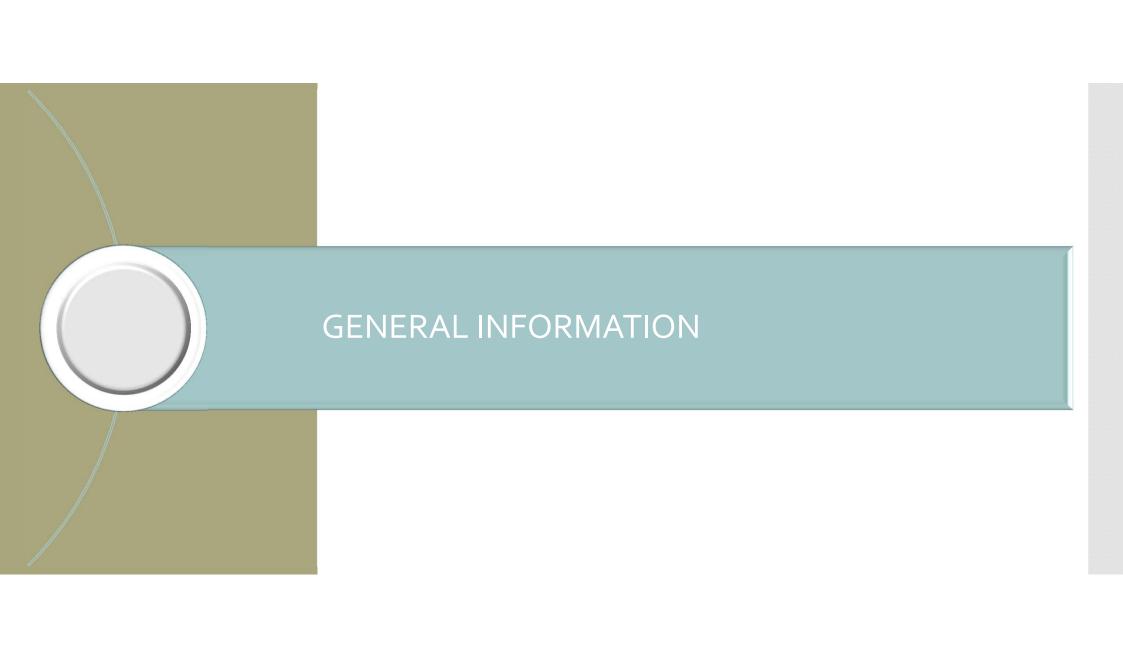


### New EU Animal Breeding Regulation

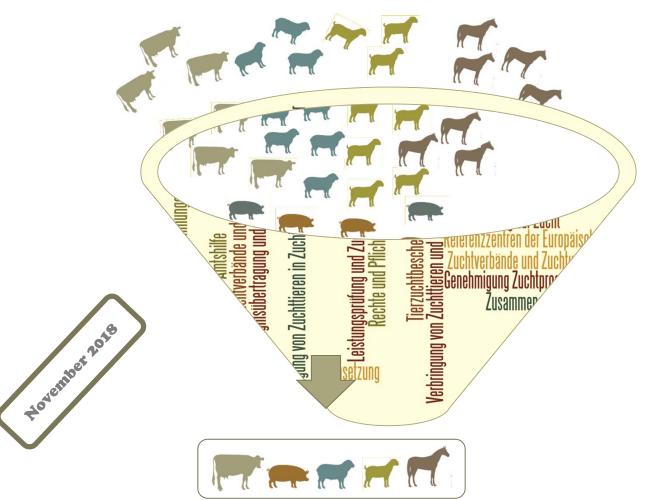
(Regulation (EU) 2016/1012)







4 species specific directives & 26 implementing acts



1 European Animal Breeding Regulation



- Recast of the European zootechnical legislation = merger of existing legislative acts + some new elements
- Creation of a uniform legal framework for trade & entry into the Union of breeding animals / germinal products
- Will apply in all 28 Member States, no national transposition
- Objective: coherent implementation in all Member States, promote free trade of breeding animals / germinal products
  - Splitting between « Recognition of breed societies / breeding operations » and « Approval of breeding programmes »
  - Extension of the geographical territory where breeding programmes are carried out
  - Rules for official controls and controls by the European Commission
  - Some derogations for endangered breeds

## Structure new ABR



- **1.** General provisions
- 2. Recognition of breed societies / breeding operations , approval of breeding programmes



- 3. Rights and obligations of breeders, breed societies / breeding operations
- 4. Entry of breeding animals in breeding books and breeding registers, acceptance for breeding



5 • Performance testing and genetic evaluation



6. European reference centres



7. Zootechnical certificates



- $\mathbf{8}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$  Entry into the Union of breeding animals and germinal products
- **9**. Competent authorities carrying out breeding programmes on purebred breeding animals
- 10. Official controls, other official activities, cooperation and enforcement by Member States
- **11.** Controls by the Commission
- 12. Delegation and implementation
- **13.** Transitional measures



Additional requiremets laid down in annexes

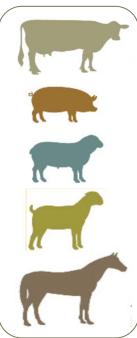


Entry of breeding animals into breeding books and their acceptance for breeding

Performance testing and genetic evaluation

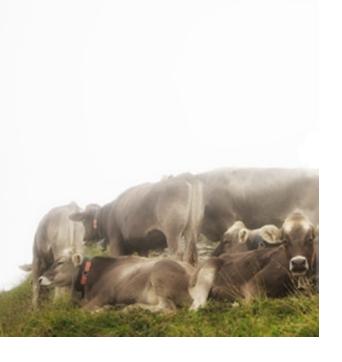
Entry into the Union of breeding animals and their germinal products

Special rules for preservation of breeds





#### Breed societies

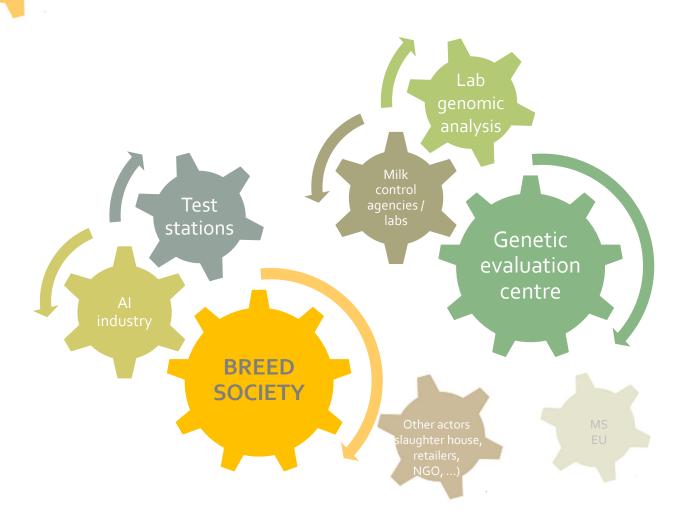


- Application for recognition as <u>breed society</u>: breeders' associations, breeding organisations, public bodies:
  - Breeders' associations:
    - No definition in the EU Animal Breeding Regulation (EU ABR)
    - association of breeders (in general with member breeders)
  - Breeding organisations:
    - No definition in EU ABR (incl. private companies) → CONDITION:
    - reeders participating in their breeding programme
    - general rules with regard to the rights of those breeders defined in annex « Recognition of breed societies » and chapter « Rights and obligations of breeders and breed societies »

#### Who is eligible?



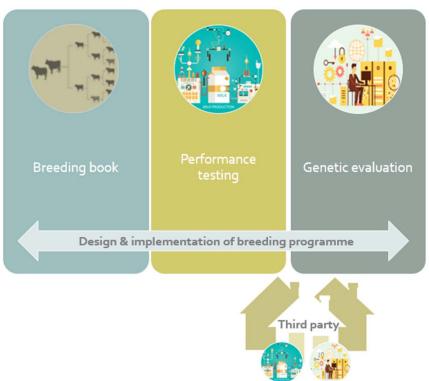




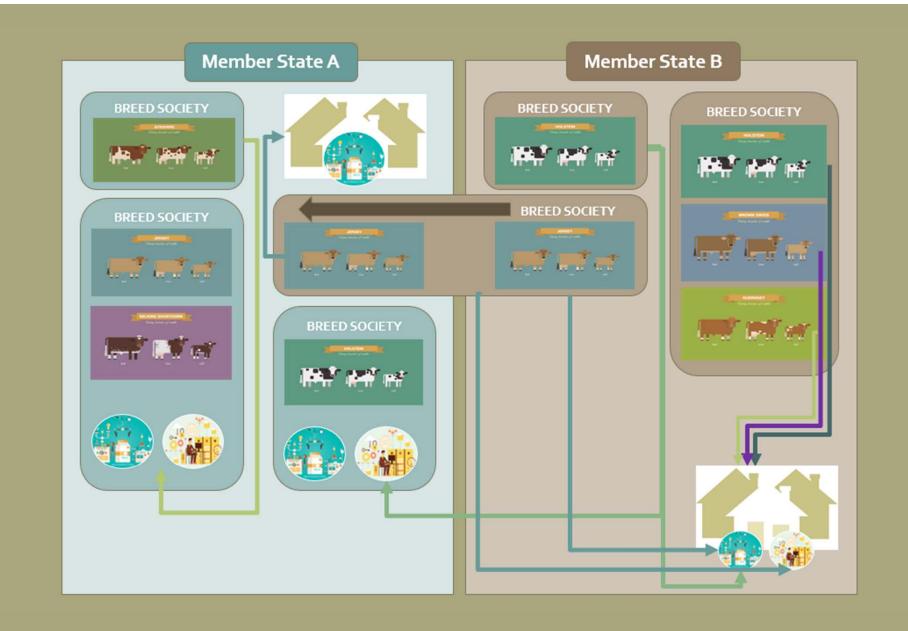
#### Breed societies



Activities of breed societies



© Condition: sufficiently large breeding population and sufficient breeders



#### Third parties



#### Breed societies:

- Carrying out themselves performance testing / genetic evaluation, or
- 2. Possibility to delegate these tasks to (a) third partie(s):
  - Breed societies remain responsible for ensuring compliance with the legal requirements for the outsourced activities or possibility of a MS to delegate this responsibility to the third party (under supervision by MS / competent authority)
  - No conflict of interests between third party and economic activities of breeders participating in the breeding programme
  - Third party must fullfil all necessary legal requirements for the activities carried out
  - Breed societies indicate the third parties to which activities are delegated to in their breeding programme (contact details, areas of activities)

## Recognition of breed societies



Who? Breeders' associations, breeding organisations, public bodies

Where? Competent authority located on the territory where the breed society has its head office

The applicant demonstrates in its application that it complies with the requirements set out in Part 1 of Annex I for its intended breeding programmes

2

Its application contains, in respect of each of those intended breeding programmes, a draft version of the breeding programme and an application for approval of at least one of those intended breeding programmes

3

The competent authority evaluates the application and recognises as breed society any applicant that complies with the legal requirements

4,

## Recognition of breed societies



Legal personality in accordance with the legislation in force in the Member State

Capacities for data management

Sufficient and qualified staff

Rules of procedure settlement of
disputes, equal
treatment, rights
and obligations of
breeders

Requirements Recognition Breed society

Adequate facilities and equipment

Sufficiently large population of breeding animals

Carrying out checks necessary for recording pedigrees





A breed society shall submit applications for approval of its breeding programmes to the competent authority which has recognised that breed society

The competent authority evaluates those breeding programmes and approves them, provided that

2

- they have one or more of the following aims: improvement of the breed, preservation of the breed, creation of a new breed, reconstruction of a breed
- they describe in detail the selection and breeding objectives
- they comply with the requirements set out in Part 2 of Annex I (Part 3 equines)

## Approval of breeding programmes



Information on the geographical area where the breeding programme is carried out

Definition objectives:
improvement,
preservation,
reconstruction,
creation of nev

Name of the breed, characteristics of the breed, including essential traits

When outsourcing activities, information on these activities, name, contact details

Requirements
Approval
Breeding programme

Selection and breeding objectives, including indications on main objectives

Rules for the division of the breeding book, criteria or procedures applied for recording animals in those sections / classes

Information on the system for performance testing, genetic evaluation (incl. genomics)

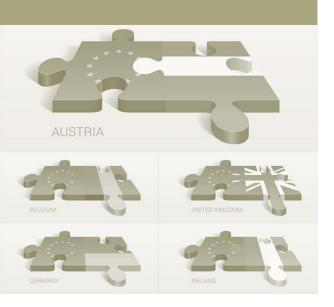
Information on the system for identifying breeding animals, for recording pedigrees

# Already recognised breed societies



#### Transitional measures:

- Operators which have already been approved or recognised under the repealed acts, shall be considered as recognised and their breeding programmes as approved in accordance with the new ABR
- Until the date of entry into application, they must ensure compliance with all the requirements of the new ABR
- Member States must ensure that those operators comply with all the rules provided for in the new ABR, in particular by carrying out risk based official controls



Where a breed society intends to carry out a breeding programme on breeding animals kept in another Member State, that breed society shall notify the competent authority which has recognised the breed society.

The competent authority which has recognised the breed society,

- a) notifies the competent authority of that other Member State at least 90 days before the intended commencement,
- b) at the request of the notified authority, provides at least 60 days before the intended commencement a copy of the breeding programme (translation on request)

The competent authority of that other Member State may, within 90 days from the date of receipt of the notification, refuse to approve the carrying out on its territory of that breeding programme (limited number of reasons for refusal)

Failure by the competent authority of that other Member State to reply within 90 days to that notification shall constitute approval

1

2

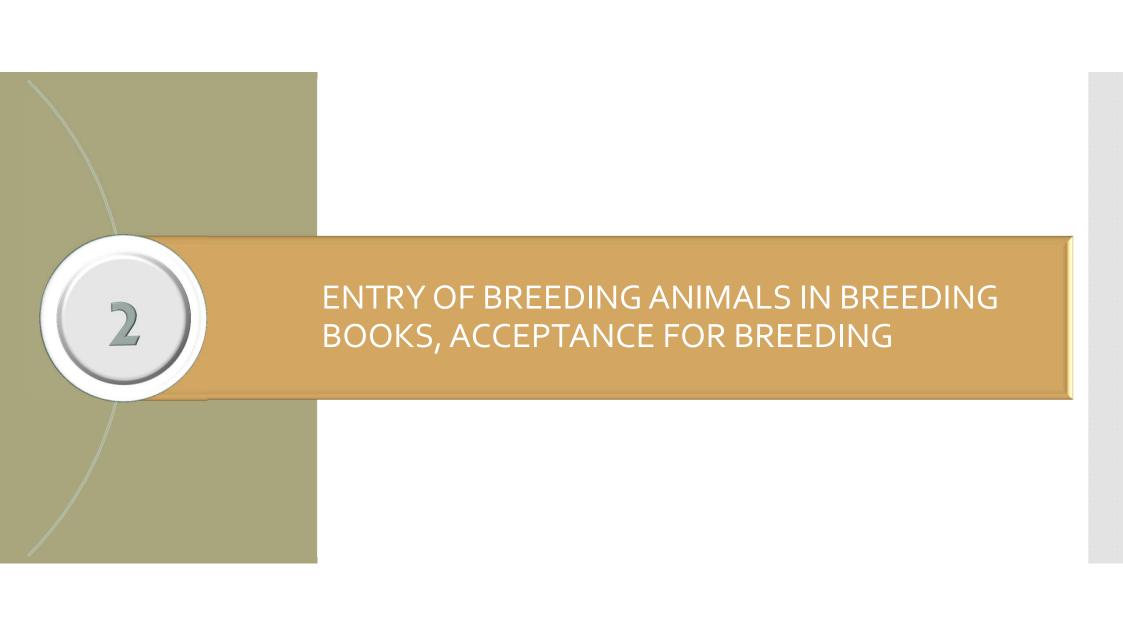
3

4

#### Reasons for refusal

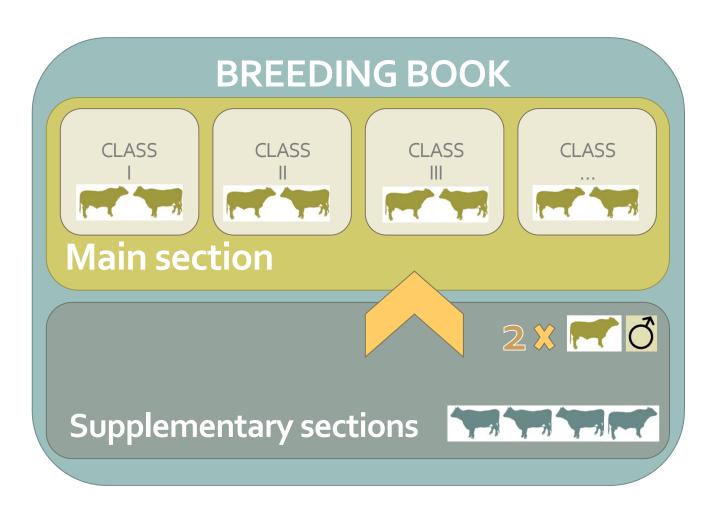


- There is a strictly limited number of reasons for refusal
- A competent authority may refuse to approve a breeding programme of a breed society that complies with the requirements, on the grounds that that breeding programme would compromise a breeding programme carried out by another breed society for the same breed as regards:
  - the essential traits of the breed characteristics or the main objectives of that breeding programme
  - the preservation of that breed or of the genetic diversity within that breed
  - where the aim of that breeding programme is the preservation of the breed, the effective implementation of that breeding programme:
    - · in the case of an endangered breed, or
    - in the case of an autochthonous breed which is not commonly found in one or more of the territories of the Union



Division of breeding books

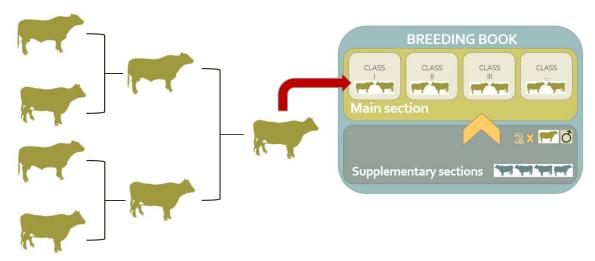




#### Main section



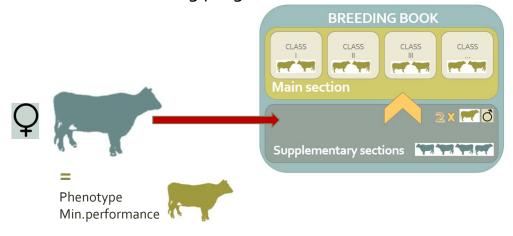
- Entry of purebred breeding animals in the main section of the breeding book
  - Condition: descending from parents and grandparents, which are entered in the main section of a breeding book of the same breed



## Supplementary sections



- Registering of animals in supplementary sections of a breeding book
  - Condition:
    - animal judged by the breed society as conform to the characteristics of the breed
    - fulfills, where applicable, at least the minimum performance requirements laid down in the breeding programme
    - Different requirements for the conformity with the breed characteristics depending on whether the animal belongs to the breed or was obtained from a cross-breeding programme mentioned in the breeding programme

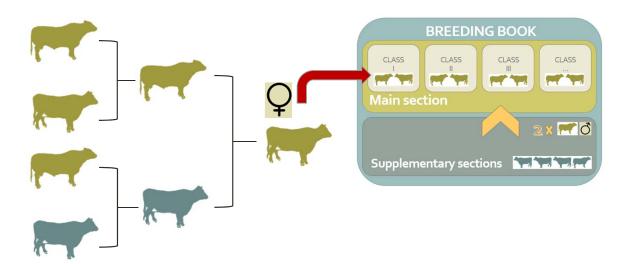


## Upgrading into the main section



## Upgrading of descendants into the main section only possible through the female line

- Condition:
  - mother and maternal grandmother recorded in a supplementary section of a breeding book of the same breed
  - father and two grandfathers entered in the main section of a breeding book of the same breed

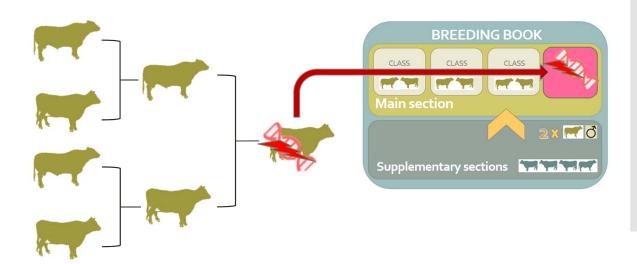


#### Genetic defects



#### Carriers of genetic defects?

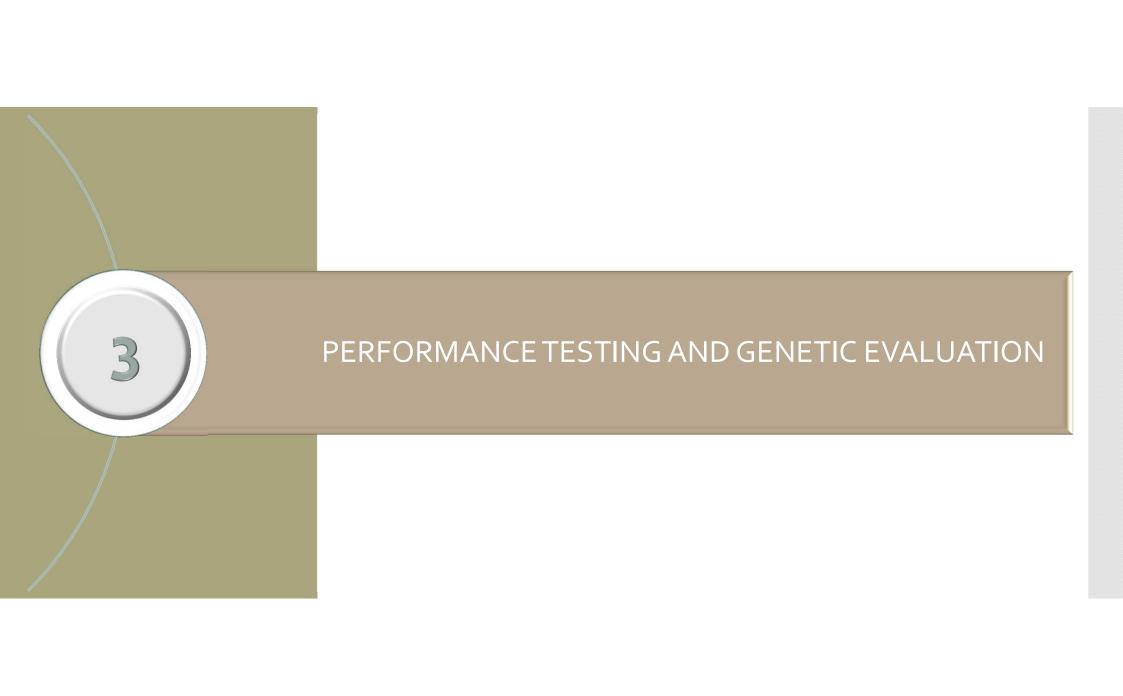
- Based on their pedigree (parents & grandparents: purebred breeding animals), automatic right for entry in the main section of the breeding book
- Within the main section, establish a special class for the entry of carriers of genetic defects, marking animals as such on the zootechnical certificate



## Acceptance for breeding



- Besides the requirements on the ascendance of animals (pedigree), the following requirements must be fulfilled in order to enter animals in the main section of a breeding book:
  - Natural service: none
  - Artificial insemination: semen of bulls which have undergone genetic evaluation
  - Embryo transfer: semen of bulls which have undergone genetic evaluation and oocytes of donor females which have undergone performance testing or genetic evaluation
- In addition, compliance with legal requirements with regard to EU/national approval of semen/embryo collection, storage centres



## Performance testing Genetic evaluation



- Laying down general principles, less details → high elasticity of the requirements (in alignement with Interbull / ICAR principles)
- Cascading principle: carrying out performance testing and genetic evaluation based on



- If additional rules required? Possibility to adjust through INTERBULL (European reference centre)
- Performance testing schemes: on-farm testing/ test station individual performance, sib, progeny, collateral testing, survey data slaughterhouses, assembly places ... other schemes in accordance with INTERBULL / ICAR principles

#### Performance testing Genetic evaluation

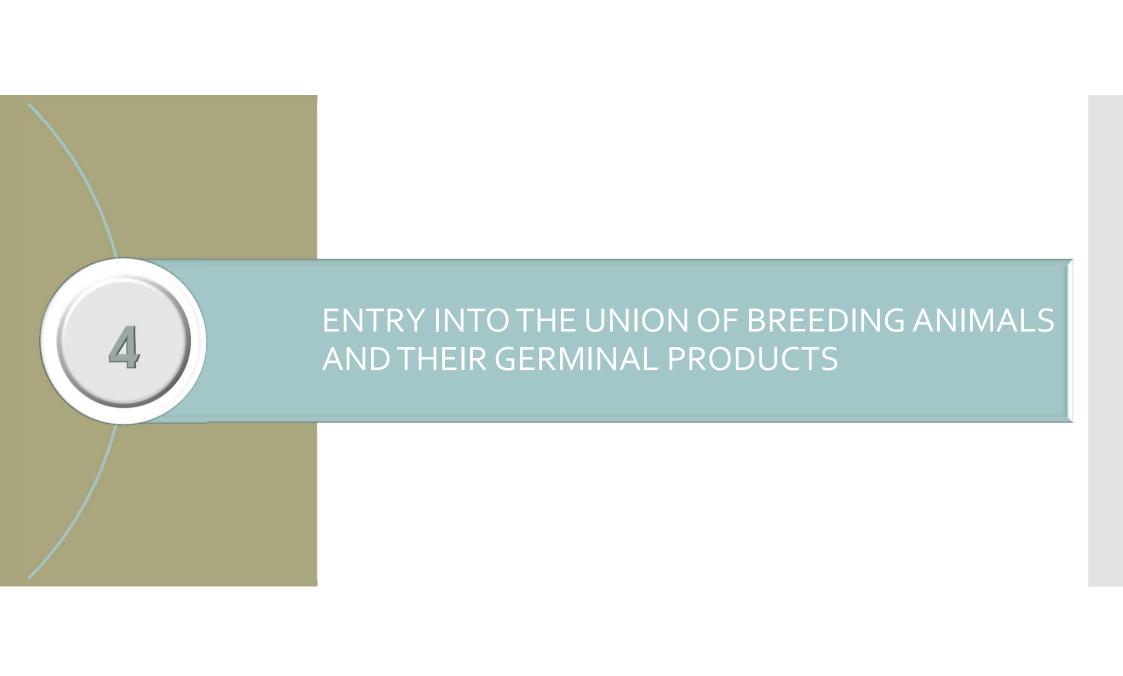


- Recorded traits (very general definition):
  - Milk production traits: milk production, milk components, other relevant traits
  - Meat production traits: meat production, other relevant traits
  - Other traits examples: body conformation, fertility, health aspects, longevity, sustainability traits ... and other relevant traits
- Information on the applied performance testing schemes, the applied test protocol, and, where relevant, the applied method for the validation of the test results, must be specified in the breeding programme
- If data are used for genetic evaluation, validation of data to ensure reliability of breeding values (unbiasedness from environmental effects, data structure, taking into account all information available)

### Performance testing Genetic evaluation



- Genetic evaluation shall only include traits in respect of which recording is carried out as specified in the breeding programme
- Estimation of breeding values based on
  - phenotypical data
  - genomic information
  - data generated by another method in accordance with INTERBULL / ICAR
  - a combination of one or more of these information
- Requirement for publishing all breeding values (expection: test bulls) including their reliabilities and the date of evaluation, indication of information on genetic defects and genetic pecularities (in relation with the breeding programme)
- Minimum requirements for reliability values for AI-bulls
  - Dairy breeds: 0,5
  - Beef breeds: 0,3



## Import from third countries



- The European Commission maintains, updates and publishes a list of breeding bodies from third countries. On that list:
  - third countries that have measures which are considered equivalent to EU ABR
  - 2 for countries without equivalent ABR measures, list of breeding bodies whose breeding programmes may be considered to comply with EU ABR requirements
  - If third countries have in place equivalent measures → the Commission adopts implementing act, recognizing that measures applied in a third country are equivalent to those required EU ABR in terms of:
    - Recognition of breed societies
    - Approval of breeding programmes
    - Entry of purebred breeding animals in breeding books
    - Acceptance of breeding animals for breeding
    - Use of germinal products of breeding animals for testing and breeding
    - Performance testing, genetic evaluation
    - Official controls

## Import from third countries



- 2 If no equivalent measures are in place (no national animal breeding law), an official service from that third country has to provide documentation demonstrating that the breeding body meets the following requirements:
  - Entry of breeding animals in breeding books
  - Acceptance of breeding animals for breeding, use of germinal products for testing (test bulls)
  - Performance testing, genetic evaluation
  - Official controls/ controls by third country
  - Internal procedures for equal treatment of breeders, no discrimination of breeding animals, germinal products based on their origin
- In addition, breeding bodies in third countries should, as a matter of reciprocity, accept breeding animals and their germinal products from the respective breed societies recognised in the Union

## Import from third countries



- When importing breeding animals and germinal products from third countries or breeding bodies listed, right of entry into the breeding book → condition
  - Breeding animals or donor animals of germinal products are entered in a breeding book of a breeding body of that third country
  - Germinal products fulfill the conditions with regard to acceptance for breeding (e.g. semen from genetically evaluated bulls)
  - Breeding animals meet the breed characteristics (as laid down in the breeding programme of the breed society)
  - Breeding body or third country is listed on the list maintained by the European Commission (equivalent breeding law or equivalent breeding programme)
  - Breeding animal or germinal product thereof is accompanied by a zootechnical certificate



## Endangered breeds

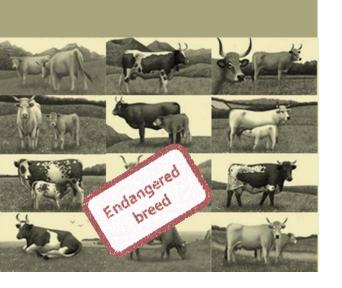


Definition of endangered breed: means a local breed, recognised by a Member State to be endangered, genetically adapted to one or more traditional production systems or environments in that Member State and where the endangered status is scientifically established by a body possessing the necessary skills and knowledge in the area of endangered breeds

# Endangered breeds

- In the case of endangered breeds, a breed society may prohibit or restrict the use of a purebred breeding animal, including the use of their germinal products, where that use would compromise the preservation of the breed or the preservation of the genetic diversity within the breed
- Member State may authorise the collection, production, processing and storage for use within their territory of germinal products at a semen/embryo collection or storage centre, only approved in accordance with the legislation of that Member State (no EU approval)
- For breeding programmes aimed at the preservation of the breed, performance testing or genetic evaluation shall only be carried out where that breeding programme requires such performance testing or genetic evaluation.

#### Endangered breeds



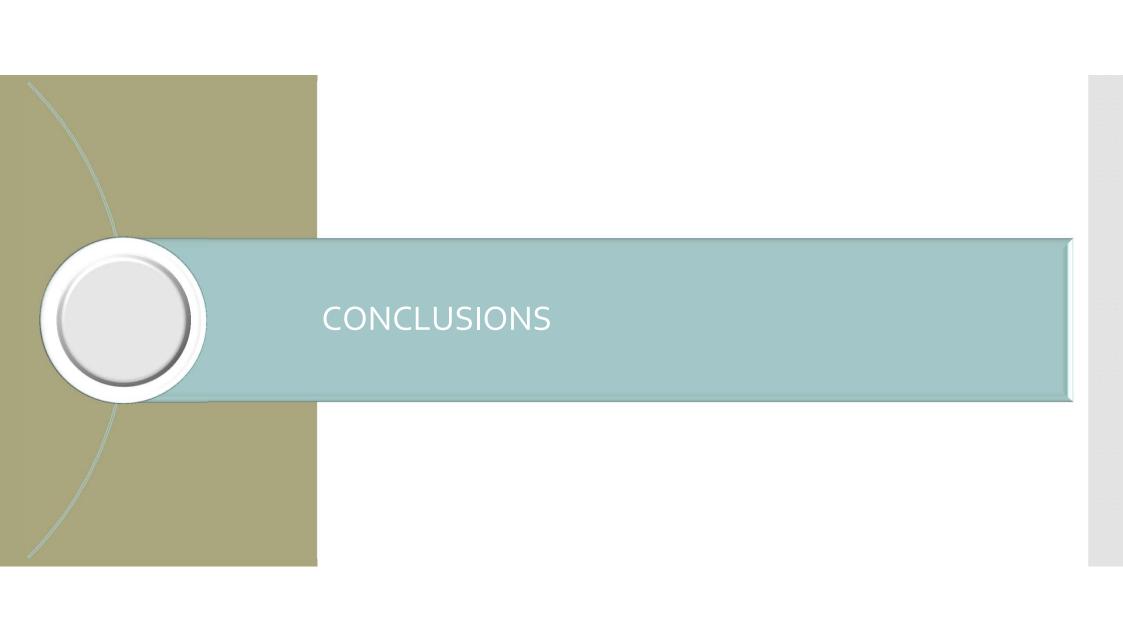
- Where a breed has disappeared or is in serious danger of disappearing, possibility given for reconstruction of breeds:
  - authorization required by the Member State / competent authoriy
  - a detailed plan for the reconstruction of the breed must be laid down in the breeding programme
  - definition of a period of re-establishment of that breeding book, appropriate for the breed concerned, which at the end of the period of reconstruction shall be controlled by the Member State
  - Member States shall include in the list of breed societies the breeds which make use of the derogation (information publically available).

# Endangered breeds

Further derogations for the upgrading rules into the main section: preliminary requirement = authorization by the Member State / competent authority → entry in the main section of the breeding book of animals descending from parents and grandparents entered or recorded in the main or supplementary sections of a breeding book of that breed

#### Conditions:

- breed society has to justify the need for making use of that derogation, in particular by demonstrating the lack of male purebred breeding animals available for breeding purposes
- Member States making use of this derogation shall make publicly available the breeds which are granted such a derogation in the list
- Other: creation of a legal base for the set up of a European reference centre for endangered breeds



#### Conclusion



- New European Animal Breeding Regulation: Fit for future? Opportunity?
- Breeding programme = increasingly complex process
   (dynamics) → improvement of efficiency, need for setting up coherent breeding programmes ... important key to success
- From a breeder's point of view: important well functioning cooperation between breeders and breed societies
- Animal breeding sector holds a key role when facing new challenges, opportunity must be taken!
- Applies 28 months after its publication: 1st of November 2018

thank you for listening!

