

Interbull: constructing international commensurability for dairy cattle selection

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Project

(part of GENOSOUTH coordinated by V. Ducrocq)

- Context of **genomic « revolution »** in dairy cattle breeding **and its internationalization**
 - **How does this technology of cattle breeding circulate across countries?**
- **Comparability of genetic values**
 - **Commensurability** – *making things comparable through a common metric (Espeland & Stevens 1998, Dérosières 2014)*
 - Social and technical process
 - Crucial point for the market of genetics
- **Interbull** as a space of commensuration with 40-year history

Interbull story in 3 stages:

1975 – 1993: **Construction of the commensurability**

- Commercial issue – constructing product quality
- From researchers working in groups to an institutionalized community with a politically-recognized issue: the comparability of genetic indices
- Conversions - “translation” of genetic indices

1993 – 2009: **Stabilization of commensurability.**

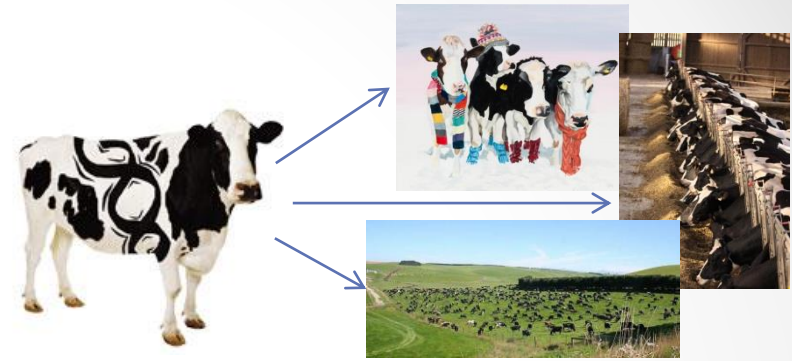
- MACE (multi-trait across country evaluation)
- Calculation center in Uppsala
- From research to service
- Space of commensuration = trade space

2009 – now: **Destabilized commensurability**

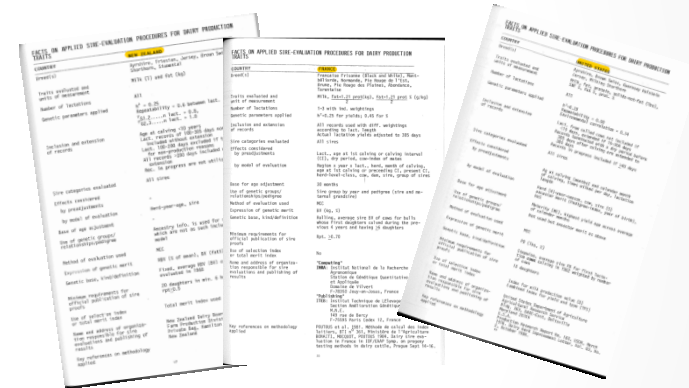
- Genomic selection
- New genotype data issue
- Demultiplication of players and diversification of services

Constructing Commensurability

Biological issue – genotype by environment interaction



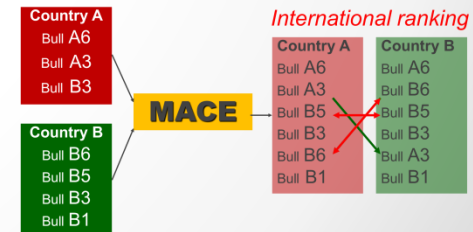
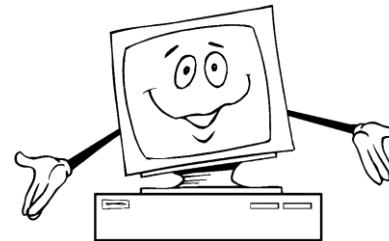
Social context – multistandards and commercial « coopetition »



Facts on applied sire-evaluation procedures for dairy production traits.
Source: Interbull Bulletin n°3, 1988

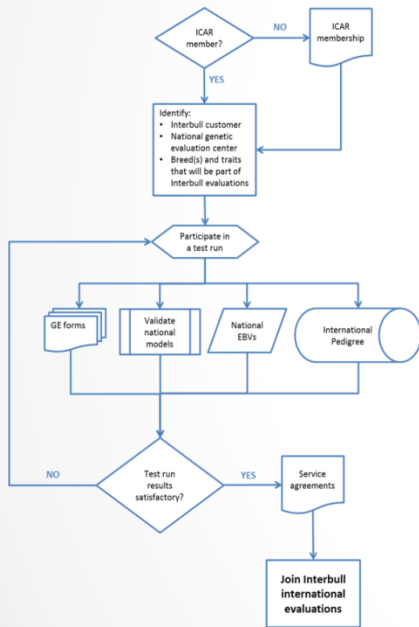


Technical solution – mathematical model estimating correlations and adapting rankings



Space of Commensurability

Technical space = political (trade) space

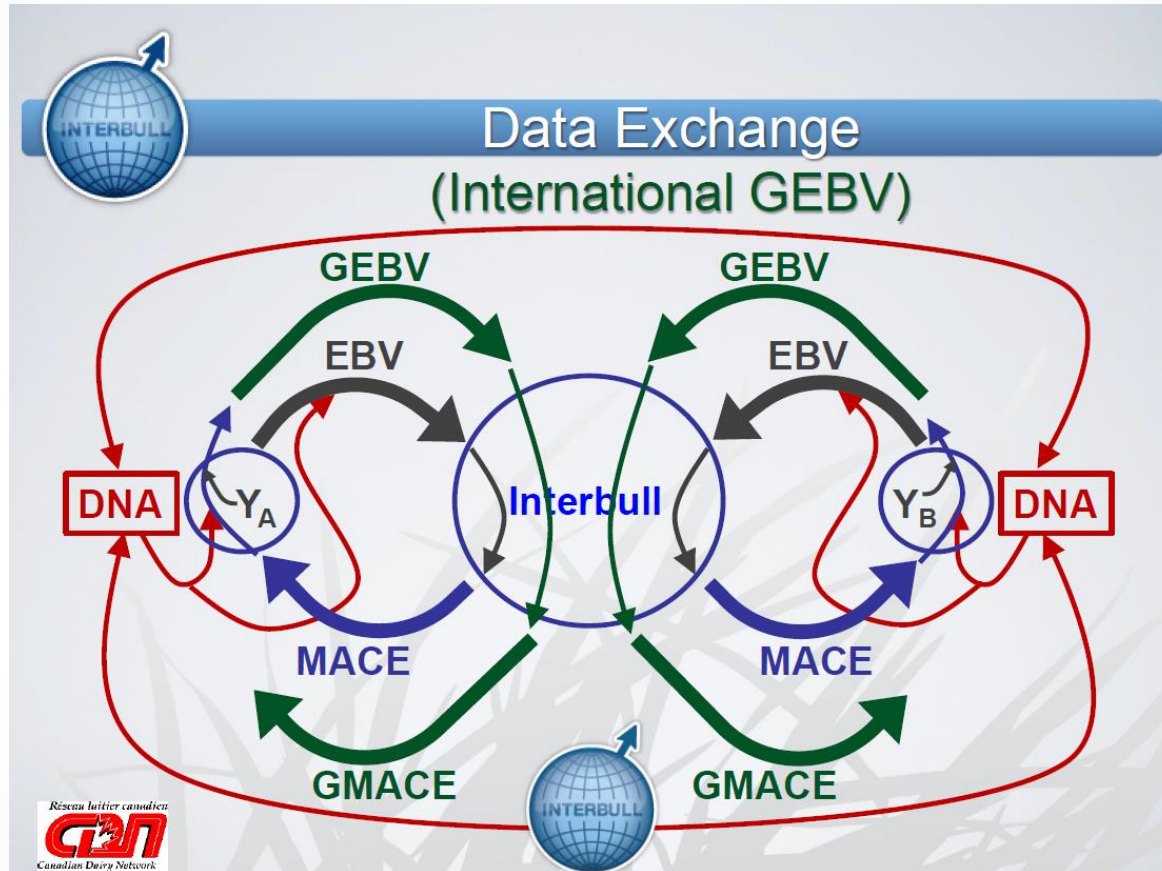


Steps for an organization willing to join the Interbull services.
Source: Interbull Code of Practice



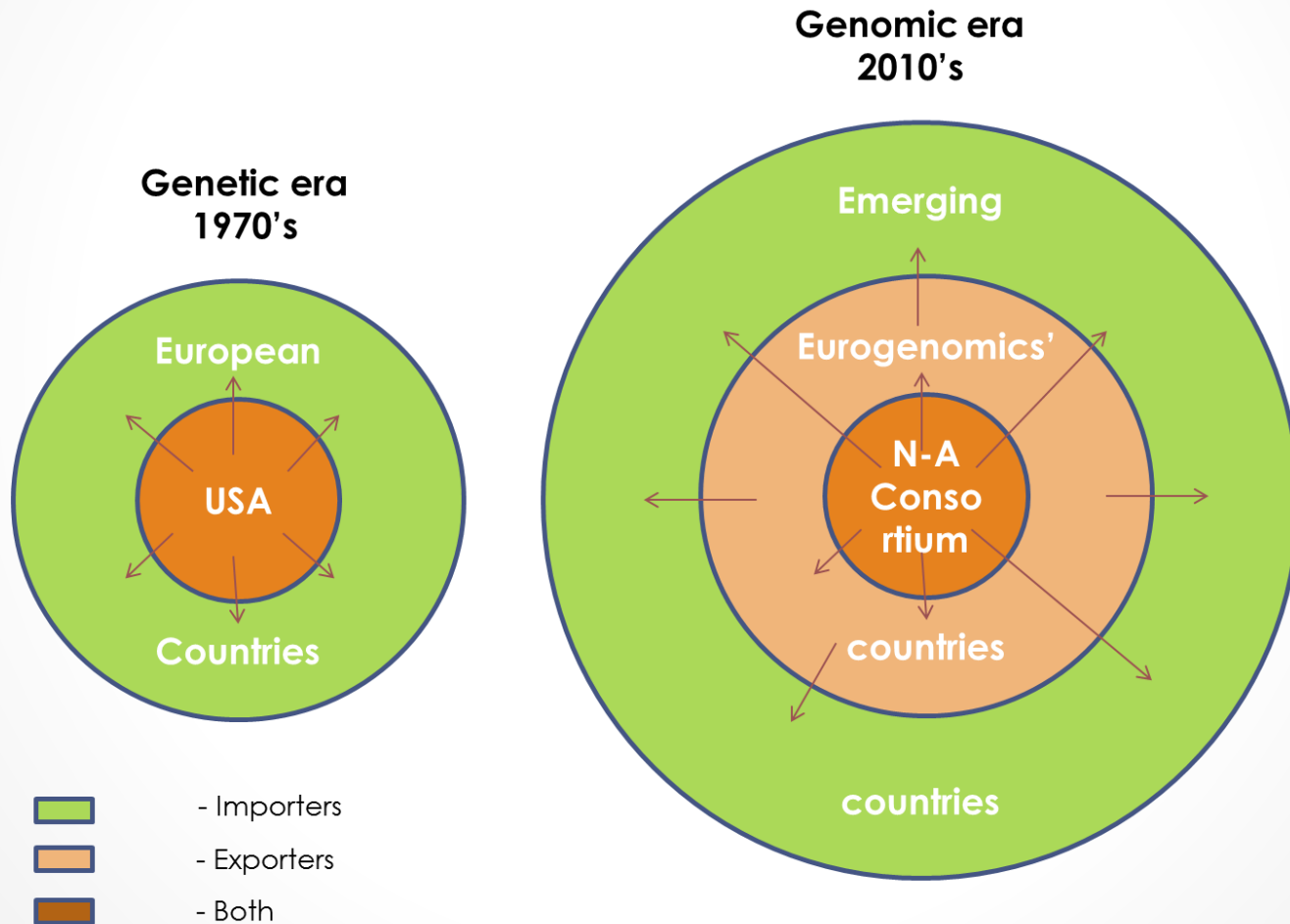
Interbull Map. Source: A. Roozen presentation 2016

Crisis of commensurability



Source: P. Sullivan Presentation Workshop Ljubljana 2017

New commensurability for new context?



Thank you for your attention
and for all your contributions
to this study.

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