

## DESCRIPTION OF NATIONAL GENETIC EVALUATION SYSTEMS

<b>Country (or countries)</b>	SLOVENIJA
<b>Main trait group<sup>1</sup></b>	LONGEVITY
<b>NOTE!</b> Only one trait group per form!	
<b>Breed(s)</b>	HOL, SIM, BSW
<b>Trait definition(s) and unit(s) of measurement<sup>2</sup></b> Attach an appendix if needed	Direct longevity: length of productive life (number of days from 1 <sup>st</sup> calving to the culling or to the moment of data collection or till the end of sixth lactation). At the end of sixth lactation we marked records as censored.
<b>Method of measuring and collecting data</b>	from milk recording data
<b>Time period for data inclusion</b>	from 01.01.2000 (truncation date)
<b>Age groups (e.g. parities) included</b>	Parities 1 to 6.
<b>Other criteria (data edits) for inclusion of records</b>	
<b>Criteria for extension of records (if applicable)</b>	
<b>Sire categories</b>	AI
<b>Environmental effects<sup>3</sup>, pre-adjustments</b>	No
<b>Method (model) of genetic evaluation<sup>3</sup></b>	Direct longevity : ST S-MGS survival analysis model, applying a proportional hazard model with Weibull baseline hazard distribution.
<b>Environmental effects<sup>3</sup> in the genetic evaluation model</b>	F – age at first calving, stage of lactation within parity, yearly herd size deviation, season R – herd, sire
<b>Adjustment for heterogeneous variance in evaluation model</b>	
<b>Use of genetic groups and relationships</b>	
<b>Blending of foreign/Interbull information in evaluation</b>	No
<b>Genetic parameters in the evaluation</b>	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
<b>System validation</b>	Genetic trend validation – method 3
<b>Expression of genetic evaluations</b> If standardised (e.g. RBV), give standardisation formula in the appendix	$BV12 = ((BV - a) / b) * 12 + 100$ a – mean of BV b – standard deviation of BV
<b>Definition of genetic reference base</b>	Mean of bulls born between 2008.
<b>Next base change</b>	2016

<b>Calculation of reliability</b>	Yes
<b>Criteria for official publication of evaluations</b>	20 daughters
<b>Number of evaluations / publications per year</b>	3
<b>Use in total merit index<sup>4</sup></b>	HOL: Direct longevity 6% BSW: Direct longevity 5% SIM: Direct longevity 10%
<b>Anticipated changes in the near future</b>	Change of genetic base
<b>Key reference on methodology applied</b>	Web site: <a href="http://www.bf.uni-lj.si/zootehnika/struktura/katedre-in-note/center-za-strokovno-delo-v-zivinoreji/govedo/">http://www.bf.uni-lj.si/zootehnika/struktura/katedre-in-note/center-za-strokovno-delo-v-zivinoreji/govedo/</a>
<b>Key organisation: name, address, phone, fax, e-mail, web site</b>	University of Ljubljana, Biotechnical Faculty, Department of Animal Science, Groblje 3, 1230 Domzale, Slovenija Tel. +386 1 3203 872 Fax: +386 1 7241 005 <a href="mailto:Jurij.Krsnik@bf.uni-lj.si">Jurij.Krsnik@bf.uni-lj.si</a> , <a href="mailto:Klemen.Potocnik@bf.uni-lj.si">Klemen.Potocnik@bf.uni-lj.si</a>

1) 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.

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

3) 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](http://www-interbull.slu.se/service_documentation/General/list_of_abbreviations.rtf)) and indicate random (R) or fixed (F).

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

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

**Country (or countries):** SLOVENIJA  
**Main trait group:** Longevity  
**Breed(s):** HOL

Trait	$h^2$	genetic variance	official proof standardisation formula <sup>a</sup>
Direct longevity	0.137	0.04	$BV12=((BV-(-0.0045))/0.0882)*12+100$
Combined longevity			

**Country (or countries):** SLOVENIJA  
**Main trait group:** Longevity  
**Breed(s):** SIM

Trait	$h^2$	genetic variance	official proof standardisation formula <sup>a</sup>
Direct longevity	0.097	0.03	$BV12=((BV-(-0.0521))/0.0864)*12+100$
Combined longevity			

**Country (or countries):** SLOVENIJA  
**Main trait group:** Longevity  
**Breed(s):** BSW

Trait	$h^2$	genetic variance	official proof standardisation formula <sup>a</sup>
Direct longevity	0.068	0.02	$BV12=((BV-(-0.0396))/0.0787)*12+100$
Combined longevity			

<sup>a</sup> 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.