INTRODUCTION

This GMACE run includes GEBV data from the following countries:
CAN DEU DFS FRA ITA NLD POL GBR BEL AUS

Changes in national procedures

Changes in the national genetic/genomic evaluation of production traits are as follows:

CHE	Breeding association for Holstein (mainly red&white) and Simmental revised their breed code assignment for Holstein X Simmental crossbreds.
GBR	Base change
NZL	Changed in herd/dtr numbers due to parentage verification

INTERBULL CHANGES COMPARED TO THE MARCH ROUTINE RUN

No changes in Interbull procedures

SCIENTIFIC LITERATURE

The GMACE procedure is based on the following scientific publications:

GMACE implementation:
- Sullivan, P.G. and VanRaden, P.M. 2010. Interbull Bulletin 41:3-7
- Sullivan, P.G. et al., 2011. Interbull Bulletin 44: 87-94
- Sullivan, P.G. and Jakobsen, J.H. 2012. Interbull Bulletin 45: 3-7.
- VanRaden, P.M. and Sullivan, P.G. 2010. Gen. Sel. Evol. 42: 7
- Sullivan, P.G. 2013. GMACE reliability approximation. Interbull Bulletin 47: 1-4
- Sullivan, P.G. 2013. GMACE variance estimation. Interbull Bulletin 47: 5-9
- Sullivan, P.G. 2013. GMACE weighting factors. Interbull Bulletin 47: 10-14.

International genetic evaluation computation:
- Schaeffer. 1994. J. Dairy Sci. 77:2671-2678
- Klei, 1998. Interbull Bulletin 17:3-7

Verification and Genetic trend validation:
- Klei et al., 2002. Interbull Bulletin 29:178-182.
- Boichard et al., 1995. J. Dairy Sci. 78:431-437

Weighting factors:
- Fikse and Banos, 2001. J. Dairy Sci. 84:1759-1767

De-regression:
- Sigurdsson and G. Banos. 1995. Acta Agric. Scand. 45:207-219
- Jairath et al. 1998. J. Dairy Sci. Vol. 81:550-562

Genetic parameter estimation:
- Klei and Weigel, 1998, Interbull Bulletin 17:8-14
- Sullivan, 1999. Interbull Bulletin 22:146-148

Post-processing of estimated genetic correlations:
- Mark et al., 2003, Interbull Bulletin 30:126-135
- Jorjani et al., 2003. J. Dairy Sci. 86:677-679
- https://wiki.interbull.org/public/rG%20procedure?action=print&rev=17

Time edits
- Weigel and Banos. 1997. J. Dairy Sci. 80:3425-3430

International reliability estimation
- Harris and Johnson. 1998. Interbull Bulletin 17:31-36

NEXT ROUTINE INTERNATIONAL EVALUATION

According to time schedule in http://www.interbull.org/ib/servicecalendar

NEXT TEST INTERNATIONAL EVALUATION

According to the time schedule on http://www.interbull.org/ib/servicecalendar

PUBLICATION OF INTERBULL GMACE RUN

Rules regarding publication of test evaluations should be observed.

Table 1. National evaluation dates in GMACE run Agust 2014

Country	Date
CAN	20140801
DEU	20140812
DFS	20140812
FRA	20140814
ITA	20140715
NLD	20140801
GBR	20140717
AUS	20080407
BEL	20140401
POL	20140715

Table 2.

Number of bulls in reference population for mil

CAN	24321.0								
DEU	1242.0	27500.0							
DFS	1102.0	25257.0	25631.0						
FRA	1395.0	21983.0	21577.0	23641.0					
ITA	22286.0	972.0	842.0	1026.0	22683.0				
NLD	1318.0	25217.0	24821.0	21811.0	1030.0	26378.0			
GBR	22716.0	1092.0	963.0	1221.0	21934.0	1156.0	22801.0		
AUS	505.0	379.0	366.0	379.0	307.0	476.0	476.0	3368.0	
BEL	503.0	649.0	590.0	636.0	484.0	664.0	471.0	221.0	1504.0
POL	136.0	210.0	205.0	264.0	137.0	215.0	132.0	107.0	179.0	2749.0

Number of bulls in reference population for fat

CAN	24321.0								
DEU	1242.0	27500.0							
DFS	1102.0	25257.0	25631.0						
FRA	1395.0	21983.0	21577.0	23641.0					
ITA	22286.0	972.0	842.0	1026.0	22683.0				
NLD	1318.0	25217.0	24821.0	21811.0	1030.0	26378.0			
GBR	22716.0	1092.0	963.0	1221.0	21934.0	1156.0	22801.0		
AUS	505.0	379.0	366.0	379.0	307.0	476.0	476.0	3368.0	
BEL	503.0	649.0	590.0	636.0	484.0	664.0	471.0	221.0	1504.0
POL	136.0	210.0	205.0	264.0	137.0	215.0	132.0	107.0	179.0	2749.0

Number of bulls in reference population for pro

CAN	24321.0								
DEU	1242.0	27500.0							
DFS	1102.0	25257.0	25631.0						
FRA	1395.0	21983.0	21577.0	23641.0					
ITA	22286.0	972.0	842.0	1026.0	22683.0				
NLD	1318.0	25217.0	24821.0	21811.0	1030.0	26378.0			
GBR	22716.0	1092.0	963.0	1221.0	21934.0	1156.0	22801.0		
AUS	505.0	379.0	366.0	379.0	307.0	476.0	476.0	3368.0	
BEL	503.0	649.0	590.0	636.0	484.0	664.0	471.0	221.0	1504.0
POL	136.0	210.0	205.0	264.0	137.0	215.0	132.0	107.0	179.0	2749.0