Form GE Status as of: 2014-08-25

## DESCRIPTION OF NATIONAL GENETIC EVALUATION SYSTEMS

Country (or countries)  Main trait group <sup>1</sup>	SLOVENIJA WORKABILITY				
NOTE! Only one trait group per form!					
Breed(s)	HOL, SIM, BSW				
Trait definition(s) and unit(s) of measurement <sup>2</sup> Attach an appendix if needed	Milking Speed: linear score $1-5$ .				
Method of measuring and collecting data	Only first lactation linear scoring is included in genetic evaluation.				
Time period for data inclusion	Calving from 01.01.2004				
Age groups (e.g. parities) included	1 <sup>st</sup> parity				
Other criteria (data edits) for	Classifier*year >= 10 scores				
inclusion of records	Classifier (total) >= 20 scores (calving date - birth date) <= 1200 days				
	5 <= (scoring date - calving date) <= 365				
Criteria for extension of records (if applicable)	· · · · · · · · · · · · · · · · · · ·				
Sire categories	AI				
Environmental effects <sup>3</sup> , pre- adjustments	No				
Method (model) of genetic evaluation <sup>3</sup>	ST – AM – BLUP				
<b>Environmental effects<sup>3</sup> in the</b>	F – classifier*year				
genetic evaluation model	F – class(birth year)*class(scoring date - calving date)				
	F – calving season*year R – herd*year				
Adjustment for heterogeneous variance in evaluation model					
Use of genetic groups and relationships					
Blending of foreign/Interbull information in evaluation	No				
Genetic parameters in the evaluation	Use Appendix GE for heritability/genetic variance estimates; for multiple-trait genetic evaluations, provide genetic correlation estimates between traits separately.				
	Use <b>also</b> appendices PR, CO, BCO, SM, LO, CA, as applicable, if you participate in the international genetic evaluations of Interbull				
System validation	Genetic trend validation – method 3				
Expression of genetic evaluations	BV12=((BV-a)/b)*12+100				
If standardised (e.g. RBV), give	a – mean of BV				
standardisation formula in the appendix	b – standard deviation of BV				

Definition of genetic reference base	Mean of cows born in 2005
Next base change	2016
Calculation of reliability	Yes
Criteria for official publication of evaluations	reliability >= 0.3
Number of evaluations / publications per year	3
Use in total merit index <sup>4</sup>	HOL: Milking Speed 2%
	BSW: Milking Speed 3%
	SIM: Milking Speed 1%
Anticipated changes in the near future	Change of genetic base
Key reference on methodology applied	Web site: <a href="http://www.bf.uni-lj.si/zootehnika/struktura/katedre-in-enote/center-za-strokovno-delo-v-zivinoreji/govedo/">http://www.bf.uni-lj.si/zootehnika/struktura/katedre-in-enote/center-za-strokovno-delo-v-zivinoreji/govedo/</a>
Key organisation: name, address, phone, fax, e-mail, web site	University of Ljubljana, Biotechnical Faculty, Department of Animal Science, Groblje 3, 1230 Domzale, Slovenija
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<sup>1)</sup> Either: Production (e.g. milk, fat, protein), Conformation, Health (e.g. mastitis resistance, milk somatic cell, resistance to diseases other than mastitis), Longevity, Calving (e.g. stillbirth, calving ease), Female fertility (e.g. non-return rate, interval between reproductive events, number of AI's, heat strength), Workability (e.g. milking speed, temperament), Beef production, Efficiency (e.g. body weight, energy balance, body conditioning score), or Other traits.

<sup>2)</sup> Indicate frequencies per category if the trait is categorical and specify transformation of data if practiced.

<sup>3)</sup> Use abbreviations for most common effects (see document with list of abbreviations at http://www-interbull.slu.se/service\_documentation/General/list\_of\_abbreviations.rtf) and indicate random (R) or fixed (F).

<sup>4)</sup> Please give economic weights and indicate how they are expressed (preferably in genetic standard deviation units).

Form GE Appendix WO

## Parameters for national genetic evaluations for workability traits as provided to Interbull

Country (or countries): SLOVENIJA

Main trait group: WORKABILITY

**Breed** (repeat as necessary): HOL

Trait	Definition	ITB <sup>a</sup>	h <sup>2b</sup>	genetic variance <sup>b</sup>	official proof standardisation formula <sup>c</sup>
Milking Speed	Scale 1-5	X	0.089	0.04073	BV12=((BV-(0.00923))/ 0.07505)*12+100
Temperament					

Country (or countries): SLOVENIJA

Main trait group: WORKABILITY

**Breed (repeat as necessary):** SIM

Trait	Definition	$ITB^a$	h <sup>2b</sup>	genetic variance <sup>b</sup>	official proof standardisation formula <sup>c</sup>
Milking Speed	Scale 1-5	X	0.081	0.03609	BV12=((BV-(-0.00738))/ 0.07562)*12+100
Temperament					

Country (or countries): SLOVENIJA

Main trait group: WORKABILITY

**Breed (repeat as necessary):** BSW

Trait	Definition	ITB <sup>a</sup>	$h^{2b}$	genetic variance <sup>b</sup>	official proof standardisation formula <sup>c</sup>
Milking Speed	Scale 1-5	X	0.095	0.04277	BV12=((BV-(-0.01708))/ 0.08313)*12+100
Temperament					

<sup>&</sup>lt;sup>a</sup> Indicate, with X, traits that are submitted to Interbull for international genetic evaluations.

If repeated records are treated as separate traits, provide heritability estimates and genetic variances separately for each trait, as well as for all traits pooled, i.e. for the trait submitted to Interbull.

Expressed as follows:

StandEval=((eval-a)/b)\*c+d where a=mean of the base adjustment, b=standard deviation of the base, c=standard deviation of expression (include sign if scale is reversed), and d=base of expression.