FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

COUNTRY	NORWAY
Breed(s)	Norwegian Red Cattle
Traits evaluated and units of measurement	Fat-protein-corrected milk yield, FPCM (kg)
Number of lactations	1
Genetic parameters applied	$h^2 = 0.20$
Inclusion and extension of records	<120days, not included >120days, included after extension Terminated lact. included without extension Records in progress (1:st year) and records from culled cows are used in the same way
Sire categories evaluated	Only AI sires
Effects considered by preadjustments	Age, season and days open
by model of evaluation	Herd-year, sire, maternal grandsire
Base of age adjustment	M.E.
Use of genetic groups/ relationships/pedigree	Relationship matrix used/sire and maternal grandsire, no grouping
Method of evaluation used	Single trait BLUP
Expression of genetic merit	RBV
Genetic base, kind/definition	Rolling base, average of the three last batches (years) of young bulls
Minimum requirements for official publication of sire proofs	100 daughters
Use of selection index or total merit index	Total merit index used
Name and address of organiza- tion responsible for sire evaluations and publishing of results	Norwegian Red Cattle Association Utstillingplassen N-2300 Hamar Norway
Key references on methodology applied	Fimland, E. 1984. Progeny testing procedures in Norway. IDF/EAAP Symp. on progeny testing methods in dairy cattle. Prague, Sept. 14-16. IDF Doc. 183, 117-132.

Country: Norway

Number of bulls tested, means and standard deviations of proofs by year

Year of first proof		FPCM* index			
	Number of bulls	$\overline{\overline{\mathbf{x}}}$	S.D.		
first proof bulls x S.D. Breed: Norwegian Red Cattle 1979 112 ** 6.2 80 109 ** 6.8 81 110 ** 6.3 82 104 ** 6.4 83 107 ** 5.4 84 114 99.0 5.1 85 117 100.6 5.2					
		**	6.2		
80	109	**	6.8		
81	110	**	6.3		
82	104	**	6.4		
83	107	**	5.4		
84	114	99.0	5.1		
	117	100.6	5.2		
86	127	99.6	5.7		
87	137	100.4	6.2		
88	131	101.2	6.0		

*Up to 1985: FPCM=M(0.22+0.075f+0.15p) From 1986: FPCM=M(0.20+0.04f+0.2p)

where M=milk yield; f=fat %; p=protein %

** No other base used than the bulls progeny tested that year, average index is 100.

App. 2

Country: Norway

Average phenotypic levels of (adjusted) production records included in the sire evaluation procedures

Year of calving	Traits	Traits				
	Milk kg	Fat %	Protein %	FPCM		
Breed: Norwegi	ian Red Cattle					
1979	5607	4.04	3.32	5725		
80	5750	4.02	3.30	5845		
81	5706	4.04	3.29	5800		
82	5809	4.02	3.25	5861		
83	5782	4.06	3.25	5879		
84	5734	4.04	3.22	5768		
85	5716	4.03	3.22	5746		
86	5895	3.98	3.23	5926		
87	6212	3.95	3.27	6181		