

# ITC – Puerto Varas, Chile 23<sup>rd</sup> October 9.00-16.00 26<sup>th</sup> October 8.00-11.00



### 11 new conformation traits for BSW

#### **BSW CONFORMATION PILOT RUN**

#### Summary of submitted traits for BSW conformation pilot run:

| Name of Trait     | Trait Code | Participating Countries |     |     |     |     |     |     |     |     |
|-------------------|------------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                   |            | CAN                     | CHE | FRA | ITA | NLD | USA | DEA | SVN | GBR |
| Overall Frame     | ofr        | Χ                       | X   | NP  | X   | NP  | Χ   | Χ   | Х   | NP  |
| Top Line          | tpl        | Χ                       | X   | NP  | X   | NP  | X   | Χ   | X   | NP  |
| Overall Rump      | oru        | Χ                       | X   | NP  | X   | NP  | Χ   | Χ   | X   | NP  |
| Rump Length       | rle        |                         | X   | NP  | Χ   | NP  | Χ   | Χ   | X   | NP  |
| Pin Width         | pwi        | Χ                       |     | NP  | X   | NP  | Χ   | Χ   | X   | NP  |
| Thurl Position    | thp        | Χ                       | X   | NP  | X   | NP  | Χ   | Χ   | X   | NP  |
| Hock Quality      | hoq        | X                       | X   | NP  | X   | NP  | X   | Χ   | X   | NP  |
| Fore Udder Length | ful        |                         | X   | NP  | X   | NP  | X   | Χ   | Х   | NP  |
| Udder Balance     | udb        |                         | X   | NP  | X   | NP  | X   | Χ   | X   | NP  |
| Teat Direction    | tdi        |                         | Χ   | NP  | X   | NP  | X   | Χ   | Х   | NP  |
| Teat Thickness    | tth        |                         | Χ   | NP  | Х   | NP  | X   | X   | X   | NP  |

NP: Not Participating

X: Initially submitted but later on rejected due to law raw correlations with other countries

-- Not submitted



### 11 new conformation traits for BSW

- ITC has discussed the results of the September test run - conclusions:
  - The results do not deviate significantly from other "breeds / traits", and ITC support to go for the December routine run.
  - Suggest that pin width and rump width is seen as the "same" traits



#### **MS-Trend Validation**

Status based on pilot run in 2014 – too many failures in the test

Action taken to look at:

- Inbreeding no clear pattern
- Reliability (input for the test) no clear pattern based on available information
- Heterogeneous variance patterns can be seen
- 4 countries with deviating results asked to give response/explanations which was used as basis for recommendation from working group



#### **MS-Trend Validation**

#### WG and ITC recommendation:

- ■The MS validation test to be obligatory for production traits from the September test-run 2017 in all countries, and a strong wish to get it for remaining normal validation traits January 2018
- In the first two years, the results of the MS validation alone shall not be used to reject any data.
- The expectation is that:
  - Regular use the MS validation test will increase the awareness (about the reasons of failure and about anomalies) at the national level, and gradually lead to the modification of the national genetic evaluation model.
  - Learning about effect from genomic selection



### GMACE Reliabilities and STD of GEBV

Observed that the GMACE reliabilities and the variances of GMACE GEBVs are inflated especially for traits like mastitis (mastitis and SCC used) and for any other trait with heritability that varies widely among countries



#### **GMACE** Reliabilities and STD of GEBV

#### Improvements GMACE results:

■Take differences in h² into account

#### **Effect**

Major effect on bulls having genomic information from more countries within consortia (r<sup>2</sup><sub>IA</sub> and SD of GEBVs go down)

More details in presentation by Pete Sulivan at the open meeting



## GMACE Reliabilities and std of GEBV (Pete Sulivan)

#### ITC recommendation:

Implement the improved GMACE method in January 2017 test run and April 2017 routine run

### SC will take final decision at the Wednesday SC meeting



### GEBV reliability calculation method (new chairman Zengting Liu)

 Goal of the group provide countries standardized and simple methods/software to calculate GEBV reliability.

#### Steps

- Members of WG describe national GEBV reliability calculation method
- Test available reliability software (from Luke, Finland) with data from several countries to investigate its performance and decide in a next step, how it can be modified to fit situations that can be encountered in the different countries



#### Discussion

- Status report on Robust MACE (ITBC) looks promising
  - Next step focus validating that robust MACE do better prediction than MACE
  - Effect on small population
  - Effect in birth years with genomic selection

#### More details in presentation by Haifa Benhajali at the open meeting