



# Executive Summary

---

October 2016

In October 2016 the joint ICAR / Interbull Meeting was for the first time ever held in South America. More than 300 participants attended this congress in Puerto Varas, Chile, from which about 150 were welcomed by the Interbull Chairman Reinhard Reents for the 2016 Interbull Meeting. In addition to the Interbull Open Meeting and Business Meetings on 24 and 25 October, the Interbull Technical Committee and Steering Committee held meetings on 23, 24 and 26 October. A summary of the relevant information and Steering Committee decisions from the meetings in Puerto Varas is presented in this document.

The **2015-2016 Interbull Centre Activity Report** was presented, covering organisational structure, personnel, service and operations, research and development and work plans in relation to Interbull, Interbeef and GenoEx. Toine Roozen, Interbull Centre Director since September 2015, also presented the **Financial Report**. The financial situation has improved again in 2015, and is expected to improve further in 2016, justifying a deficit in the budget for 2017. A summary of the Interbull **Strategic Plan 2016-2018** was also presented.

These reports are available at [www.interbull.org/ib/itbcreports](http://www.interbull.org/ib/itbcreports), while presentations will be available online for the Business Meeting ([www.interbull.org/ib/2016\\_bm\\_presentations](http://www.interbull.org/ib/2016_bm_presentations)) Open Meeting ([www.interbull.org/ib/puerto\\_varas\\_presentations](http://www.interbull.org/ib/puerto_varas_presentations)) and joint ICAR-Interbull Session ([www.interbull.org/ib/2016\\_icar\\_technical\\_session](http://www.interbull.org/ib/2016_icar_technical_session)).

### Interbull Governance

#### **Steering Committee membership**

The Business Meeting unanimously supported a new term for **Enrico Santus**, who represents the countries Italy, Spain and Portugal on the Interbull Steering Committee. Enrico has always very actively supported the activities of the Non-Holstein breeds and one example of this is the establishment of InterGenomics, applied to the Brown Swiss breed.

#### **Interbull-ICAR Agreements**

In the Interbull-ICAR Operations Task Force the relationship and agreements between ICAR, Service-ICAR, Interbull, Interbull Centre (SLU) and the Interbull Service Users have been addressed. New agreements are proposed by ICAR; if these have little influence on the current relationships with the Interbull customers and organisational structure, this process may be completed by June 2017. If however this would result in significant changes in the current relationships and organisational structure, this will be a main topic at the Interbull Meeting in August 2017.

### New Services

#### **Launch of two new DNA-based Services**

Two new DNA-based services were presented and discussed in Chile. The main purpose of the **Parentage SNP Exchange ("GenoEx-PSE")** is to provide a service for exchanging standardised sets of SNP between the Interbull Centre and authorised GenoEx-PSE Service

Users for genotyped animals to facilitate parentage analysis activities. Authorised GenoEx-PSE Service Users will be required to achieve **Accreditation of DNA Data Interpretation Centres** for the appropriate level of parentage analysis service it wishes to provide, which, for the immediate future, includes either (a) only SNP-based parentage verification, or (b) SNP-based parentage verification and discovery.

GenoEx-PSE will be launched on the basis of a 3-party agreement between Service-ICAR, Interbull Centre/SLU and the Service User. In order to address concerns that were raised, a review is underway to possibly change this in due course to a 2-party agreement. Further details are available at [www.interbull.org/ib/genoex\\_pse](http://www.interbull.org/ib/genoex_pse).

### **InterGenomics for Holstein Populations**

A number of countries have expressed interest in a service for **genotype pooling and genomic evaluation for Holstein populations**, similar to the InterGenomics evaluations of Brown Swiss populations. If you are interested or like more information, please contact Marija Klopčič ([Marija.Klopacic@bf.uni-lj.si](mailto:Marija.Klopacic@bf.uni-lj.si)) from Slovenia, who is leading this initiative.

### **Collaboration with WHFF for international exchange of information on genetic traits**

The **World Holstein Friesian Federation (WHFF)** harmonised the codes and nomenclature for genetic traits to support its recommendation that genetic traits be reported to breed Herdbook official documents and be made available for data exchange. Following a request from WHFF to assist with the **international exchange of information on these genetic traits**, the possibility for Interbull Service Users to upload information on genetic traits for Holstein bulls will be introduced in the January 2017 test run. This information will be distributed three times per year to Interbull Service Users – as part of the routine runs.

The Interbull Centre is receptive to requests for similar activities for other breeds, as long as the coding and nomenclature have been harmonised (at least) within breeds.

### **Updates to Current Services**

#### **Mendelian Sampling Variance Test**

The **Mendelian Sampling Variance Test** will be mandatory for all countries from the September 2017 test run for production traits, with an aspiration to introduce it for other usual validation traits in January 2018. In the first two years after the introduction of the MS validation test, the MS test results alone shall not be used to reject any data. It is expected that the MS validation test will lead to the improvement of national genetic evaluation models and an increased understanding of the effect of genomic selection on estimation of conventional breeding values.

#### **GMACE**

- A **modified GMACE model** will be implemented in the GMACE test run January 2017. This modified GMACE will correct an inconsistency in the standard deviation of GMACE GEBVs and calculation of reliability values in the current GMACE by accounting for different heritability values across countries when calculating residual correlations between country pairs.
- Instead of uploading the **Interbull 733 and 734 files** in flat file format, from the January 2017 GMACE test run, these two files will need to be uploaded via the AnimInfo module of the IDEA database.

#### **Brown Swiss Conformation Traits**

The September 2016 test run included 11 new conformation traits for Brown Swiss. The

Interbull Technical Committee (ITC) has discussed the results of the September test run and concluded that: 1) The results do not deviate significantly from other "breeds / traits", and 2) "Pin width" and "Rump width" can be seen as the "same" traits. The ITC therefore proposes the inclusion of these traits, with the exception of "Pin width", effective from the December 2016 routine run. This has been endorsed by the Steering Committee.

### **Improvements to international data and identification exchange**

Additional proposals from Interbull Users for improvements of Interbull's "IDEA" database to facilitate international data exchange and a reduction in duplication of animal identification were received and discussed during the Business Meeting. A small task force involving ICAR, Interbull Centre and several Interbull Service Users has been created to evaluate and implement these proposals.

### **2017 Interbull Technical Workshop**

The 2017 Interbull Technical Workshop, aimed at technical staff at Interbull Service Users and researchers in the Interbull community, will be held in the City Hotel in **Ljubljana, Slovenia, on 6 and 7 February 2017**, addressing the following themes:

- 1) Adapt MACE to genomic selection
  - Keep validation tests up to date
  - Single-step evaluations
- 2) International SNP model
- 3) R&D Network supporting Interbull services.

Preparations for the workshop are ongoing. The latest details will be made available on: [www.interbull.org/ib/2017\\_technical\\_workshop](http://www.interbull.org/ib/2017_technical_workshop).

### **Interbull Annual Meetings**

The next Interbull Meeting will be held in August **2017** in **Tallinn, Estonia** in conjunction with the 67<sup>th</sup> annual meeting of **EAAP**. The Interbull Business and Open Meetings are scheduled on Friday 25 - Sunday 27 August, followed on Monday 28 August by joint meetings with the EAAP cattle commission as well as the EAAP genetics commission ([www.eaap2017.org](http://www.eaap2017.org)).

In **2018** there will be a unique setup when the Interbull Meeting will be held in conjunction with **ICAR** and the World Congress on Genetics Applied to Livestock Production (**WCGALP**) in **Auckland, New Zealand** (<http://wcalp.com/wcalp18>). The Interbull Business and Open Meetings are scheduled on Saturday 10 and Sunday 11 February, followed on Monday 12 and possibly Tuesday 13 February 2018 by joint meetings with the WCGALP commissions on application of state of the art statistical methods in cattle breeding that Interbull and its network then puts into practice.

The Interbull Meetings will be preceded by the ICAR Meetings and this gives an excellent setup to link the standardisation of phenotypic data, which is the core business of ICAR, with its use in research and in genetic and genomic evaluation through the ICAR subcommittee Interbull.

In June **2019** the Interbull Meeting will be in conjunction with the American Dairy Science Association (**ADSA**) in **Cincinnati, Ohio, USA** ([www.adsa.org/Meetings/ADSAMeetings.aspx](http://www.adsa.org/Meetings/ADSAMeetings.aspx)).



The new ICAR logo was launched at the ICAR meeting in Puerto Varas.