CODEEFABAR

the commitment to responsible breeding

Species Specific Template
Code EFABAR
POULTRY

Code EFABAR 2017

Company: _____

POULTRY

1. Impact and structure of breeding in poultry industry in EU

In poultry, the twentieth century saw a move from pure breeding to crossbreeding. This utilised hybrid vigour and allowed different selection emphasis to be applied to male and female lines. Most table eggs today come from specialised crossbred layer chickens, and poultry meat is mainly produced from crossbred meat-type broilers, turkeys and ducks. Within the segment of crossbred lines, there are a wide variety of lines that result in poultry with a variety of colours of the bird and/or the eggs or meat, various growth rates of broiler lines, from slow growing lines to fast growing lines, various characteristics for growth rate, egg production and performance qualities. Other poultry species such as geese, guinea fowl, ostriches and pigeons serve niche markets.

During at least the last four to five decades, poultry breeding companies have steadily broadened their breeding goals and have worked towards improving various traits such as health, welfare and performance characteristics simultaneously. The science which underpins that animal breeding (and associated technologies) has been used to identify avian and genetic line characteristics required for more robust selection strategies. Now, many welfare and sustainability traits, such as cardiovascular function, skeletal strength, feed efficiency, and liveability are included in breeding goals of genetic lines for crossbred poultry. Each poultry breeding company, collects a large amount of data on a variety of traits for each bird including information on welfare, health, fitness, reproduction and production efficiency. The major achievement of this is that it is now possible, and common practice, to improve at the same time traits that are antagonistic, i.e., when you improve the one it is likely it will have a negative effect on the other trait. This is often the case with production and health or welfare traits.

Nowadays, the breeding goal is made more sustainable by including both types of traits and to select all in the desirable direction so that both types of traits will improve. This principle is then applied across the whole breeding goal of 30 to 40 traits, all of which are under selection simultaneously. The desired balance is maintained within specific bio secure breeding populations to optimize avian health, to limit inbreeding, and to achieve high selection intensities. This is based on proper statistical methodology, accurate data recording infrastructure and continuous improvement of accuracy of measurement of each characteristic within the breeding population for each genetic line.

Breeding companies maintain primary breeding lines to produce commercially available crossbred lines with various traditional and modern selection methodologies. Breeding companies also maintain various experimental or control lines, to evaluate the potential of new crossbred lines and to ensure they can supply future needs, while keeping the rate of inbreeding below 1% per annum.

Europe is the main source of ownership of the world's poultry breeding stock. Continuing concentration has led to the current situation that only four groups of primary breeders account for about 90 % of the layers, broilers and turkeys produced annually on the global scale. Most breeding companies do offer several different strain crosses to satisfy a range of customer demands. These breeding companies do not only sell genetically improved animals but also provide technical service to their customers and to the customers of their customers. In the definition of their breeding goals they consider customer, policy, consumer and society developments and requirements. Alongside with the use of Code EFABAR, the poultry breeding companies are committed increasingly to transparency often publishing their breeding improvements in technical and peer reviewed articles. Thus, they are committed to the whole food supply chain.

2. Introduction

Give a brief description of the governance policy of the breeding company regarding the societal challenges as mentioned in the Code EFABAR General Document. Besides the 6 pillars of the Code EFABAR, take also Food Security into consideration.

3. Sustainability and Technologies

PART 1 SUSTAINABILITY

A. Food Safety and Public Health

Breeding Element	**Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No**	**If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address it in its breeding program in the next 3 years? If no, why?**
Reduction of use of antibiotics and lowering the antimicrobial resistance (e.g. breeding more disease resistant and robust animals)	*To be filled by the company*	*To be filled in by the company*
Meat quality (related to food safety and public health) (e.g. minimizing the spreading of zoonotic diseases through meat		
Egg quality (related to food safety and public health)		

Management element	**Yes/No**	**If yes, give a short explanation If no, explain why not**
Has the Breeding Company a biosecurity policy on its own premises (to avoid spreading zoonoses) and is it implemented?		
Has the Breeding Company an antimicrobial policy on its own premises and is it implemented?		

B. Product Quality

Breeding Element	**Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No**	**If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?**
Carcass quality		
Egg quality		
Specific products for specific consumers (if applicable for the BC)		

C. Genetic diversity

Breeding Element	**Has the BC implemented this element in its breeding program, directly or indirectly?**	**If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address**

	Yes/No	this element in its breeding program in the next 3 years? If no, why?
Genetic diversity within purebred lines		
Conservation of genes of purebred lines (in situ or ex situ)		
Preventing inbreeding (balancing rate of inbreeding with rate of genetic change)		

Management Element	Yes/No	If yes, give a short explanation If no, explain why not
Does the BC have or contribute to a gene bank for commercial breeds?		
Does the BC contribute to the conservation of genes of rare and threatened breeds?		

D. Resource Efficiency

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Longevity and/or liveability		
High Egg number (egg income/number per hen housed)		
Hatchability		
Growth rate		
Feed efficiency (related to upcoming lack of resources)		
Robustness		

Management element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company a resource efficiency policy on its own premises and is it implemented?		

E. Environment

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Reduction N and P emission (consider the reusability of these elements in the manure)		
Reduction of Green House Gas (GHG) emission		
Reduction NH3 emission		
Adaptation to different environments (climate change)		

Management element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company an environment policy on its own premises and is it implemented?		

F. Animal Health and Welfare

Breeding Element	Has the BC implemented this element in its breeding program, directly or indirectly? Yes/No	If yes, how has the BC implemented this element in its breeding program? If no, does the BC plan to address this element in its breeding program in the next 3 years? If no, why?
Monofactorial genetic defects		
Leg strength		
Osteoporosis in laying hens		
Cardiovascular capacity and function		
Cannibalism, feather pecking		
Disease resistance		
Behaviour		
Gut health and bird physiology		

Management element	Yes/No	If yes, give a short explanation If no, explain why not
Has the Breeding Company a biosecurity policy on its own premises (to avoid diseases and the spreading of diseases to other premises) and is it implemented?		
Has the Breeding Company a welfare policy on its own premises and is it implemented?		
Has the Breeding Company a specific policy on how to house its animals in each specific stage of an animal's life (to ensure proper care and complying with the animal's intrinsic needs) and is it implemented?		
Has the Breeding Company a policy in place to periodically train and update its animal care takers on how to manage and handle the animals and is it implemented?		
Has the Breeding Company a policy on how to handle its animals prior to and during transport and is it implemented?		
Has the Breeding Company measures in place that ensure and is it implemented proper zoning of different production stages on its own premises?		
Has the Breeding Company compartmentalised its breeding operations?		

PART II TECHNOLOGIES

A. Breeding technologies

Element	Is the BC using these breeding technologies in its breeding practices? Yes/no; why, why not?
Genomics	
Chick sexing	
Sibling and Genotype by Environment testing	
Challenge tests (health & welfare)	
Transgenesis	
Gene editing	

B. Reproduction Technologies

Element	Is the BC using these (reproduction) technologies in its reproduction practices? Yes/no; why, why not?
Artificial insemination (AI)	
Embryo sexing	
Controlled feeding (attention for welfare)	

4. Certification

We herewith declare that the content of this template expresses the breeding and reproduction policy of the company

Place:
Date:

Name and signature:

European Forum of Farm Animal Breeders (EFFAB)
We herewith state that this template complies with the CODE EFABAR Version 2017

Place: Brussels
Period of validity:

J. (Jan) G.B. Venneman, EFFAB, Director