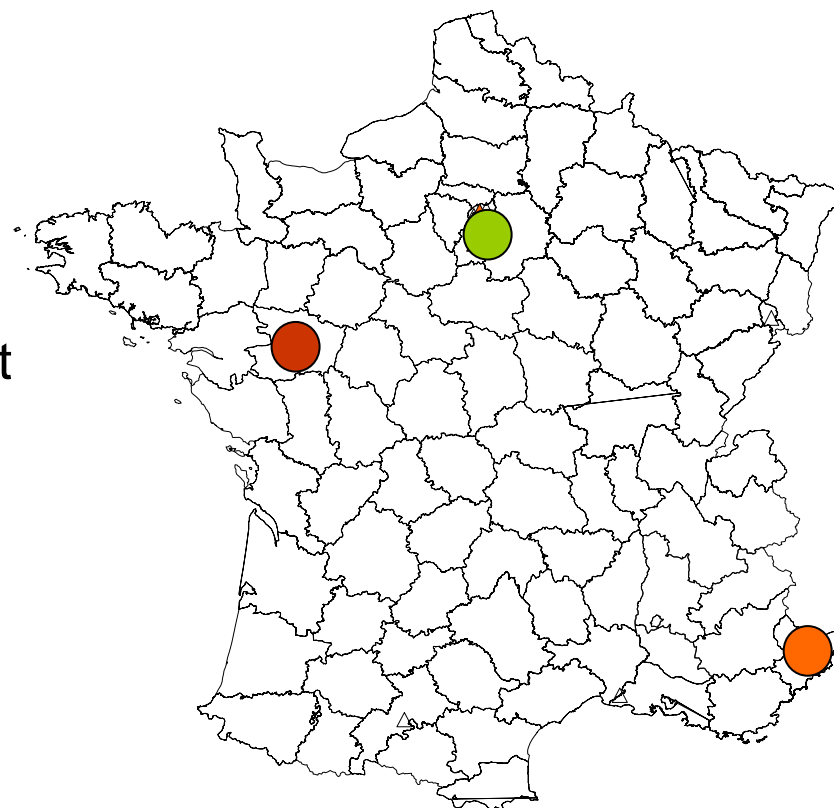
# FRENCH ORGANIZATION

## National Reference Laboratories



- **Pesticides**

- AFSSA LERQAP Maisons-Alfort (foodstuffs of animal origin)
- AFSSA Sofia (honey)
- LNPV Angers (vegetable)



# FRENCH ORGANIZATION

## National Reference Laboratory



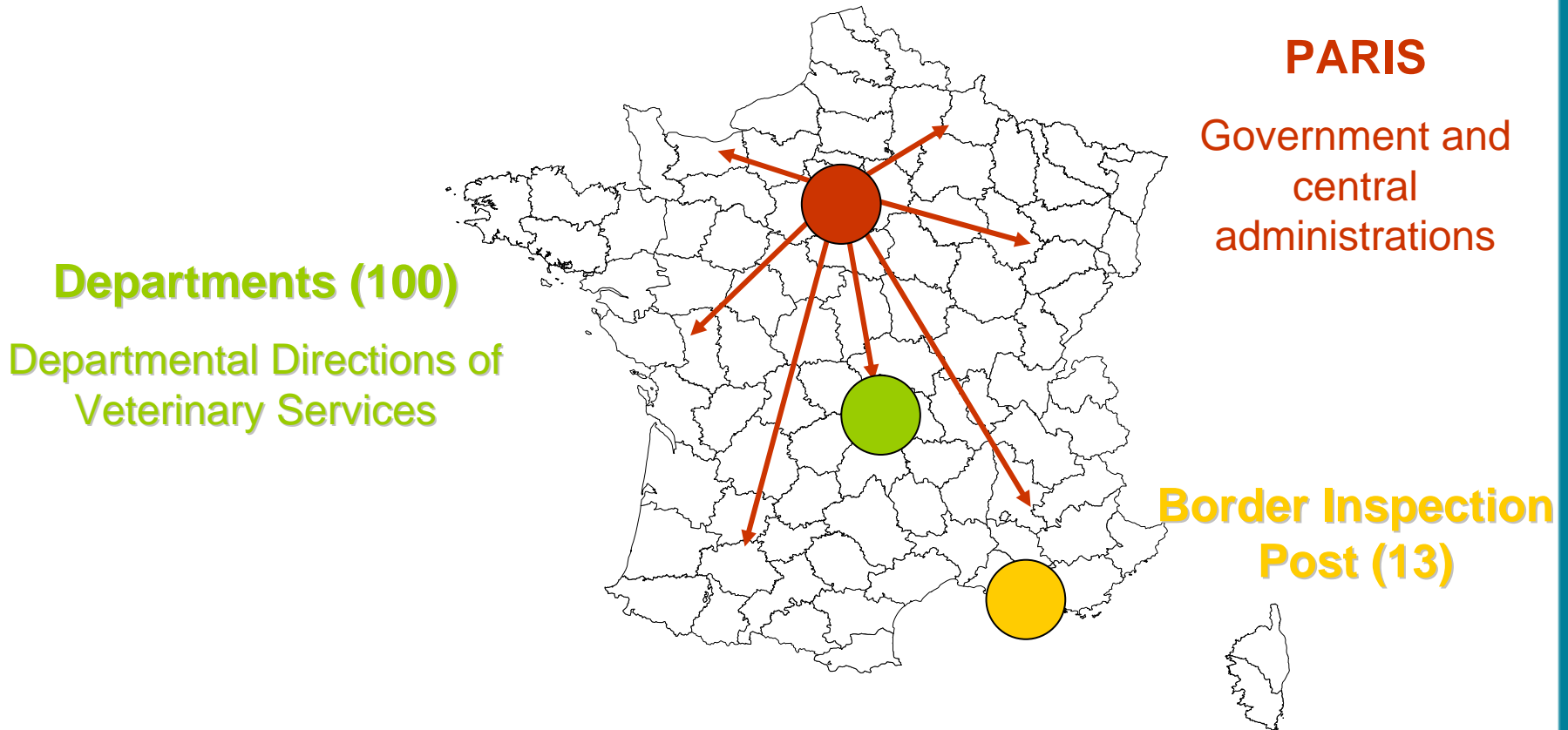
- **Coordinate** the work of designated laboratories, training, coordinate the standards
- Organize **comparative tests**
- Scientific and technical support for the government
- **Confirm positive analysis** detected by public laboratories
- Development and validation of method of analysis,
- Disseminate information supplied by CRL, knowledge of international standards and practical
- Maintain **qualified staff** and equipment

# FRENCH ORGANIZATION

## A single chain of command



➔ a single chain of command



# SPECIFIC TOOLS

## System of information



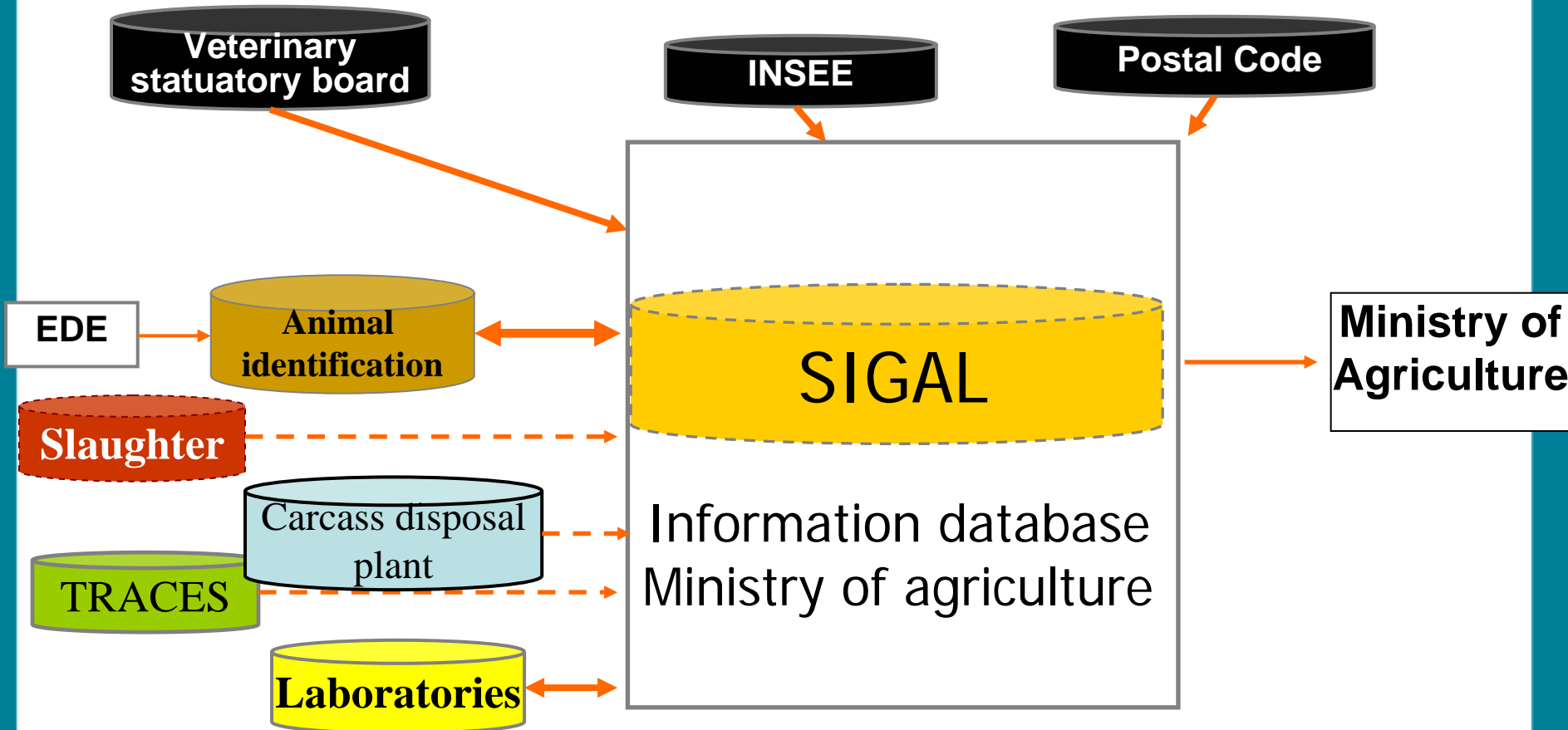
- **SIGAL : System of information for DGAI**
  - Information Processing System connecting the departments to the laboratories and the general division for food (DGAI)
  - Base Data-Processing containing the requests for samples by plan and department
  - Daily monitoring of control plans realization

# SPECIFIC TOOLS

## System of information



### Users's national database



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# RESULTS AND FOLLOW-UP

## Results in 2005



Species	Nb of samples	% of Non compliance	Pesticide
Bovine	970	0.22	OP, OC, Pyret., PCB
Poultry	360	0	OC, Pyret., PCB
Rabbit	15	0	OC, Pyret., PCB
Game	50	0	OC, Pyret., PCB
Fish	130	1	OP, OC, Pyret., PCB
Milk	80	0	OP, OC, Pyret., PCB
Egg	110	1.1	OC, PCB
Honey	140	0	OC, amitraze, Pyret



# RESULTS AND FOLLOW-UP

## Follow up - Non compliance



If the result exceeds the maximum residue limit (MRL)



Investigation on farm

- Find the cause of non compliance (not respect of the latency).
- Checking the register of breeding.
- Recall of the obligations.
- Correct measurements to implement.
- Withdrawal of the market of the food products if new non compliant results.
- Targeting of the breeding for the plan of the year n+1.

# RESULTS AND FOLLOW-UP

## Three samples procedure



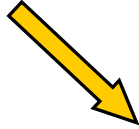
- Prohibited substances
- 1<sup>st</sup> sample for official laboratories
- 2nd sample for the animal's owner :
  - Possibility for the animal's owner to analyze his sample in an approved laboratory
- 3rd sample for the national authorities :
  - In case of different result between the 1st and 2nd sample, analysis of the 3rd sample by the National Reference Laboratory (NRL).

# RESULTS AND FOLLOW-UP

## Follow up - Summarize



### Surveillance plan



Positive results

### Official random checks :

- Previous positive results
- Suspected fraud or use of illegal substances



Positive results

### Intensified checks :

- Repeated positive results
- Detection or presence of prohibited substances



- Investigation on the farm to detect unauthorised substances
- Check on animal's feedingstuffs, drinking water
- Animals are impounded
- No leaving before results of analysis
- Animals are slaughtered and destroyed if results are positive





# THANK YOU FOR YOUR ATTENTION

