Interbull introduces Sire-Dam pedigree in MACE

The Interbull Community has decided to introduce a new MACE model including relationships on bull dams in the April 2012 run. The background for the change is to move genetic groups further away from animals with data in order for them to have less impact on the proofs. The consequence is changes in proofs especially for bulls with no progeny test in own country and an average increase in reliabilities. The main reason for changes in proofs for this group of bulls is that the parent average of the bull is computed differently for sire-dam (SD)-MACE compared to the sire-maternal-grandsire(S-MGS)-MACE model due to the change in pedigree structure. This due to the fact that the bull dam in the SD-MACE model gets a breeding value based on the relatives she has in the system. A national breeding value of the bull dam is not included in the MACE model. The breeding value of the dam is therefore only influenced by the performance of her relatives in the MACE system. A very positive performance of a dam, solely based on her relatives, will give a boost to a parent average of a bull compared to the parent average he had in the S-MGS system. A change in the parent average of a bull will therefore impact his converted proofs to other country scales and is the main cause of changes between systems. The usage of the sire-dam pedigree gives the MACE system more information on the genetic background of a bull. In case a dam has several sons tested in several countries, better links between countries are created.