France's strategy for a more profitable beef & sheep industry

Session B1 : Information for Profitable Beef & Sheep Farming - Strategy & Information Services

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Introduction and context

France is an important bovine and ovine meat producer in Europe
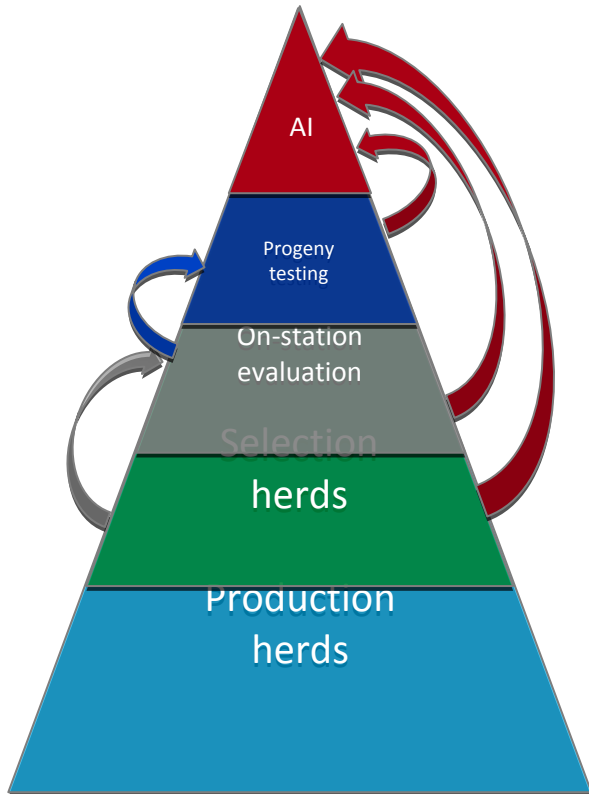
	Beef cattle	**Meat sheep**
Number of suckling females	4 100 000	4 050 000
Number of breeders	102 000 (> 5 cows)	52 000
Meat production (million tons)	1,591 (1,383 beef meat)	0,102
Rank in EU	1st	3rd

French genetic programs in beef cattle and sheep

(FGE 2011)

AI

Progeny testing

On-station evaluation

Selection herds

Production herds

	Meat sheep	Beef cattle
Nb of progeny tested males / year	195	81
Nb of evaluated young males / year	3 853 (2500)	2 254 (290)
Nb of females in the recording scheme	281 735 7%	937 915 21%
Nb of suckling females	4 050 000	4 100 000

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Management of French data

▸ **French genetic organizations are developed an information system (SNIG) for each species:**

▸ To centralize all data to manage genetic programs,

▸ To share data between all organizations,

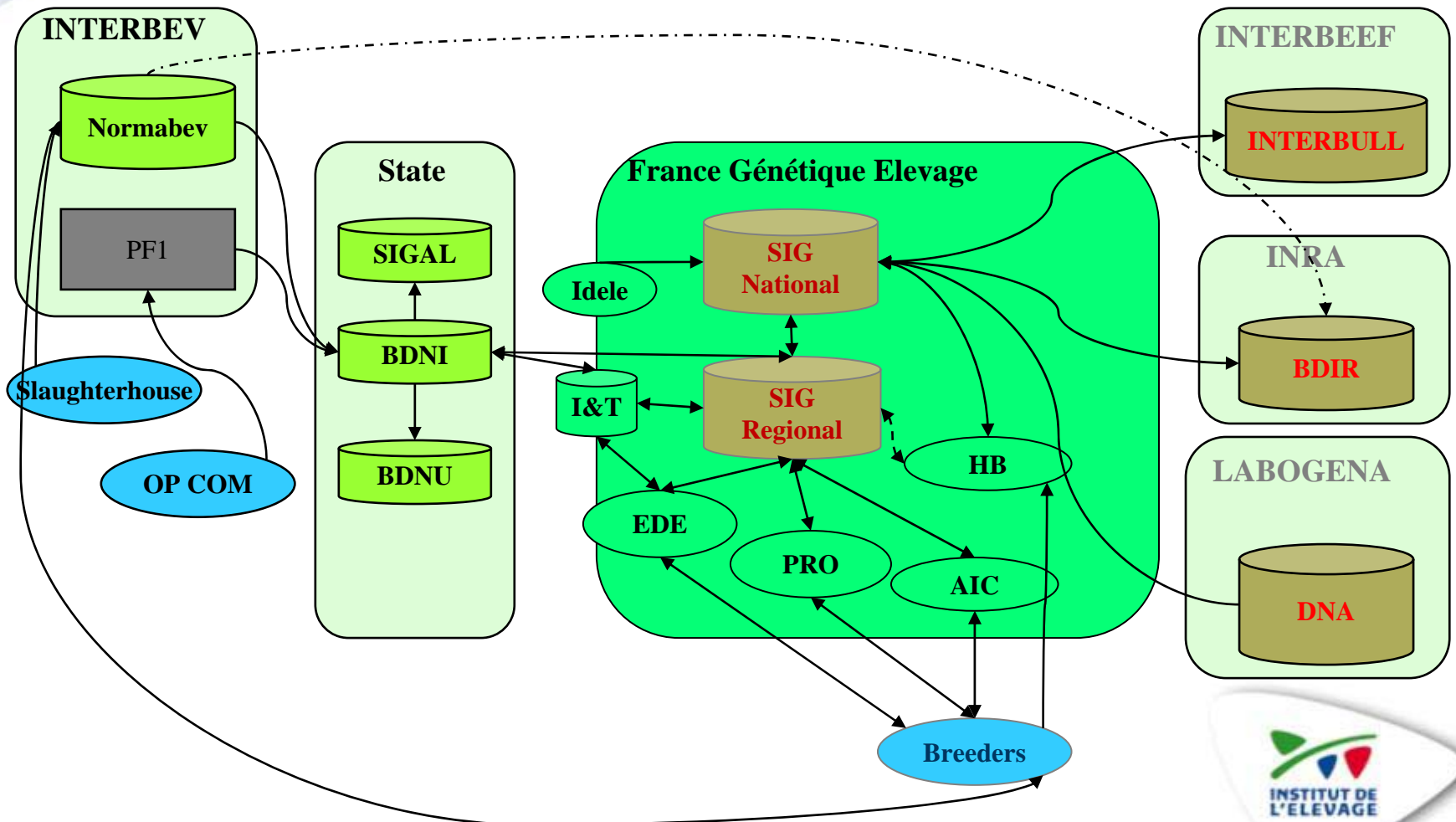▸ To modernize the database management system.

▸ **For cattle**

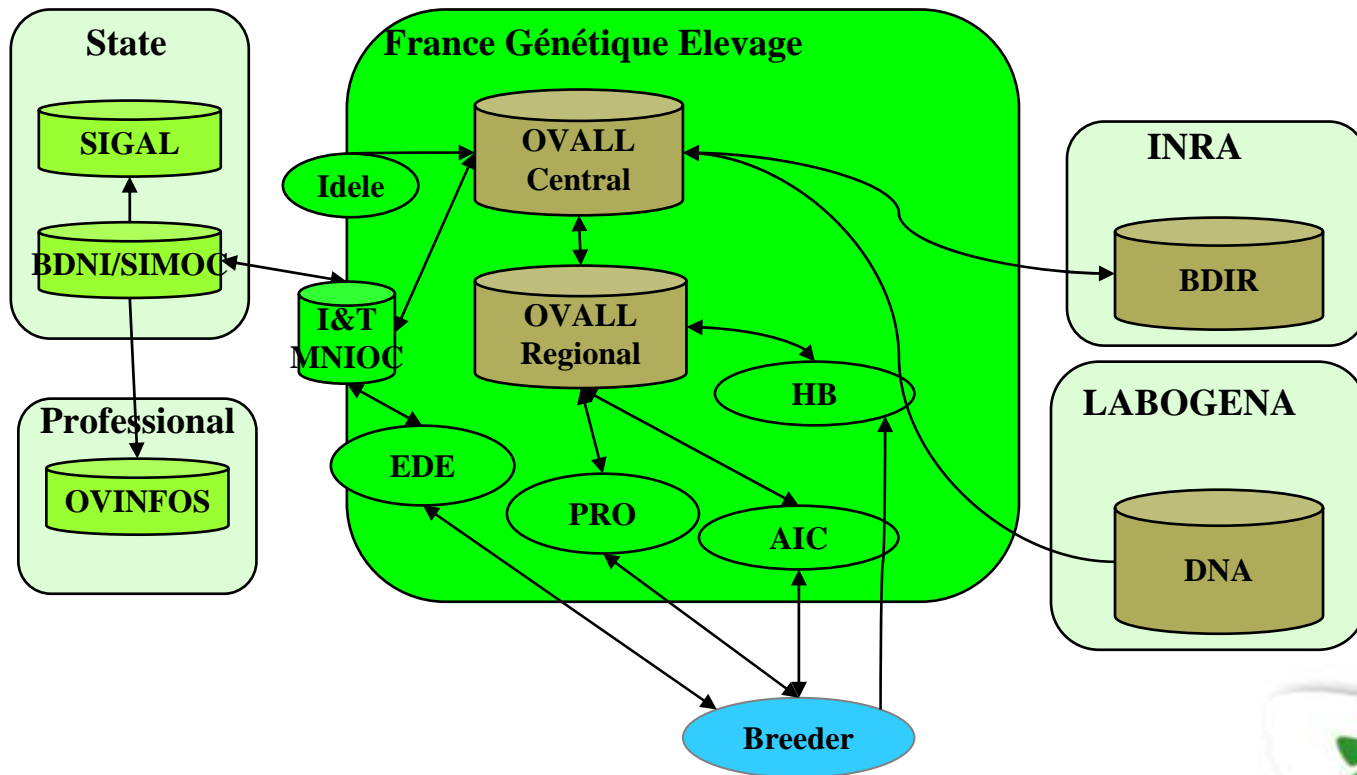▸ only one database called SIG

▸ **For sheep**

▸ two genetic information systems

▸ OVALL is the genetic information system for meat sheep

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The genetic information system for cattle = SIG

The genetic information system for meat sheep = OVALL

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French strategy for the future

The main goals are:

1. **to reform all SNIG in a common national genetic information system: in order to simplify the management and to expect to save money**

2. **to exchange even more with other databases: in order to valorise the maximum of the collected data which have an interest**

3. **to have a common system for all ruminants to exchange with all farmers: in order to develop the automatic exchanges with all breeder's software**

4. **to develop custom built services for hosting particular data: in order to develop new collects of data**
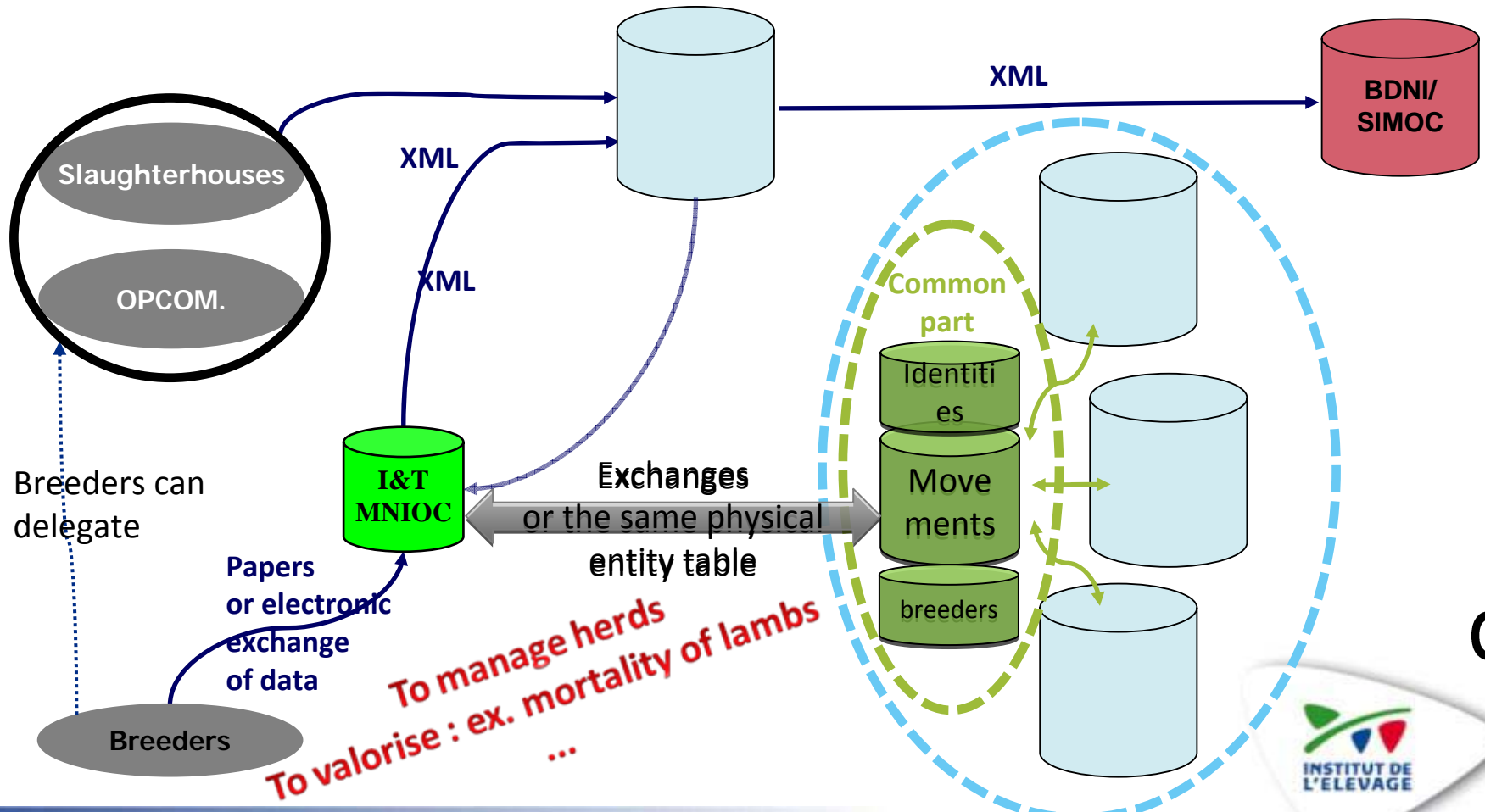
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To reform all SNIG in a common genetic information system

◄ **All evolutions are made in order to establish later a common information system for all ruminants**

◄ **For example in sheep :**

◄ On-station evaluation of the young rams: we created a common part between the genetic information systems of dairy sheep and OVALL. This common database use the software of OVALL but can manage the young rams of the dairy programs.

◄ **for example for all ruminants :**

◄ Management of all EBVs: the aim is to manage for example EBVs in beef cattle and in meat sheep with the same method …
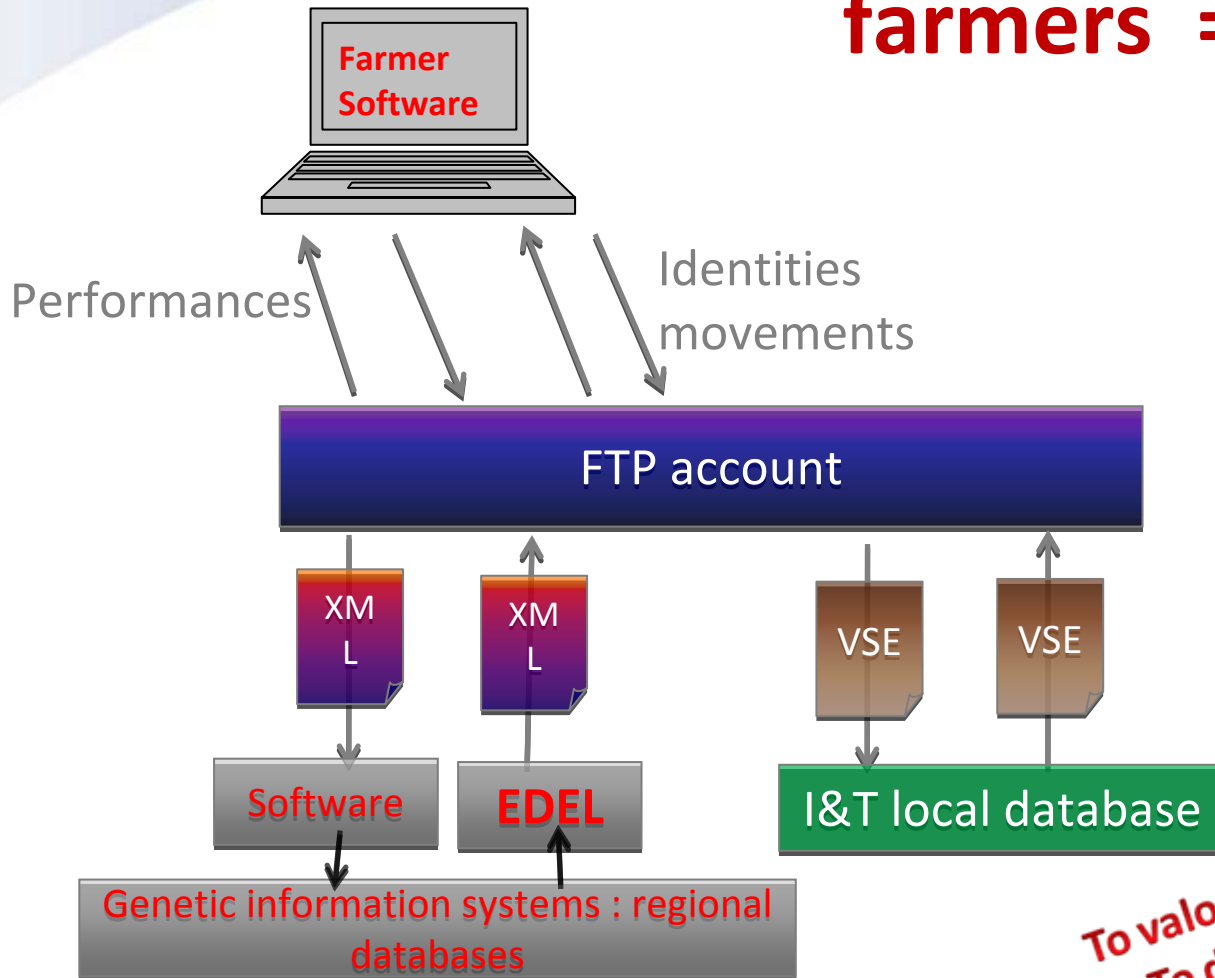
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Exchange even more with other databases

Example : Project in 2012 for the management of the small ruminant traceability

Slaughterhouses

OPCOM.

XML

XML

XML

BDNI/ SIMOC

Common part

Identities

Movements

breeders

Breeders can delegate

I&T MNIOC

Papers or electronic exchange of data

Breeders

Exchanges or the same physical entity table

To manage herds

To valorise : ex. mortality of lambs ...

OVI

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To have a common system to exchange with all farmers = EDEL

Farmer Software

Performances

Identities movements

FTP account

XML

XML

VSE

VSE

Software

EDEL

I&T local database

Genetic information systems : regional databases

For the livestock management:

Exchanges using XML standard and FTP account

Just for the data of bovine I&T , using an old standard (VSE, in ASCII format)

To valorise, to improve the collects, To develop new collects of data
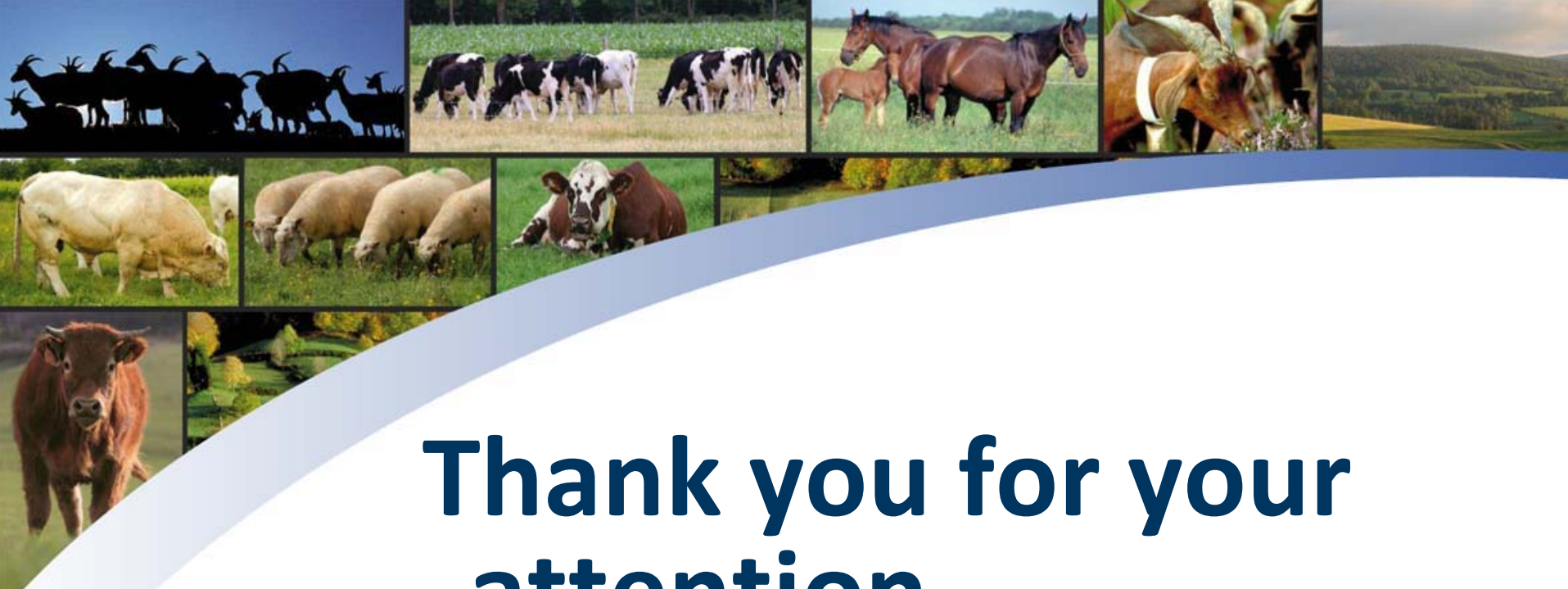
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To develop custom built services for hosting particular data

▶ **We are working about genomic evaluations**

▶ **And FGE and the French genetic organizations want to develop collection of new data**

  ▶ But all the new data are not shared between all the genetic organizations

  ▶ So French organizations need a custom built services for hosting particular data

▶ **A custom built services for hosting particular data:**

  ▶ using the same standards with the genetic information system

  ▶ validating the data with all the data of the genetic information system

  ▶ having a good management of access rights

  ▶ The challenge is to facilitate the new genetic evaluations and the management of these data depending on the agreements between the organizations

Ex. sanitary data

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Conclusion

▶ **The arrival of new technologies in computing or in genetics (like genomics) imposes some evolutions in the strategy of FGE**

▶ **French genetic organizations need to develop valorisations of all interesting data collected in other databases in order to increase the profitability**

▶ **To achieve this, FGE want:**

  ▶ to develop exchanges between databases, with the breeder's software

  ▶ to built a common genetic information system for all ruminants

  ▶ to keep collective genetic databases , but FGE need to offer a solution to all the genetic organizations for the collect of new private data

▶ **Especially for the beef cattle, FGE must have a reflexion about the management of genotypes**

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Thank you for your attention