ICBF
Foreign Animal Genotyping
and
Pedigree Data
(Pedigree Breeder / AI / Breed Society)

Contents

ICBF Genotyping and Pedigree Data

1. Objectives

The object of this service is to ensure either.

i.   More accurate genetic evaluations for animals in Ireland and/or
ii.   The provision of genetic/genomic evaluation services for animals outside of Ireland.

2. Commitment

As part of this service, ICBF gives a commitment that the data provided will only be used for the provision of ICBF genetic/genomic evaluation services and will not be forward to any other third party, without the prior consent of the organisation requesting the service.

3. Document Purpose

This document describes in detail the procedure for submission of non-traditional data to ICBF.
Pre-requisites

1. Data will not be accepted where a breed society has an Irish affiliation. If Irish subsidiary of breed society exists, please contact them directly, unless a prior agreement has been made to accept data from another party.
2. Data file must come directly from the foreign breed society; data file will not be accepted from breeders or any other individuals, except by prior agreement.

4. Process Overview
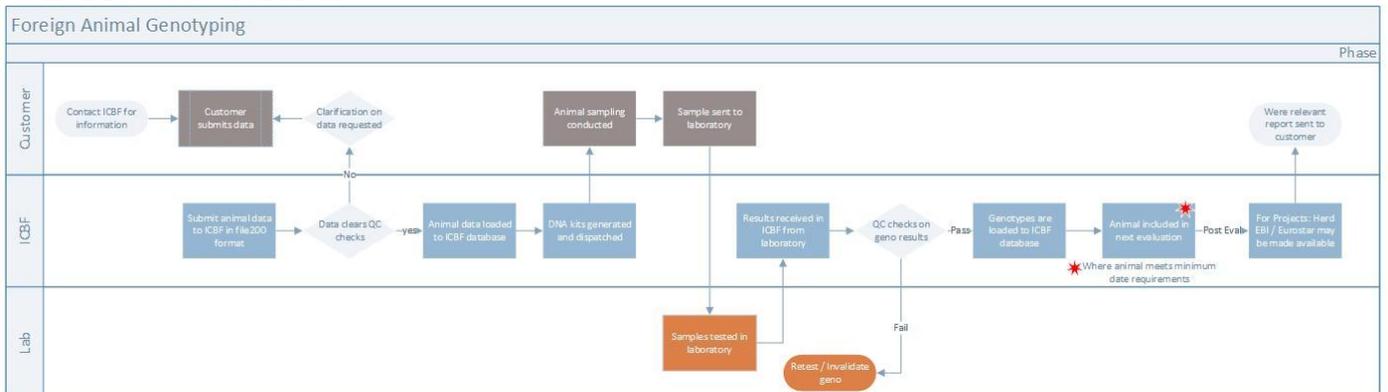
1. Submit animal data to ICBF
2. Animal data loaded to ICBF database
3. DNA kits generated and dispatched to relevant person
4. Animal sampling conducted (by relevant person) and samples forwarded to the laboratory for testing with myostatin variant testing flagged for each animal for each variant.
   a. Stock Bulls should be genotyped and myostatin variant tested first, allowing an informal decision regarding further myostatin testing of cows and heifers, where necessary with regard to calving difficulty.
5. Samples tested and results received and loaded to ICBF database
6. Animal included in next genetic evaluation, where the animal meets the minimum data requirements.

7. EuroStar / EBI reports and dashboard generated

5. Procedure to submit foreign pedigree animal data to ICBF
1. Data file must in the following format – see file format information below.
2. Data file must be submitted to dedicated mailbox (foreigndata@icbf.com)
3. All new animal details should be supplied.
4. Gaps in animal pedigree data should be supplied.
5. An initial file of relevant animals will be submitted. Updates to this file should then be provided to ICBF on a regular / relevant basis.

6. ICBF Contact / Responsibility
- ICBF Contact: Emma Dair email: foreigndata@icbf.com
- Files sent to other email addresses will not be accepted.

7. Loading Process
- ICBF will be responsible for loading animal and genomic data, based on the correct format of data submitted.
  - Controls / checks on incoming data must been cleared before data is excepted for loading to the ICBF database.

8. Queries
- All queries should be directed in the first instance to ICBF representative:
  - Emma Dair at foreigndata@icbf.com
- Email: foreigndata@icbf.com queries sent to other email addresses will not be reviewed.
- Incorrect data will be flagged by ICBF and a notification email will be sent to the relevant party / breed society.
- Please note sire data will be required for each animal to be included for a genetic evaluation.
- The sire/s of relevant animals that have not been previously genotyped, may also have to be genotyped.

9. Genomic Service
Two access points:-
1. Animal already has genotype – email foreigndata@icbf.com with genotype file and Interbull file200 pedigree file – please contact ICBF for accepted file formats.
2. Where animal/s are not genotyped – which may need to be sampled – in the first instance contact ICBF.

10. Myostatin Variant Testing
The below variants in red are relevant
1. AA Sire used on Lim cows/heifers (nt821, F94L and to a lesser extent Q204X)
2. LIM Sire used on SH cows/heifers (F94L, E226X and to a lesser extent nt821, Q204X and nt419)
3. SH Sire used on AA cows/heifers (E226X, nt821, F94L and to a lesser extent nt419)

11. Costings
Genotyping and administration for a research group of animals groups are charged at the rate of:-

- €tba per animal
- €tba per test per myostatin variant per animal (subject to discount for large groups of testing)

12. File Format – Pedigree Data

- Animal template with instructions will be provided by ICBF if the customer requires to manually enter animal details, alternativity a database extract file format can be provided.
- The file format is used by most countries around world. Based on international id's, includes relevant details such as sire, dam, dob , pedigree name etc.
- http://www.interbull.org/ib/file200

Starting Position	Field	Format	Example
1	Record type	Character 3	200
	International ID of ANIMAL		
5	Breed of animal	character 3	HOL
8	Country of first registration of animal[1]	character 3	CAN
11	Sex	character 1	M
12	ID number of animal[2]	character 12	000000A12345
	International ID of Sire of ANIMAL		
25	Breed of sire of animal	character 3	HOL
28	Country of first registration of sire of animal[1]	character 3	CAN
31	Sex	character 1	M
32	ID number of sire of animal[2]	character 12	556912367589
	International ID of Dam of ANIMAL		
45	Breed of dam of animal	character 3	HOL
48	Country of first registration of dam of animal[1]	character 3	CAN
51	Sex	character 1	F
52	ID number of dam of animal[2]	character 12	123569874521
65	Birth date of animal (YYYYMMDD)	integer 8	19870215
74	Status of animal[3]	Integer 2	10
77	Birth date of first AI daughters (YYYYMMDD)	Integer 8	19890314
86	Name of animal	character 30	Cantarello
	National ID of ANIMAL		
117	Breed of animal	character 3	HOL
120	Country	character 3	CAN
123	Sex	character 1	M
124	ID number of animal[2]	character 12	000000A12345
137	Country sending information	character 3	CAN
Character encoding: UTF-8			

1. Identification in the country of first registration, as known in the country sending this information.
2. All ID numbers: Registration numbers, right justified, leading blanks as zeros.
3. Status of bull: **00** unknown; **10** bull randomly sampled through an official AI scheme; **20** other bull.
4. Records with "20" in this field will be excluded from the international evaluation, unless type of proof is "21".

Other File Format Information
- BFR is standard international tag code for breed FR in some animals
- UUU is used as a placeholder for blanks.

13. Appendix

File Example

200	BRFGBRM111111111111	HOLNLDM00000000033	BRFGBRF000000000096	20161017	0	0	FARM	ANIMAL 1	BRFGBRM111111111111	GBR
200	BRFGBRM000000000000	HOLNLDM00000000033	HOLGBRF000000000036	20160114	0	0	HILL	ANIMAL 2	BRFGBRM000000000000	GBR
200	BRFGBRM000000000011	HOLNLDM00000000033	BRFGBRF000000000052	20000314	0	0	FARM	PED	BRFGBRM000000000011	GBR
200	HOLGBRF111111111112	BRFGBRM00000036388	HOLGBRF000000000076	19781009	0	0	PED	CALF 48	HOLGBRF111111111112	GBR
200	HOLGBRF111111111122	BRFGBRM00000055911	HOLGBRF000000001767	20020312	0	0	FARM	COW 22	HOLGBRF111111111122	GBR
200	HOLGBRF222222222211	BRFGBRM00000055923	UUUUUUUUUUUUUUUUUUUU	UUUUUUUU	0	0	VALLEY	COW 211	HOLGBRF222222222211	GBR
200	HOLGBRF222222222233	BRFGBRM00000058765	HOLGBRF000000000054	20010122	0	0	FIELD	DAISY 33	HOLGBRF222222222233	GBR
200	HOLGBRF222222222200	BRFGBRM00000060314	HOLGBRF000000000098	20051115	0	0	TREE	LEAVES 200	HOLGBRF222222222200	GBR

14. Document Revision Control

Revision Number	Release / Change Effected	Changed / Released By	Release / Change Date
1.0 Draft	Initial Release of Draft	Emma Dair	14/08/2017
1.0	Initial Release	Emma Dair	15/08/2017
1.1	Update to query / costings	Emma Dair	12/12/2019
1.2	Update to loading process	Emma Dair	10/02/2021

15. Notes / Comments

Comment Number	Comment Actioned	Changed / Released By	Release / Change Date