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Appendix Ia: Part 1. Comparison of Performance Recording (Dairy)

Dairy: Summary of national information for Production traits (Milk, Fat and Protein)

Country	Definition and measures					
	ICAR Guideline: 24h yield, Accumulated yield, Average yield	The amounts of milk, fat and protein produced by the individual cow over the period of time				
Belgium	Records are kg of yield produced within a 24-hours test-day period and EBV are average 305-d yields (kg) across lactation 1,2 and 3 Fat and protein percentage	24h yield, Average Yield				
Czech Republic	Milk recording data. 24-hour production collected by milk recording organizations every four weeks.	24h yield (average)				
Croatia	Test-day records of daily milk (kg), fat (kg), and protein yield (kg)	24h yield				
Denmark, Finland and Sweden	Test day observations for milk (kg), protein (kg) and fat (kg)	24h yield				
Estonia	Milk(kg), fat(kg), protein(kg), fat (%), protein (%), all traits collected by official milk recording organisations according to ICAR rules. EBVs are average 305d milk, fat and protein yields (kg) across lactations 1,2 and 3 with equal weights (1/3). Percentages are calculated indirectly, using yields' EBVs and phenotypic averages of the breed.	24h yield				
France	Milk, fat and true protein Yields (kg), fat and true protein %					
Germany, Luxemburg	Milk (kg), fat (kg), protein (kg) on 24-hour daily basis	24h yield				



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and Austria						
United Kingdom	Records are kg of yield for milk, fat and protein produced within a 24-hour test day period. 305day milk, fat and protein yields also included	24h yield, Accumulated Yield				
Hungary	Milk yield [kg], fat yield [kg], protein yield [kg]	24h yield				
Country	Definition and measures					
Ireland	Test day observations for milk(kg), protein(kg) and fat(kg). Collected by milk recording agencies	24h yield				
Italy	HOL: Milk, fat and protein kg. 24-hour production collected by milk recording agencies every four weeks in a A or AM/PM scheme JER: ME 305-days milk, fat and protein yield, fat and protein % BSW & SIM: Milk yield Kg Fat yield Kg Protein yield Kg	HOL: 24h yield JER: Accumulated yield BSW & SIM: 24h yield				
Latvia	Milk (kg), fat (kg), protein (kg), fat (%), protein (%) on 24-hour daily basis. All production data collected using ICAR certified milk recording methods	24h yield				
Lithuania	Milk(kg), fat(kg), protein(kg); fat (%), protein(%) all traits collected by official milk recording organizations according to ICAR rules. EBV s are average 305 d milk, fat and protein yields (kg) across lactations 1, 2 and 3 with equal weights (1/3). Percentages are calculated indirectly, using yield EBV and phenotypic averages of the breed	24h yield				
Netherlands	Records are kg of yield for milk, fat and protein produced within a 24-hour test day period	24h yield				
Poland	Milk (kg), fat (kg), protein (kg). Test-day records between 5 and 305 days in milk. Known sire required. Supervised milkings from A4, AT4, A8 systems.	24h yield				
Portugal	Milk (kg) Fat (kg) Protein (kg) Fat (%) Protein (%). A4 and AT4 milk recording scheme according with ICAR rules					
Slovenia	Test day observations for milk (kg), protein (kg) and fat (kg). ICAR Milk recording method to 29.2.2004 A4 method from 1.3.2004 AT4 method	24h yield				
Slovakia	Milk (kg), fat (kg), protein (kg). 24-hour production collected by official milk recording system using ICAR methods (The Breeding Services of the Slovak Republic)	24h yield				



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Spain	Direct: Production of Kg of milk, fat, protein in 305 days calculated with Fleischman method from monthly test day data Indirect: Percentages are calculated from yield figures at 305 days.	Accumulated Yield
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^{*} For breed codes see: https://interbull.org/ib/icarbreedcodes



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Appendix Ia: Part 2. Comparison of Performance Recording (Beef)

Beef: Summary of national information for AWW (Adjusted Weaning Weight)

Trait Definition of Adjusted Weaning Weight (AWW) in the international genetic evaluations in beef: It is recommended that weaning weights should be taken when the average age of the calves is close to 205 days.

Adjusted Weaning Weight	Denmark (D) Finland (F) and Sweden (S) (DFS)	Czech Republic (CZE)	France (FRA)	Germany (DEU)	Ireland (IRL)	Spain (ESP)	United Kingdom (GBR)
BREEDS*	CHA, LIM, SIM, AAB, HER	AAB, SIM, BBL, BAQ, GAL, HER, CHA, LIM, PIE, SAL, GAS, HLA		CHA, LIM, SIM, AAB, HER, SAL, BAQ, UCK	CHA (25%), LIM (25%), AAB (14%), HER (11%), SIM (11%), BBL (8%), BAQ (1%), SAL (1%), AUB (1%), BSH (1%), PAR, PIE, ROM	LIM	LIM
EVALUATION	Y	Y	Y	Y	Y	Y	Y



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TRAIT DEFINITION (TEXT)	Weaning weight as weight at 200 days, or adjusted to 200 d if measured at other age	Weights at birth, at age of 120, 210 and 365 days, in kg	CHA: 210 days adjusted weaning weight LIM: 120 days adjusted weight + 210 days adjusted weaning weight	Weaning weight at 200 days, Weights and scores of all male and female animals are recorded 2 times.	Average from performances recorded from 150 to 300 days	Weaning weight as weight at 210 days.	The animal live weight at 200 days of age. The weaning live weight of an animal is defined given the live weights of animals between 170 and 300 days of age.
AGE AT MEASUREMENT	Measured at: D:140 to 260 days F:150 to 250 days S:125 to 275 days Adjusted to 200 days	120 d (90-250d) 210 d 365 d	120 d 210 d	210 d	150 – 300 d	210 d	200 d (170-300 d)
PURE/ CROSSBREED (P/C)	Only P in DFS model D&S and F (CHA; LIM; SIM): P F (AAB, HER): P & C	P&C		P	P&C	P	
Adjusted Weaning Weight	Denmark (D) Finland (F) and Sweden (S) (DFS)	Czech Republic (CZE)	France (FRA)	Germany (DEU)	Ireland (IRL)	Spain (ESP)	United Kingdom (GBR)
YEAR OF DATA CUT	D&S:1980, F:1985	2000	1972	1981	1980	1989	1972
DATA ADJUSTMENTS	weaning weight has been weighed when animal has been 150- 250 days, if animal has 2 or more weaning weights in database the weight which is	Live weights are adjusted to defined age (210d)	120 and 210 days adjusted weights are calculated by intra- extrapolation for each animal with at least 2 weights, with two conditions on these		Performances between 150 and 300 days are averaged. In case of multiple weighting, HYS is set to the first weighting date.	weight records are adjusted at 210 days using individual lineal regression	Weaning live weights are adjusted to a 200- day age constant using interpolation of the two nearest weights before and after 200 days of age



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weighed nearest 200 days is selected, AWW=200*((ww- bw)/(days between ww andbw))where ww=weaning weight, bw= birth weight. Also we adjust aww for heterogeneous variance between countries. In F: Adjustment to weight at 200 d.	weights: -the interval between the target age (120 or 210 days) and the closest weighing date must be less than 2 months,-the interval between the two weighing dates must be less than 300 days.	where the weights are measured within the age range of 170 to 300 days. Data is not selected, all animals are recorded for weaning weight
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^{*} For breed codes see: https://interbull.org/ib/icarbreedcodes