French Report

Eric Venot (INRA)
Marie-Noëlle Fouilloux (Institut de l'Elevage)
Florence Phocas (INRA)
Laurent Griffon (Institut de l'Elevage)

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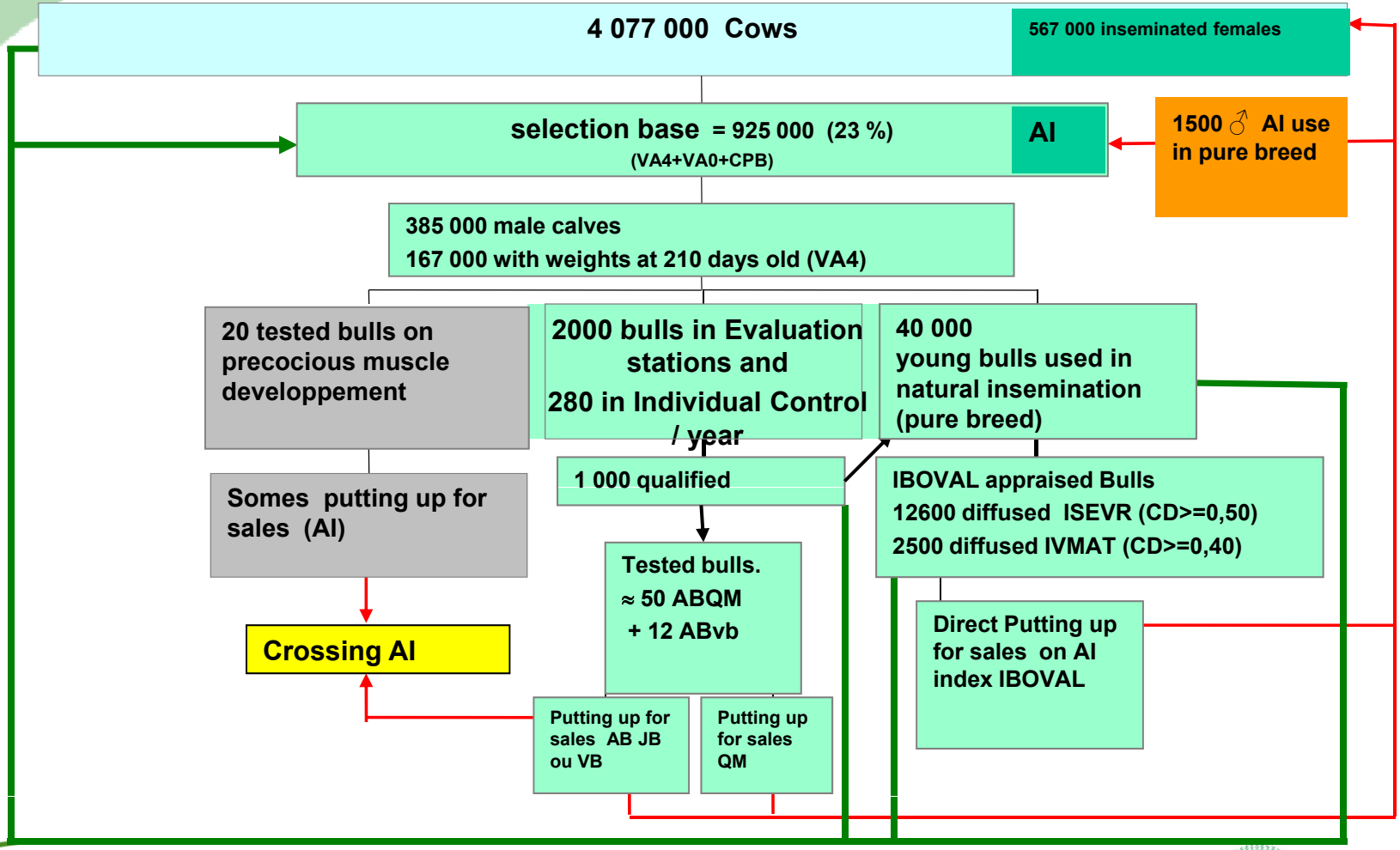
Overall view of the beef cattle program in France



IBOVAL – pre-weaning evaluations (E. Venot)

Traits and EBVs

- Calving ease (maternal effect of calving conditions : AVel) and birth conditions (direct effects of BW and calving conditions : IFNAIS)
- Weaning weight at 210d : direct effect (CRsev), maternal effect (ALait)
- Morphology : muscular development (DMsev), skeletal developement (DSsev) and Bone slimness (FOSsev)
- Total merit indices : ISEVR (production) and IVMAT (herd replacement)

What's new ?

Since 2010

- New model and genetic parameters for all traits and all breeds
- New EBVs : new DSsev (only the volume of the animal) without cannon bone circumference and new EBV FOSsev (Bone slimness, the opposite of cannon bone circumference)
- New chain of calculation : Automation of the process to product all EBVs

IBOVAL – post-weaning evaluations (MN Fouilloux)

Traits and EBVs

- Heifer growth (CRpsf): weight at 24 months,
  BLUP multitraits model with W210d, W12m, W18m and W24m
  Charolais, Maine Anjou, Blonde, Limousine and Parthenaise
- Commercial carcass traits : young bulls at slaughter
  Carcass weight and slaughter age in a composite index called ICRCjbf and carcass conformation score (CONFjbf).
  Total merit economic index = IABjbf
  BLUP multitraits model with weaning traits
  Charolais, Blonde, Maine Anjou

What's new ? Prospective

- Since 2011 : new data base NORMABEV (5 millions carcass data per year)
- More breeds involved : Limousine for heifer growth
  Salers for carcass traits
- Other beef productions considered (veal, ...)
- Heifer morphology around 2 years : Muscular Development , Skeletal Development , Functional abilities

New EBVs for the French breeders

Productive life

- Preliminary studies have been done :
  - Fertility : first AI success for heifers
  - Reproductive efficiency : number of calvings at a given age
  - Longevity for hardy breeds

Docility

- Two traits : Number of movements during calf weighing and calf behavior towards human during morphological scoring

Genomic : the GeMBAL project

- Constitution of founder populations in order to impute medium density genotypes (54K) into high density (777K) for all the 18 French breeds (beef and dairy cattle)
- Development of tools, methodology and applications for multi-breed genomic prediction : on all traits recording on farm for cattle
- Better knowledge of the structure of the bovine genome : characterization of bovine diversity and traces of selection

Genomic : tasks of the GeMBAL project