INTERBEEF Working Group meeting
26th November 2014

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1. Welcome & Introduction – Andrew Cromie

Andrew Cromie, in his capacity as the incumbent chairman of the Interbeef Working Group, thanked Brian Wickham (outgoing chairman) for his excellent work in the development of INTERBEEF, from its initial concept to its current position as an organisation on brink of official evaluations for 10 member countries.

Participants and apologies: Attached as appendix 1.

2. Adoption of Agenda

The agenda which was circulated at the start of the meeting was adopted.

3. Minutes of Meeting 20th May, Berlin Dublin

a) Chairperson of the Technical Committee

Joao Durr stepped down as chairman of the Technical Committee in Berlin. Andrew Cromie indicated that Eric Venot from INRA France, had agreed to replace Joao as the new chairman. Everyone wished Eric well in his new role.

Brian Wickham stated that he was present at the meeting in his role within ICAR as acting Secretary General. Brian also stated that the terms of reference for the Technical group were available on the website. Charl Hunlun also indicated he was present as an ICAR representative.

4. WG Membership

a. Robert Banks - welcome
b. Replacing - Joao Durr, Clara Diaz

Andrew Cromie stated he would like to see a clear differentiation between the objectives of the Technical Group and that of the Working group. The Technical group should be a small group providing guidance on technical issues. The Working group would be a larger group that would take decisions regarding policy and direction. Andrew indicated that the Working group would grow and evolve as participation in INTERBEEF expanded. He suggested that at some stage in the future there may be a need to formalise the structure into representative regions (similar to that which existed within Interbull). However, he did not see this as a requirement for the immediate future (next 2-3 years), as the immediate requirement was to create a forum where members and potential members could participate in INTERBEEF’s development. Brian stated that chairpersons of the Technical and Working Groups have the authority to decide who can attend the meetings in conjunction with ICAR representatives. He indicated that the Working group responsibility is to develop beef breeding in general and not to protect participants national interests.

5. Technical Committee Report – Chairperson of TC

Eric Venot reported on feedback from the Technical committee. There was a lot of positive feedback from the test run from each of the countries that participated (i.e., FRA, IRE, GBR, DEU, CHE, CZR, SWE, DNK, FIN & ESP). Only CHE had some remaining concerns which they indicated that would follow up on internally and report back. As a consequence there was a clear recommendation from the Technical group to go official for weaning weight direct
and maternal after the next data call and evaluation run. In terms of schedule plan, the following was discussed and agreed as a proposal that would be forwarded to the Interbull centre (Table 1).

Table 1. Interbeef evaluation schedule - First 2015 run

| Pedigree upload by all countries | as soon as possible to let other countries have time for validation before January 16th |
| Pedigree validation | as soon as there are animal to validate before January 23rd |
| Data call | January 30th |
| Interbeef result pre-release | February 16th |
| Interbeef official release | February 23rd |

6. Interbeef genetic evaluation
   a. Status of the results
   b. EBV publication and use in the different countries
   c. Official schedule: data call and EBV's release

Friedrich Rheinhardt stated that participating countries would need a period of time to report feedback ahead of publication of the next official run. Eric outlined that in the TC proposition, proofs would be released on the 16 February (as per Table 1) and participating countries would then have until the 23 February to raise any issues of concern, after which proofs would become official.

Eric stated that INTERBULL needed to provide checks on each run compared to previous run when sending out new proofs. Andrew Cromie indicated that he would follow this up with INTERBULL.

Eric also stated that it was a recommendation from the technical group regarding the need for a clear view on how countries will use the INTERBEEF results, now that they have been cleared as official. Andrew stated that this work would need to completed before Christmas by each country.

Eric asked how we should consider data from Finland, Denmark and Sweden for the next evaluation run (given the planned merger of these three dataset). Andrew suggested that such changes should not be made until the next test run.

Ross Evans asked about what to do with the Spanish data for the official routine run. Again, Andrew suggested that we needed another test run before we could omit this data. Brian
Wickham stated it was in the terms of reference that data submitted to INTERBEEF shall remain in the INTERBEEF database even after participating countries have left the project.

Japie van der Westhuizen asked when the next test run would be. Andrew said that he would ensure that the INTERBULL centre publish a test run schedule so that countries know well in advance regarding test evaluation schedules.

7. Workplan:
   a. Evaluation Services - Progress Report Interbull Centre.

Andrew stated that he was very pleased with the INTERBULL centre performance in producing the new test run by end September (as was agreed). Thierry Pabiou noted that INTERBULL have been very responsive in all communication. Andrew said he would communicate this back to the INTERBULL centre.

Pavel Bucek also mentioned that he had now received access to INTERBULL servers in October for calving research work.

Andrew said that actions coming out of the Beef Genomics workshop just finished needed to be factored into future work-plans.


Thierry Pabiou reported that new correlations for countries (with Ireland) have improved slightly for direct traits, now that the Irish crossbred data has been included in the test evaluations. He suggested that he was going to try Bayesian analysis in parameter estimation in DMU to see if this improved the correlations further.

Ross Evans asked about Roel Veerkamp’s suggestion on storing the information on heterosis, recombination and founder breeds in IDEA database directly. Kirsty Moore said it would be easier to go with new data being submitted to IDEA on breed fractions etc. Andrew said he would take this action back to the INTERBULL centre again to open the dialogue on this. Brian Wickham urged caution on this given the amount of work already done by Thierry and Valentina and that we should proceed on the current path of fake ancestors.

To summarise Thierry said he was confident that the Irish crossbred data would be included in the next test run.

   c. Research on development of international beef genetic evaluations for Calving traits – Zdenka Vesela.

Zdenka now has access to MIX99 on the INTERBULL server. She mentioned that the participating country variances and co-variances were needed for a test run genetic evaluation. She will be sending on surveys soon to get this information. Genetic parameter estimation was proving to be difficult for maternal traits. Eric mentioned that she should consider including FRA and CZE in 3 country analyses to help convergence. Zdenka said she would compile a report on current status for the participants.

Eric commented that calving difficulty EBV’s were critical for INTERBEEF breeder interest and that Zdenka should liaise with Thierry to see if he can help in any way.
Andrew encouraged the group to keep momentum with the work around calving evaluations, as it would be great to have another trait-set official by later in 2015.

d. Research on international beef genetic evaluations for carcass traits – Kirsty Moore.

Kirsty said there was no update on the carcass project since the last meeting and that perhaps it was best to wait until the issues with pedigrees on crossbred animals were clarified from Thierry’s work (given the crossbred nature of the carcass data available in the UK and Ireland).

There was a discussion on whether to include weaning weight as a proxy trait in carcass evaluations in order to take into account potential selection bias (and also for those countries with limited carcass data). Kirsty said she would produce a list of recommendations on what traits to look at for the next meeting. Laurent Griffon stated that there needs be a coherent direction on carcass traits at the INTERBEEF level to make a case for more data availability from France.

e. Development of international beef genetic evaluations for female fertility traits - Friedrich Reinhardt.

Friedrich acknowledged that they were slightly behind on the proposed schedule. He was waiting on a data call from INTERBULL centre and would contact Mohammed Nilforooshan next week on this. This research could commence in January 2015 if the data call was successful. Eric asked what traits would be initially considered? Friedrich said that the traits would be simple and based on birth/calving dates such as Age 1st Calving, Calving interval and Survival. Eric asked if survival analysis would be used for the survival trait. Friedrich said it would be based on a linear model.

Andrew stated that the group needed to discuss the actions from the Genomics Workshop.

One of the groups in the workshop suggested a 4 point plan for participation and collaboration at an International level.

1) Interbeef/INTERBULL would facilitate the sharing of a list of genotyped animals among participating countries. This could lead to sharing of genotypes by the countries involved if they so wished.
2) Interbeef/INTERBULL would operate a genotypes database which countries could then use to swap genotypes if they so wished. This could also lead to sharing of pedigree information on those bulls.
3) Interbeef/INTERBULL would provide an Imputation service for countries who participate at the step 2 level.
4) Interbeef/INTERBULL would provide the infrastructure for a Full international genetic/genomic evaluation service for participating countries. Here countries would pool resources around pedigree, phenotypic and genotypic information.

There was good agreement re: the outcomes of the workshop. Andrew and Eric indicated that they would be following up on these with the INTERBULL centre and would provide an update to the relevant groups at the next Interbeef meeting.

8. Finances

a. Fees for 2014
b. Fees for 2015, including different categories of service users.
Andrew raised the issue of the work needed for 2015 by the research partners and INTERBULL centre. He stated that service income would be driven by more customers, breeds and traits and there was a need to encourage more members to join. Brian stated that INTERBEEF was operating on breakeven or at a loss most years, with shortfalls then supported by ICAR. This could not continue in the longer term. Andrew and Eric agreed to have a discussion with INTERBULL centre regarding relevant fees for the year ahead.

Brian Wickham proposed that the Working Group would leave the specific discussion regarding membership fees until there was a new director at the INTERBULL centre and General Secretary at ICAR. The discussion was deferred to the next meeting.

9. Interbeef Priorities
   a. New breeds – Simmental
   b. New trait sets – calving, carcass, female fertility

Brian Wickham stated that Simmental was the breed most likely to be serviced next by INTERBEEF. He stated that half of European Simmental cattle were in countries that were already existing INTERBEEF service users. The remainder included Hungary, Austria, UK (Breedplan evaluated) and Slovenia. Thomas Schmidt stated that based on previous meetings that Simmental should be the next breed followed by Angus. Brian Wickham stated that communication with World Simmental had been going for almost two years but that as of yet there was no contact with the World Angus federation. He felt that it was best to work with the Simmental first. Pavel Bucek stated that there was a need to distinguish the beef Simmental from the Flekviev.

Andrew suggested a data call 1 month before the next INTERBEEF meeting in Krakow in June 2015 meeting and that the INTERBEEF working group should invite people involved in the Simmental breed to come to the Krakow meeting. On the advice of Brian Wickham, he also agreed to make contact with World Simmental to update them on INTERBEEF’s development plans.

10. Additional items

   **GenoEX and Genotype Lists.** Andrew raised the issue of the list of genotyped animals for sharing between participants. Thierry Pabiou mentioned that ICBF put an excel file list on their website of all genotyped animals. Andrew replied that excel files were not particularly useful when moving forward, and that a more interactive solution was needed. Brian Wickham indicated that this needed to be built into the IDEA database in the long term. Andrew indicated that he was on the GENOEX committee at INTERBULL and would raise the issue to that forum. Brian stated that ICAR were fully behind genotype exchange or something equivalent to the Brown Swiss international cooperation model. It was recommended that France and Ireland should drive this agenda due to the numbers of genotypes available in both those countries.

   There was discussion on a potential imputation service but it was agreed that the first requirement was to have an operating GENOEX database for members.

   **Legislation lobbying:** Concern has been expressed at the workshop regarding impending changes to breeding legislation within the EU. Brian Wickham indicated that he would follow up this up with the commission.

   **Knowledge transfer:** Andrew said that the slides, notes, questionnaires etc from the Genomics meeting and the INTERBEEF workshop would be put onto the INTERBEEF
websites within a few days. Regarding their questionnaire, Eric indicated that people would be given two weeks to update their questionnaire, before he would re-post his presentation.

**International collaboration.** Thierry Pabiou asked if the relationship with Breed-plan was starting to evolve and if there was any discussion on the potential of this relationship yet. Kirsty mentioned that UK Charolais breeders had been told that if they requested their data from Breedplan that they would have access to it. Brian confirmed that as far as he was aware there was no issue if the breed associations requested the data. Andrew Cromie said that INTERBEEF need to be mindful of the need for co-existence between Breedplan, the North American consortia and Interbeef. Alex McDonald is new chief executive of Breedplan/ABRI and that initial discussions regarding future collaboration were positive.

A question was asked about guidelines but Brian stated that the group was not prepared enough to discuss guidelines. Laurent Griffon said that Gerben de Jong recently updated the guidelines for morphological traits.

**Discussion on next meeting.** Thomas Schmidt asked if there was a need for a meeting in late 2015/early 2016? He proposed Austria as the venue for this. It was agreed to potentially go for a meeting in early 2016. Brian mentioned that the ICAR board met last week and that the priorities for INTERBEEF discussed there were for more breeds and genomics collaboration.

### Appendix 1 – List of Meeting Participants

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