



2012 INTERBULL MEETING

Cork, Ireland

May 28 to June 1, 2012

EXECUTIVE SUMMARY

A total of 174 representatives from 35 countries gathered at the Rochestown Park Hotel in Cork, Ireland, for the Interbull annual meeting in connection with the ICAR 2012 Conference. The proposal in 2012 was to have a program fully integrated with the ICAR conference and therefore it took a different format from previous years: the business meetings were shorter and the Open Meeting was only one day, but two additional sessions were organized jointly with ICAR/Interbeef. The overall experience was considered very positive by the Steering Committee (SC), with the only reservation being that longer business meetings would be desirable to stimulate more interaction with and among Interbull customers and collaborators. Several important issues were debated and key decisions were made. This executive summary aims to inform the Interbull community of these developments.

Before we go on, however, **we would like to express our sincere gratitude to the Irish organizers, in particular the Irish Cattle Breeding Federation (ICBF), for a perfect organization and for the extremely friendly environment we all enjoyed very much!**

INTERNATIONAL GENOMIC EVALUATIONS OF YOUNG BULLS (R-GMACE)

- Working group: Jette Jakobsen, Pete Sullivan, Paul Van Raden, Gerben de Jong, Zengting Liu
- Planned test run in September 2012
- Most questions from the Verona workshop were resolved, remaining issues are being addressed by working group
- Interbull Centre will contact participating countries early August to confirm test run
- Participating countries need to validate national GEBVs
 - Same rules as for conventional MACE validation will apply for participation in R-GMACE, i.e. All traits included in MACE, with the exception of conformation, in which the mandatory traits are stature, udder support and if 10 years of data is available, body condition score and locomotion
 - Alternatively, validate milk, fat and protein yields, somatic cell score, direct longevity, stature and cow conception rate (CC1) in July 16, 2012, and the other traits in October. Traits that have been validated during the past two years do not have to be submitted for validation again
- Decision timeline
 - September: R-GMACE test run will start 2 weeks after normal test run
 - October/November 2012: ITC + participating countries evaluate test run results
 - December 2012: Decision by SC
 - January 2013: 2nd test run
 - April 2013: 1st routine run (goal)

VALIDATION OF NATIONAL GEBVS

- GEBV validation results for non-production traits were analyzed by the ITC and no concerns were raised
- New rule:
 - Validation should only be noted as failed if regression coefficients are significantly lower than the expected value (=over evaluation of young bulls)

MENDELIAN SAMPLING VALIDATION

- The latest results of the joint project between MTT, NAV and Interbull Centre about the MS validation methodology were presented during the Open meeting
- The next steps in the project are to:
 - Examine how the methodology behaves with low heritability traits
 - Study how sensitive the method is to detect genomic pre-selection
 - Apply reviewed method to the data sets used to test MS validation in the past
 - The Interbull Centre will investigate if variances of national EBVs generated by the verify program and/or REML estimates of sire variances can provide auxiliary information to detect unexpected MS trends

NEW RULE FOR MACE RESULTS DISTRIBUTIONS

- Currently, only MACE evaluations from bulls where the country of first proof has sent data are distributed
- Decision:
 - MACE evaluations should be distributed either if country of 1st evaluation sends data for a given bull-trait combination OR if at least one other country, with 2nd crop evaluations for a given bull-trait combination based on at least 150 daughters in 50 herds sends data.

OVERALL CONFORMATION TRAITS

- Interbull plans a separate test run following the traditional test run in September 2012 for estimation of Overall conformation from linear type traits and composite traits based on the method proposed by Miglior et al. (2007).
 - Countries that submit overall conformation EBVs for MACE that are different from the ones published nationally will be requested to send the latter for the test run. Further instructions will be sent to all national evaluation centers in due time before the September 2012 test run.

CONVERSION EQUATIONS

- A survey on conversion equations was conducted during the Spring 2012 with the aim to investigate the size of the problem of converting proofs on non-published scales. The result of the survey indicated that the problem is minor and it was decided to include a code in the parameter file indicating if the country-breed-trait combination submitted to Interbull is on the published scale. The retained information will be included in the file with conversion equations sent back to countries. Further instructions will be sent to all national evaluation centers in due time before the September test run.

BUDGETS & FINANCES

- A significant negative balance shown in the 2011 financial report caused concern among customers and collaborators
 - Negative results were already expected in Stavanger, and they were the basis for readjusting the service fees in 2012
 - Additionally, the Interbull Centre is making a series of investments to cope with the new scale of services as well as the development of new services related to genomics

- 2011 also had a lower income from SLU grants and due to the delay on the Interbeef agreement, as well as higher costs for personnel, partly due to hiring a new data base administrator
- Finances are in balance for 2012 and 2013, but the 2013 budget may change depending on potential new services to be provided

INTERNATIONAL REPOSITORY OF GENOTYPES

- Following the demands from previous meetings options for housing of genotype data was evaluated by the Interbull Centre:
 - In house development (GenoSwap)
 - Commercial software (BC|SNPmax platform)
 - Use of an available system from collaborators (e.g. IGenoP)
- Given that the investment is significant, the SC wants to clearly define the potential demands and then make a decision. To achieve this aim a questionnaire will be send out soon to potential customers of the service.
- This is a proposal that might lose its appeal over time and therefore it will be examined with urgency by the SC

SC WORKING GROUPS

- Interbull key documentation needs to be reviewed and the SC has a number of working groups to carry out the task
 - Code of Practice
 - Publication rules
 - Data access
 - Interbull Guidelines
- Interbull Terms of Reference will also be reviewed as part of the strategic planning of the SC

OTHER ISSUES

- The ITC has created a working group to evaluate the post-processing of genetic correlations used in MACE
- The Interbull Centre has presented the latest developments on the Interbull Data Exchange Area (IDEA), which include
 - A new version of the pedigree module to be tested during the Summer and implemented into service after the August 2012 run with improved performance and functionalities
 - GenoList: a module for exchange of genotyped animal lists, which is expected to be put into production before the end of 2012
 - AnimInfo: a simple proposal to handle additional animal information, which is also planned to be released before the end of 2012
- Other important issues reported and discussed in Cork can be found in the 2012 Interbull Centre Report at http://www.interbull.org/index.php?option=com_content&view=article&id=28&Itemid=62