



❖ GMACE

- 2014 (1st half)
 - Fine tuning of methodology
 - Implementation runs
- 2014 starting in August
 - 1st routine run
 - Traits: same portfolio as MACE
 - Recipients of MACE results are required to make publicly available all results (traits) that they receive from Interbull
 - No requirement to calculate Total Merit Index



GMACE

Genomic Multiple Across Country Evaluation (GMACE)	December 2014
Countries	11
Evaluation breeds	1
Country-breed-trait combinations	331
Breed-trait evaluations	38
Submitted national estimated breeding values	14,975,470
Qualified national estimated breeding values	12,171,547
Calculated international estimated breeding values	135,578,888
Distributed international estimated breeding values	6,378,848



GMACE Rules

- ❖ Prerequisites for participation
 - a. National genomic system Interbull validated
 - b. National genomic evaluations approved in a test run
- ❖ In early 2014 rules for GMACE participation (re)defined
- ❖ Note: with SNP data multiple entries of gEBVs for the same bull possible
- ❖ Introduction of BCC information (= Bull controlling country)
 - BCC determines if a bull can be incorporated and disseminated via GMACE
 - Intention:
 - Tool to decide from when on a (very young) bull gets GMACE EBVs on international scales, but one time in ever in
 - Filter for AI studs that do not want to have GEBVs for all of their bulls disseminated



GMACE Rules II

- ❖ BCC was used by US and Canada for the implementation runs and routine runs until December 2014
- ❖ In early runs a lot of conflicts → multiple countries claimed BCC for an individual bull
 - IB SC decided in May 2014 in Berlin, that in case of conflicts one country with a BCC = publishable overrules the BCC = non publishable



GMACE Participation

- ❖ Until december 2014 → DFS, DEU, NLD, FRA (multiple entries), POL, ITA, UK (also with some US bulls), AUS, BEL
- ❖ From April 2015 onwards:
 - + Spain, + Canada
- ❖ Specific case US
- ❖ Unlike CDN CDCB did not participate in test runs any more → no gEBVs from CDCB included
BUT
US AI bulls have gEBVs from CAN, ITA and UK
- ❖ CDN was assigned for some US bulls with a publishable = yes
- ❖ BUT only few US bulls
 - Concern has been expressed towards Interbull that they could have been selectively chosen
 - Good in GMACE, poor with use of SNP data in foreign evaluation systems