World Holstein-Friesian Federation

WHFF FORMATS

(21 April 2006)

Introduction

Dear Colleagues,

As mentioned during the WHFF General Assembly in Paris 1st March 2004, the purpose of the Working Group Electronic Data Exchanges (WG EDE) is to develop WHFF standards on data transfer in order to make easy and to harmonize data exchanges.

The first step of this Working Group was to update the 1996 formats.

We though that this task could be done relatively quickly, but after the publication of the version of October 2004 for test, we received a lot of suggestions and we had to reconsider these formats and had to make choices. For other formats, we had to take the recommendations of other Working Groups and ICAR in account.

Now; this has been done and with the new or updated formats present the following characteristics:

- The version of this format is given at the beginning of each record,
- If necessary, those records can be updated between 2 countries and / or between 2 organizations, for special use,
- New formats are added: Tested record (124) and Breeding Value for Udder Health Record (132),
- Other formats are strongly updated:
    - Female Type Classification Record (122) and Breeding Value for Type Record (131) contain now “generic traits” instead of “absolute traits” to make changes easier,
    - Blood Type record was replaced by DNA Record (115),
    - For Recessive or Dominant Genes Profile (116), we have changed the expression of code.
- The ID of animal is one of the most problematic questions: for a lot of reasons, we could not go on to use only the ‘Interbull’ ID. Also the choice of the ‘ID factor’ which is on front of each number, should certainly both allow to each organization to keep on working as currently and taking the future needs into account.

All our thanks to the members of the Working Group for the realized work: László Bognár, 'Fabiola Canavesi', Glenn S. Cherry, Arnold Harbers and Wilfried Ilse.

All our thanks for their comments also to the countries that were involved in testing these formats.

But we can’t leave it at that:

- The needs of update are permanent,
- The technology changed, and make now easier the updates,

The next step will the use of the new technologies to open up new horizons.

In the meantime, don’t hesitate to ask for explanations or to send comments or suggestions.

Yours sincerely.

Jean RAINAUT
Chairman of the WHFF WG on Electronic Data Exchange
PRIM'HOLSTEIN FRANCE
jean.rainaut@primholstein.com
Fax 33 2 41 43 23 96

Summary of records and updates

For all records:

G1: The international ID number (Byte 25 to 42) has been updated with :
- ID number left justified, leave trailing blanks as is (instead right justified, leading blanks as zeros)
- sexe put out of the international ID number

G2°: The version of the format (byte 4 to 10) has been introduced to handle future update of formats.

Code	Record name:	previous Update	last Update	main updates since 1996
110	Animal Pedigree Record	July 1996	March 2006	G1 + G2 + ID number of animal and parents+Breed Code
112	Breeder,Owner,Exporter Record	July 1996	March 2006	G1 + G2
115	DNA Record	July 1996	March 2006	G1 + G2 + DNA Type record instead of Blood typing record
116	Recessive or Dominant Genes Profile Record	July 1996	March 2006	G1 + G2 + change in expression code
120	Lactation Record	July 1996	March 2006	G1 + G2
121	Lifetime Milk Production Record	July 1996	March 2006	G1 + G2
122	Female Type Classification Record	July 1996	March 2006	G1 + G2 + 40 "generic" linear traits
123	Female Service/Embryo Service Record	July 1996	March 2006	G1 + G2+ Breed Code
124	Testday Record	**new**	March 2006	
130	Breeding Value for Production Record	July 1996	March 2006	G1 + G2 + ref base+ miscellanous
131	Breeding Value for Type Record	July 1996	March 2006	G1+ G2 + 40 "generic" linear traits
132	Breeding Value for Udder Health Record	***new***	March 2006	
150	Extract Record	May 2004	March 2006	G1+ G2 + extend extract facilities+specific field for each extract record if needed
151	Delivery Record	November 2003	March 2006	G1+ G2 + 3 delivery records + reason of non delivery or partial delivery for the animal
160	Progeny Requests Record	July 1996	March 2006	G1 + G2 (ID number)

Record type: **110** **31 March 2006**
Record name: **Animal Pedigree Record** **Length: 268**

Starting byte	Length	format	description	notes	Example
1	3	a	Record Type	1	110
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date(YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	30	a	Name		
			Sending country's ID of animal	10	
73	2	a	ID factor	6	
75	3	a	Country of origin	7	
78	1	a	Sex of animal	8	F
79	12	a	ID number	9	
91	30	a	Name		
121	8	i	Date of birth (YYYYMMDD)		20040101
129	2	a	Type of identification	11	S
131	15	a	Ear number		
146	16	a	Electronic ID		
162	2	a	Primary Breed	12	HO
164	3	i	Percentage primary breed		100
167	2	a	Secondary breed	12	
169	2	i	Percentage secondary breed		
171	2	a	Registration category	13	
			Sire's international ID		
173	2	a	ID factor	6	
175	3	a	Country of origin	7	
178	1	a	Sex	8	
179	12	a	ID number	9	
191	30	a	Sire's name		
			Dam's international ID		
221	2	a	ID factor	6	
223	3	a	Country of origin	7	
226	1	a	Sex	8	
227	12	a	ID number	9	
239	30	a	Dam's name		

Record Type: 110 (Contd)

Notes:

1. Always 110, indicating WHFF animal pedigree record

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply. (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should be used only for bytes 73 to 74 and for a number who is different from IT

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. ID Number/Name by which animal is known in sending country if different from international ID and Name

11. S is sketch, E is eartag, I is electronic implant, R is exterior electronic device
P is photograph, PE is photograph an ear tag.

12. Code for breed of animal. (see Appendix 3)

13 Registration status code or purity status code.
(Please supply your own country's codes at this point and supply the receiving country with a copy of this record definition.)

General: Numeric fields right justified. All alpha fields upper case.
Missing integer values are filled with zeros.

Record type: **112** **31 March 2006**
Record name: **Breeder,Owner,Exporter Record** **Length: 275**

Starting byte	Lenght	format	description	notes	Example
1	3	a	Record Type	1	112
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	2	i	Record Sequence number	10	01
			Breeder		
45	40	a	Name		
85	30	a	Town/Region		
115	3	a	Country	5	
118	15	a	Herd prefix		
133	2	i	Breeder sequence number	11	01
135	40	a	Name of exporter		
175	3	a	Country of exporter	5	
			Owner	12	
178	40	a	Name		
218	30	a	Town/Region		
248	3	a	Country	5	
251	8	i	Date of Sale (YYYYMMDD)		
259	15	a	Herd prefix		
274	2	i	Owner sequence number	13	01

NB: This record may be present more than once for each animal te record a succession of owners and/or joint breeders. (See Notes 10, 11 and 12)

Notes:

1. Always 112, indicating WHFF record on breeder, owner, exporter

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for orgaisation sending record and for which definition of varaisbles may apply. (see Appendix)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   - IT :International Number : normally, number given for the first time to an animal
   - IB : International Number given by Interbull
   - EU: Europeen Communauty ID Number (when different from IT number)

   Local :
   - LC : Local number (Often HerdBook Number, when different from IT Numbers)
   - For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. Determines the sequence of record type 112's for this animal if more than one record type 112 supplied. For the first (or only) record type 112 sent for this animal this field will contain the value 01.

11. For the first (or only) record type 112 sent for animal this will contain the value 01. If the animal is bred by more than one breeder then further record type 112's will be supplied and in these records this field will contain a sequence number to inidcate a succession of breeders.

12 Owner details are not recorded if the animal remained in the breeder's ownership until the time of export

13 For the first (or only) record type 112 sent for this field will contain the value 01 (unless the aanimal remained in the breeder's ownership until the time of export when this field will contain 00). To record a succession of owners, further record type 112's will be supplied and in these records this field will contain a sequence number to indicate the order of ownership records.

General: Numeric fields right justified. All alpha fields upper case. Missing integer values are filled with zeros.

Note Multiple Record Type 112s

If more than one Record Type 112 is supplied then the additional records will contain only that information that differs from the first record. For example, if an animal that has been bred by just one breeder has been owned by three different owners, three record type 112s would be supplied as follows:

Record sequence 01 -
this would contain the breeder's details with the breeder sequence number set to 01 and the first owner's details with the owner sequence number set to 01

Record sequence 02 -
the breeder's details would be blank (ie spaces) with the breeder sequence number set to 00 but the second owner's details would be present with the owner sequence set to 02

Records sequence 03 -
the breeder's details would be blank (ie spaces) with the breeder sequence number set to 00 but the third owner's details would be present with the owner sequence set to 03

Record type: **115** **31 March 2006**

Record name: **DNA Record** **Length: Variable (Max = 711)**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	115
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	CAN
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	10	a	Code ISAG of the labotary		F/S
53	8	a	Date of test (YYYYMMDD)		
61	3	a	Country of testing laboratory		
64	1	a	Test type	10	M
65	7	a	laboratory ID of animal (or test reference)		123456
72			main markers (mandatory)		
72	10	a	name of marker 1	11	BM1824
82	3	a	result of allele 1 of marker 1		
85	3	a	result of allele 2 of marker 1		
88	10	a	name of marker 2	11	BM2113
98	3	a	result of allele 1 of marker 2		
101	3	a	result of allele 2 of marker 2		
104	10	a	name of marker 3	11	ETH10
114	3	a	result of allele 1 of marker 3		
117	3	a	result of allele 2 of marker 3		
120	10	a	name of marker 4	11	ETH225
130	3	a	result of allele 1 of marker 4		
133	3	a	result of allele 2 of marker 4		
136	10	a	name of marker 5	11	INRA23
146	3	a	result of allele 1 of marker 5		
149	3	a	result of allele 2 of marker 5		
152	10	a	name of marker 6	11	SPS115
162	3	a	result of allele 1 of marker 6		
165	3	a	result of allele 2 of marker 6		
168	10	a	name of marker 7	11	TGLA122
178	3	a	result of allele 1 of marker 7		
181	3	a	result of allele 2 of marker 7		
184	10	a	name of marker 8	11	TGLA126
194	3	a	result of allele 1 of marker 8		
197	3	a	result of allele 2 of marker 8		
200	10	a	name of marker 9	11	TGLA227
210	3	a	result of allele 1 of marker 9		
213	3	a	result of allele 2 of marker 9		
216		a	optionals markers		
216	10	a	name of marker 10	12	HUJI177
226	3	a	result of allele 1 of marker 10		
229	3	a	result of allele 2 of marker 10		
232	10	a	name of marker 11	12	
242	3	a	result of allele 1 of marker 11		
245	3	a	result of allele 2 of marker 11		
248	10	a	name of marker 12	12	
258	3	a	result of allele 1 of marker 12		
261	3	a	result of allele 2 of marker 12		

264	10	a	name of marker 13	12
274	3	a	result of allele 1 of marker 13	
277	3	a	result of allele 2 of marker 13	
280	10	a	name of marker 14	12
290	3	a	result of allele 1 of marker 14	
293	3	a	result of allele 2 of marker 14	
296	10	a	name of marker 15	12
306	3	a	result of allele 1 of marker 15	
309	3	a	result of allele 2 of marker 15	
312	10	a	name of marker 16	12
322	3	a	result of allele 1 of marker 16	
325	3	a	result of allele 2 of marker 16	
328	10	a	name of marker 17	12
338	3	a	result of allele 1 of marker 17	
341	3	a	result of allele 2 of marker 17	
344	10	a	name of marker 18	12
354	3	a	result of allele 1 of marker 18	
357	3	a	result of allele 2 of marker 18	
360	10	a	name of marker 19	12
370	3	a	result of allele 1 of marker 19	
373	3	a	result of allele 2 of marker 19	
376	10	a	name of marker 20	12
386	3	a	result of allele 1 of marker 20	
389	3	a	result of allele 2 of marker 20	
392	10	a	name of marker 21	12
402	3	a	result of allele 1 of marker 21	
405	3	a	result of allele 2 of marker 21	
408	10	a	name of marker 22	12
418	3	a	result of allele 1 of marker 22	
421	3	a	result of allele 2 of marker 22	
424	10	a	name of marker 23	12
434	3	a	result of allele 1 of marker 23	
437	3	a	result of allele 2 of marker 23	
440	10	a	name of marker 24	12
450	3	a	result of allele 1 of marker 24	
453	3	a	result of allele 2 of marker 24	
456	10	a	name of marker 25	12
466	3	a	result of allele 1 of marker 25	
469	3	a	result of allele 2 of marker 25	
472	10	a	name of marker 26	12
482	3	a	result of allele 1 of marker 26	
485	3	a	result of allele 2 of marker 26	
488	10	a	name of marker 27	12
498	3	a	result of allele 1 of marker 27	
501	3	a	result of allele 2 of marker 27	
504	10	a	name of marker 28	12
514	3	a	result of allele 1 of marker 28	
517	3	a	result of allele 2 of marker 28	
520	10	a	name of marker 29	12
530	3	a	result of allele 1 of marker 29	
533	3	a	result of allele 2 of marker 29	
536	10	a	name of marker 30	12
546	3	a	result of allele 1 of marker 30	
549	3	a	result of allele 2 of marker 30	
552	10	a	name of marker 31	12
562	3	a	result of allele 1 of marker 31	
565	3	a	result of allele 2 of marker 31	
568	10	a	name of marker 32	12
578	3	a	result of allele 1 of marker 32	
581	3	a	result of allele 2 of marker 32	
584	10	a	name of marker 33	12
594	3	a	result of allele 1 of marker 33	

597	3	a	result of allele 2 of marker 33	
600	10	a	name of marker 34	12
610	3	a	result of allele 1 of marker 34	
613	3	a	result of allele 2 of marker 34	
616	10	a	name of marker 35	12
626	3	a	result of allele 1 of marker 35	
629	3	a	result of allele 2 of marker 35	
632	10	a	name of marker 36	12
642	3	a	result of allele 1 of marker 36	
645	3	a	result of allele 2 of marker 36	
648	10	a	name of marker 37	12
658	3	a	result of allele 1 of marker 37	
661	3	a	result of allele 2 of marker 37	
664	10	a	name of marker 38	12
674	3	a	result of allele 1 of marker 38	
677	3	a	result of allele 2 of marker 38	
680	10	a	name of marker 39	12
690	3	a	result of allele 1 of marker 39	
693	3	a	result of allele 2 of marker 39	
696	10	a	name of marker 40	12
706	3	a	result of allele 1 of marker 40	
709	3	a	result of allele 2 of marker 40	

Notes:

1. Always 115, indicating WHFF Blood type record

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply (see Appendix 1)

5. ISO alpha country code (*see Appendix 2)*

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   IT :International Number : normally, number given for the first time to an animal
   IB : International Number given by Interbull
   EU: Europeen Communauty ID Number (when different from IT number)
   Local :
   LC : Local number (Often HerdBook Number, when different from IT Numbers)
   For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
   .Left justified, leave trailing blanks as is
   If Factor ID is equal to IB (Interbull)
   .Right justified, leading blanks as zeros.
   If Factor ID is equal to LC (Local)
   .Left or right justified (in accordance with the choice of the country giving the Local ID number)

10 F = DNA fingerprinting ; M = DNA microsatellite ; S = SNP

11 Mandatory : the order of main markers must not be changed

12 Optional : optional markers - their order can change from one country to another country

General: Numeric fields right justified. All alpha fields upper case.
Missing integer values are filled with zeros.

Record type: **116** **31 March 2006**
Record name: **Recessive or Dominant Genes Profile Record**
Length: Variable (Max = 602)

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	116
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	PHF
14	3	a	Country	5	FRA
17	8	i	Extract date (YYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	CAN
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
			Recessive Genes or proteins		
43	10	a	Name of abnomality or gene	10	BLAD
53	2	a	Gene code*	11	BL
55	2	a	Expression Code*	12	C

* Bytes 43-56 repeated for each gene recorded (max 40 genes or proteins) to byte 602.
Milk proteins

Notes:

1. Always 116, indicating WHFF recessive or dominant genes record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply (*see Appendix 1)*

5. ISO alpha country code (*see Appendix 2)*

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   IT :International Number : normally, number given for the first time to an animal
   IB : International Number given by Interbull
   EU: Europeen Communauty ID Number (when different from IT number)
   Local :
   LC : Local number (Often HerdBook Number, when different from IT Numbers)
   For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
   .Left justified, leave trailing blanks as is
   If Factor ID is equal to IB (Interbull)
   .Right justified, leading blanks as zeros.
   If Factor ID is equal to LC (Local)

   .Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. name of abnormality or gene (optionnal)

11. Gene/Protein Code (*see Appendix 4)*

12. Expression code (see Appendix 4)

General: Numeric fields justified. All alpha fields upper case. Missing integer values are filled with zeros

Record type: **120** **31 March 2006**
Record name: **Lactation Record** **Length: 114**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	120
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYYMMDD)		20050101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	3	a	Units of measurements	10	KGS
46	8	i	Lactation start date (YYYYMMDD)		
54	2	i	Lactation number		
56	4	i	Age at lactation start (YYMM)		
60			305 day lactation details		
60	3	i	Days in milk		
63	5	i	Milk yield		
68	3	i	Fat yield		
71	3	i	Protein yield		
74	3	i	Fat % (% *100)		403
77	3	i	Protein % (% *100)		
80	2	i	Tests		
82	4	a	Milkings per day	11	
86	2	a	Recording frequency	12	
88	1	a	Approval indicator	13	Y
89	1	a	Observation code 1	14	B
90	1	a	Observation code 2	14	
91	1	a	Observation code 3	14	
92	2	i	No of supervised tests		
			Natural lactation details		
94	4	i	Days in milk		
98	5	i	Milk yield		
103	3	i	Fat yield		
106	3	i	Protein yield		
109	3	i	Fat % (% *100)		
112	3	i	Protein % (% *100)		

Notes:

1. Always 120, indicating WHFF lactation record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply. (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)

.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. Indicates weighings, KGS is kilograms, LBS is pounds..

11. Blank indicates 2 milkings per day, 1X is one milking per day, 3X is three milkings per day, 4X is four milkings per day, RX is continuous milking (eg robotic milking).

Regular milkings not at the same times on each day are shown as the average number of milkings per day, eg 10 milkings per week is shown as 1.4X.

Animal both milked and suckled is shown as SX (number of times milked prefixes the S)

Alternative milking (herd is recorded at one milking at one recording visit and a different milking at the next recording visit) is shown as T.

Comparative milking (herd is recorded at the same milking at each recording visit) is shown as C.

12. A4 = A4 method, A6 = A6 method, etc.

13 Y, lactation is official, N, lactation is non-official

14. "abnormalities" observed during the lactation, B is animal received BST treatment, 3 is animal has three teats, E is animal calved early…

General: Numeric fields right justified. All alpha fields upper case. Missing integer values are filled zeros.

Record type: **121** **31 March 2006**
Record name: **Lifetime Milk Production Record** **Length: 74**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	121
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20050101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
			Lifetime lactation details		
43	3	a	Units of measurement	10	KGS
46	2	i	Total lactations		
48	4	i	Total days in milk		
52	6	i	Total milk yield		
58	5	i	Total fat yield		
63	5	i	Total protein yield		
68	3	i	Average fat % (% *100)		
71	3	i	Average protein % (% *100)		
74	1	a	Approval indicator	11	Y

Notes:

1. Always 121, indicating WHFF lifetime milk production record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply. (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   - IT :International Number : normally, number given for the first time to an animal
   - IB : International Number given by Interbull
   - EU: Europeen Communauty ID Number (when different from IT number)

   Local :
   - LC : Local number (Often HerdBook Number, when different from IT Numbers)

   For International Exchanges, Local number (LC) should not be used

Record type: **122** **31 March 2006**
Record name: **Female Type Classification Record** **Length: 335**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record Type	1	122
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date(YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	8	i	Inspection date (YYYYMMDD)		
51	3	a	Inspection organisation code		HFS
54	2	i	Lactation no at inspection		
56	1	i	Inspection sequence number	10	1
57	12	a	Herd at time of inspection	11	
69			Linear scores		
69	3	a	trait 1- short name	12	STA
72	1	a	trait 1- (WHFF agreed / Optional/ blanc)	13	W
73	2	i	trait 1- score	14	05
75	3	a	trait 2- short name		
78	1	a	trait 2- (WHFF agreed / Optional/ blanc)		
79	2	i	trait 2- score		
81	3	a	trait 3- short name		
84	1	a	trait 3- (WHFF agreed / Optional/ blanc)		
85	2	i	trait 3- score		
87	3	a	trait 4- short name		
90	1	a	trait 4- (WHFF agreed / Optional/ blanc)		
91	2	i	trait 4- score		
93	3	a	trait 5- short name		
96	1	a	trait 5- (WHFF agreed / Optional/ blanc)		
97	2	i	trait 5- score		
99	3	a	trait 6- short name		
102	1	a	trait 6- (WHFF agreed / Optional/ blanc)		
103	2	i	trait 6- score		
105	3	a	trait 7- short name		
108	1	a	trait 7- (WHFF agreed / Optional/ blanc)		
109	2	i	trait 7- score		
111	3	a	trait 8- short name		
114	1	a	trait 8- (WHFF agreed / Optional/ blanc)		
115	2	i	trait 8- score		
117	3	a	trait 9- short name		
120	1	a	trait 9- (WHFF agreed / Optional/ blanc)		
121	2	i	trait 9- score		
123	3	a	trait 10- short name		
126	1	a	trait 10- (WHFF agreed / Optional/ blanc)		
127	2	i	trait 10- score		
129	3	a	trait 11- short name		
132	1	a	trait 11- (WHFF agreed / Optional/ blanc)		
133	2	i	trait 11- score		
135	3	a	trait 12- short name		
138	1	a	trait 12- (WHFF agreed / Optional/ blanc)		
139	2	i	trait 12- score		
141	3	a	trait 13- short name		

144	1	a	trait 13- (WHFF agreed / Optional/ blanc)
145	2	i	trait 13- score
147	3	a	trait 14- short name
150	1	a	trait 14- (WHFF agreed / Optional/ blanc)
151	2	i	trait 14- score
153	3	a	trait 15- short name
156	1	a	trait 15- (WHFF agreed / Optional/ blanc)
157	2	i	trait 15- score
159	3	a	trait 16- short name
162	1	a	trait 16- (WHFF agreed / Optional/ blanc)
163	2	i	trait 16- score
165	3	a	trait 17- short name
168	1	a	trait 17- (WHFF agreed / Optional/ blanc)
169	2	i	trait 17- score
171	3	a	trait 18- short name
174	1	a	trait 18- (WHFF agreed / Optional/ blanc)
175	2	i	trait 18- score
177	3	a	trait 19- short name
180	1	a	trait 19- (WHFF agreed / Optional/ blanc)
181	2	i	trait 19- score
183	3	a	trait 20- short name
186	1	a	trait 20- (WHFF agreed / Optional/ blanc)
187	2	i	trait 20- score
189	3	a	trait 21- short name
192	1	a	trait 21- (WHFF agreed / Optional/ blanc)
193	2	i	trait 21- score
195	3	a	trait 22- short name
198	1	a	trait 22- (WHFF agreed / Optional/ blanc)
199	2	i	trait 22- score
201	3	a	trait 23- short name
204	1	a	trait 23- (WHFF agreed / Optional/ blanc)
205	2	i	trait 23- score
207	3	a	trait 24- short name
210	1	a	trait 24- (WHFF agreed / Optional/ blanc)
211	2	i	trait 24- score
213	3	a	trait 25- short name
216	1	a	trait 25- (WHFF agreed / Optional/ blanc)
217	2	i	trait 25- score
219	3	a	trait 26- short name
222	1	a	trait 26- (WHFF agreed / Optional/ blanc)
223	2	i	trait 26- score
225	3	a	trait 27- short name
228	1	a	trait 27- (WHFF agreed / Optional/ blanc)
229	2	i	trait 27- score
231	3	a	trait 28- short name
234	1	a	trait 28- (WHFF agreed / Optional/ blanc)
235	2	i	trait 28- score
237	3	a	trait 29- short name
240	1	a	trait 29- (WHFF agreed / Optional/ blanc)
241	2	i	trait 29- score
243	3	a	trait 30- short name
246	1	a	trait 30- (WHFF agreed / Optional/ blanc)
247	2	i	trait 30- score
249	3	a	trait 31- short name
252	1	a	trait 31- (WHFF agreed / Optional/ blanc)
253	2	i	trait 31- score
255	3	a	trait 32- short name
258	1	a	trait 32- (WHFF agreed / Optional/ blanc)
259	2	i	trait 32- score
261	3	a	trait 33- short name
264	1	a	trait 33- (WHFF agreed / Optional/ blanc)

265	2	i	trait 33- score		
267	3	a	trait 34- short name		
270	1	a	trait 34- (WHFF agreed / Optional/ blanc)		
271	2	i	trait 34- score		
273	3	a	trait 35- short name		
276	1	a	trait 35- (WHFF agreed / Optional/ blanc)		
277	2	i	trait 35- score		
279	3	a	trait 36- short name		
282	1	a	trait 36- (WHFF agreed / Optional/ blanc)		
283	2	i	trait 36- score		
285	3	a	trait 37- short name		
288	1	a	trait 37- (WHFF agreed / Optional/ blanc)		
289	2	i	trait 37- score		
291	3	a	trait 38- short name		
294	1	a	trait 38- (WHFF agreed / Optional/ blanc)		
295	2	i	trait 38- score		
297	3	a	trait 39- short name		
300	1	a	trait 39- (WHFF agreed / Optional/ blanc)		
301	2	i	trait 39- score		
303	3	a	trait 40- short name		
306	1	a	trait 40- (WHFF agreed / Optional/ blanc)		
307	2	i	trait 40- score		
309	6	a	Linear table - version (YYYYMM)	15	
			Classification:D33		
315	2	a	Body Conformation	16	EX
317	2	i	Score for Body Conformation	17	
319	2	a	Dairy Character	16	
321	2	i	Score for Dairy Character	17	
323	2	a	Legs and Feet	16	
325	2	i	Score for Legs and Feet	17	
327	2	a	Mammary System	16	
329	2	i	Score for Mammary System	17	
331	2	a	Overall classification	16	
333	2	i	Overall classification score	17	
335	1	i	No of times Excellent	18	

Notes:

1. Always 122, indicating WHFF female type classification record

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply.
(see Appendix 1)

5. ISO alpha country cose. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. 1 indicates first inspection, 2 indicates second inspection etc. etc.

11. Name of herd (or herd identity number) in which animal was inspected.

12. Linear Trait : Short Name (see APPENDIX 5)

13. Type of agreement : W = WHFF agreed ; O = Optional ; Blanc = Other
trait (2 countries can exchange traits who are'nt areed by WHFF, neither

14. Score of linear trait (range 01 - 09/01-50)

15. Linear table : last version approved by the board council or the general
Assenbly :date of approval (YYYYMM)

16. Code for classification:

EX Excellent	VG Very Good
GP Good Plus	G Good
F Fair	P Poor

17. Classification score, range 01 - 99

18. No of inspections at which the animal has achieved an overall classification of Excellent.

General: Numeric fields justified. All alpha fields upper case. Missing integer values are filled with

Record type: **123** **31 March 2006**
Record name: **Female Service/Embryo Service Record** **Length: 170**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record Type	1	123
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal	10	
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
			Service		
43	8	i	Service date (YYYYMMDD)		
51	1	a	Service code (type)	11	A
			International ID of service sire		
52	2	a	ID factor	6	
54	3	a	Country of origin	7	
57	1	a	Sex of animal	8	
58	12	a	ID number	9	
70	2	a	Sire's breed	12	HO
72	2	i	Sequence number	13	01
74	1	a	Conception code	14	U
			International ID of donor dam	15	
75	2	a	ID factor	6	
77	3	a	Country of origin	7	
80	1	a	Sex of animal	8	
81	12	a	ID number	9	
93	2	a	Donor dam's breed	16	HO
95	8	a	Recovery date of embryo (YYYYMMDD)		
103	30	a	Individual embryo id (if frozen)	17	CANF5401327 19950125123
133	30	a	Recipient dam id (if implanted)	18	CANF5036270
163	8	a	Embryo transplant date (YYYYMMDD)		

NB: This record may be present more than once for each animal to record a succession of services (see note 13).

Notes:

1. Always 123, indicating WHFF female service/embryo service record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply. (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :

IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)

Local :

LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the

10. The International ID fields will be blank if this is a record for an embryo (implanted or frozen)

11. Type of Service, N is natural, A is artifivical, V is in-vitro, U is in-utero.

12. Code for breed of sire (see Appendix 3)

13. For the first (or only) record type 123 sent for this animal, this field will contain the value 01. To record a succession of services, further records type 123s will be supplied and in these records this filed will contain a sequence number to indicate the order of service records.

14. If this record is an embryo service record, then this field will contain E for regular embryo, S for split, C for cloned, or N for nuclear transfer.

15. The following fields are only present if this record is an Embryo Service record (see Note 10)

16. Code for breed of donor Dam (see Appendix 3)

17. Frozen embryos are referenced by their individual indentification. The format established by the international Embryo Transfer Society must be strictly adhered to when freezing embryos and labelling the straw; however for reporting purposes the following is sufficient: donor dam indentification + date of recovery + unique serial number of embryo.

18. Transplanted embryos are referenced by the recipient dam's indentification which may take the format of registration number, tag(s) or name.

General: Numeric fields right justified. All alpha fields upper case. Missing integer values are filled with zeros.

Record type: **124** **31 March 2006**
Record name: **Testday Record** **Length :** **152**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record Type	1	124
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date(YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	3	a	Units of measurements	10	
46	12	a	Herd of the testday - WHFF agreed	11	
58	8	i	Lactation start date (YYYYMMDD)		
66	2	i	Lactation number		
68	8	i	Date of the herd testday		
76			Herd testday details		
76	5	i	Milk yield		
81	3	i	Fat yield		
84	3	i	True protein yield		
87	3	i	Crude protein yield		
90	3	i	Fat % (% *100)		
93	3	i	True protein % (% *100)		
96	3	i	Crude protein % (% *100)		
99	4	i	Somatic cell count		
103	5	i	Milk urea nitrogen (*10)		
108	3	i	Lactose % (% *100)		
111	5	i	Empty (For future use)		
116	5	i	Empty (For future use)		
121	1	a	Record Indicator Milk yield	12	
122	1	a	Record Indicator Fat yield	12	
123	1	a	Record Indicator True protein yield	12	
124	1	a	Record Indicator Crude protein yield	12	
125	1	a	Record Indicator Fat %	12	
126	1	a	Record Indicator True protein %	12	
127	1	a	Record Indicator Crude protein %	12	
128	1	a	Record Indicator Somatic cell count	12	
129	1	a	Record Indicator Milk urea nitrogen	12	
130	1	a	Record Indicator Lactose	12	
131	1	a	Record Indicator Empty	12	
132	1	a	Record Indicator Empty	12	
133	5	a	Milkings per day	13	
138	1	a	Approval indicator Milk yield	14	
139	1	a	Approval indicator Fat yield	14	
140	1	a	Approval indicator True protein yield	14	
141	1	a	Approval indicator Crude protein yield	14	
142	1	a	Approval indicator Fat %	14	
143	1	a	Approval indicator True protein %	14	
144	1	a	Approval indicator Crude protein %	14	
145	1	a	Approval indicator Somatic cell count	14	
146	1	a	Approval indicator Milk urea nitrogen	14	
147	1	a	Approval indicator Lactose	14	
148	1	a	Approval indicator Empty	14	

149	1	a	Approval indicator Empty	14
150	1	a	Observation code 1	15
151	1	a	Observation code 2	15
152	1	a	Observation code 3	15

Notes:

1. Always 124, indicating WHFF testday record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply. (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. Indicates weighings, KGS is kilograms, LBS is pounds..

11. Name of herd (or herd indentity number) in which animal was milked.

12. Indicates whether record is an estimate or actual record
E = Record is an estimate based on a sampling period less than 24 hours
A = Record is an actual record based on a sampling period of at least 24 hours

13. Blank indicates missing, 1X is one milking per day, 2X is two milkings per day, 3X is three milkings per day, 4X is four milkings per day, RX is continuous milking (eg robotic milking).

Regular milkings not at the same times on each day are shown as the average number of milkings per day, eg 10 milkings per week is shown as 1.4X.

Animal both milked and suckled is shown as SX (number of times milked prefixes the S)

Alternative milking (herd is recorded at one milking at one recording visit and a different

milking at the next recording visit) is shown as T.

Comparative milking (herd is recorded at the same milking at each recording visit) is shown as C.

14. Y, testday is official, N, testday is non-official

15. "abnormalities" observed during the lactation, B is animal received BST treatment, 3 is animal has three teats, E is animal calved early…

General: Numeric fields right justified. All alpha fields upper case. Missing integer values are filled zeros.

Record type: 130 — 31 March 2006
Record name: Breeding Value for Production Record — **Length :** 238

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record Type	1	130
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date(YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	
31	12	a	ID number	9	F
43	8	i	Date of national evaluation (YYYYMMDD)		
51	7	a	Reference base definition	10	
58	3	a	Unit of measurement	11	
61	2	a	Genetic merit definition of national proof	12	
63	2	i	Type of proof	15	
65	1	a	Incorporation of foreign proof	16	
66	1	a	Official publication of proof	17	
67	6	i	Date of birth of first AI daughters in the country sending this information (YYYYMM)		
73	2	i	Status	18, 13	
75	2	i	No of own lactations in proof	14	
77	3	i	No of own testdays in proof	12	
80	2	i	Avg no of daughters' lactations (avg *10)	13	
82	3	i	Avg no of daughters' testdays (avg *10)	13	
			MILK YIELD PROOF		
85	6	i	Number of daughters	13	
91	6	i	Number of herds	13	
97	2	i	Repeatability/Reliability		
99	8	i(S)	Milk yield national proof (* 100)	19	
107	8	i(S)	Milk yield DYD (* 100)	19, 13	
115	8	i(S)	Milk yield YD (* 100)	19, 14	
			FAT YIELD PROOF		
123	6	i	Number of daughters	13	
129	6	i	Number of herds	13	
135	2	i	Repeatability/Reliability		
137	6	i(S)	Fat yield national proof (* 100)	19	
143	6	i(S)	Fat yield DYD (* 100)	19, 13	
149	6	i(S)	Fat yield YD (* 100)	19, 14	
			PROTEIN YIELD PROOF		
155	6	i	Number of daughters	13	
161	6	i	Number of herds	13	
167	2	i	Repeatability/Reliability		
169	6	i(S)	Protein yield national proof (* 100)	19	
175	6	i(S)	Protein yield DYD (* 100)	19, 13	
181	6	i(S)	Protein yield YD (* 100)	19, 14	
			FAT PERCENTAGE PROOF		
187	6	i	Number of daughters	13	
193	6	i	Number of herds	13	
199	2	i	Repeatability/Reliability		
201	4	i(S)	Fat percentage national proof (* 100)	19	
205	4	i(S)	Fat percentage DYD (* 100)	19, 13	
209	4	i(S)	Fat percentage YD (* 100)	19, 14	
			PROTEIN PERCENTAGE PROOF		
213	6	i	Number of daughters	13	
219	6	i	Number of herds	13	
225	2	i	Repeatability/Reliability		
227	4	i(S)	Protein percentage national proof (* 100)	19	
231	4	i(S)	Protein percentage DYD (* 100)	19, 13	
235	4	i(S)	Protein percentage YD (* 100)	19, 14	

Notes:

1. Always 130, indicating WHFF breeding value for production record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply.
(see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. For designation of genetic base the following convention should be followed (Interbull guidelines november 2001):
1) A letter indicating breed of evaluation (e.g. A, B, G, H, J, or S for the breeds Ayrshire, Brown Swiss, Guernsey, Holstein, Jersery or Simmental, X for multiple breeds in the base definition);
2) Two digits indicating the year of base established (e.g. 00 for year 2000);
3) A letter indicating type of animals included (e.g. C, or B, for cows or bulls);
4) A letter indicating the event used (e.g. B, or C, for birth or calving);
5) Two digits to indicate the event's year (e.g. 95 for year 1995).
For example, H00CB95 which means a base defined in 2000 (00),
based on Holstein (H) Cows (C) Born (B) in 1995 (95)

11. Unit of expression of national proof and daughter yield deviation in the country sending this information. KGS is kilogram, LTR is litre, LBS is pound, RBV is Relative Breeding Value, BCA is Breed Class Average

12. BV is Breeding Value, TA is Transmitting Ability (half BV).

13. Refers to sires' proofs only (field is zero filled if this record is for a female)

14. Refers to females' proofs only (field is zero filled if this record is for a sire)

15. Type of proof:

00	unknown
11	Domestic proof
12	First and second crops
13	second crop only (imported proven bulls)
21	pedigree index
31	converted proof
41	MACE proof

16. Incorporation of foreign proof: Y if converted proof or DYD from another country are incorporation in this national proof, N if not.

17. Official publication of proof: Y if the proof met national standards for official publication.

18. Animal's status:

00	unknown
10	AI bull
20	Other bull

19. DYD is Daughter Yield Deviation.
YD is Yield Deviation
National proof expressed as either estimated BV or TA (note 8) in base and units for the country sending this information (notes 6 & 7) and multiplied by 100 to include two decimal points.
For missing national proof, DYD or YD fill in 9s:
eg. Missing milk yield national proof +9999999
missing fat yield DYD +99999

General: Numeric fields right justified. All alpha fields upper case. Missing integer fields are filled with zeros except missing EBV, DYD or YD which are filled with 9's

Record type: **131** **31 March 2006**
Record name: **Breeding Value for Type Record** **Length: 1558**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	131
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	CAN
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	8	i	Date of national evaluation (YYYYMMDD)		
51	7	a	Reference base definition	10	
58	3	i	Unit of measurement	11	
61	2	a	Genetic merit definition of national proof	12	
63	2	i	Type of proof	14	
65	1	a	Incorporation of foreign proof	15	N
66	1	a	Official publication of proof	13	Y
67	6	i	Date of birth of first IA daugthers in the country sending this information (YYYYMM)		
73	2	i	Status	18, 13	
75	2	i	n° of own classification in proof	14	
77	2	i	Avg no of daugther's classification (avg *10)	13	
79					
79			LINEAR OR COMPOSITE TRAITS		
79			**TRAIT 1**		
79	1	a	Type of trait	21	L
80	3	a	Short name	22	STA
83	1	a	WHFF agreed / Optional/ blanc	23	W
84	6	i	Number of daugthers	13	
90	6	i	Number of Herds	13	
96	2	i	Repeatability/Reliability		
98	6	i(S)	national proof (*100)	19	
104	6	i(S)	DYD (*100)	19,13	
110	6	i(S)	YD (*100)	19,14	
116			**TRAIT 2**		
116	1		Type of trait	21	L
117	3	a	Short name	22	CHW
120	1	a	WHFF agreed / Optional/ blanc	23	W
121	6	i	Number of daugthers	13	
127	6	i	Number of Herds	13	
133	2	i	Repeatability/Reliability		
135	6	i(S)	national proof (*100)	19	
141	6	i(S)	DYD (*100)	19,13	
147	6	i(S)	YD (*100)	19,14	
153			**TRAIT 3**		
153	1		Type of trait	21	L
154	3	a	Short name	22	BDD
157	1	a	WHFF agreed / Optional/ blanc	23	W
158	6	i	Number of daugthers	13	
164	6	i	Number of Herds	13	
170	2	i	Repeatability/Reliability		
172	6	i(S)	national proof (*100)	19	
178	6	i(S)	DYD (*100)	19,13	

184	6 i(S)	YD (*100)	19,14	
190		**TRAIT 4**		
190	1	Type of trait	21	L
191	3 a	Short name	22	ANG
194	1 a	WHFF agreed / Optional/ blanc	23	W
195	6 i	Number of daugthers	13	
201	6 i	Number of Herds	13	
207	2 i	Repeatability/Reliability		
209	6 i(S)	national proof (*100)	19	
215	6 i(S)	DYD (*100)	19,13	
221	6 i(S)	YD (*100)	19,14	
227		**TRAIT 5**		
227	1	Type of trait	21	L
228	3 a	Short name	22	RPA
231	1 a	WHFF agreed / Optional/ blanc	23	W
232	6 i	Number of daugthers	13	
238	6 i	Number of Herds	13	
244	2 i	Repeatability/Reliability		
246	6 i(S)	national proof (*100)	19	
252	6 i(S)	DYD (*100)	19,13	
258	6 i(S)	YD (*100)	19,14	
264		**TRAIT 6**		
264	1	Type of trait	21	L
265	3 a	Short name	22	RPW
268	1 a	WHFF agreed / Optional/ blanc	23	W
269	6 i	Number of daugthers	13	
275	6 i	Number of Herds	13	
281	2 i	Repeatability/Reliability		
283	6 i(S)	national proof (*100)	19	
289	6 i(S)	DYD (*100)	19,13	
295	6 i(S)	YD (*100)	19,14	
301		**TRAIT 7**		
301	1	Type of trait	21	L
302	3 a	Short name	22	RLR
305	1 a	WHFF agreed / Optional/ blanc	23	W
306	6 i	Number of daugthers	13	
312	6 i	Number of Herds	13	
318	2 i	Repeatability/Reliability		
320	6 i(S)	national proof (*100)	19	
326	6 i(S)	DYD (*100)	19,13	
332	6 i(S)	YD (*100)	19,14	
338		**TRAIT 8**		
338	1	Type of trait	21	L
339	3 a	Short name	22	RLS
342	1 a	WHFF agreed / Optional/ blanc	23	W
343	6 i	Number of daugthers	13	
349	6 i	Number of Herds	13	
355	2 i	Repeatability/Reliability		
357	6 i(S)	national proof (*100)	19	
363	6 i(S)	DYD (*100)	19,13	
369	6 i(S)	YD (*100)	19,14	
375		**TRAIT 9**		
375	1	Type of trait	21	L
376	3 a	Short name	22	FTA
379	1 a	WHFF agreed / Optional/ blanc	23	W
380	6 i	Number of daugthers	13	
386	6 i	Number of Herds	13	
392	2 i	Repeatability/Reliability		
394	6 i(S)	national proof (*100)	19	
400	6 i(S)	DYD (*100)	19,13	
406	6 i(S)	YD (*100)	19,14	

412		**TRAIT 10**		
412	1	Type of trait	21	L
413	3 a	Short name	22	FUA
416	1 a	WHFF agreed / Optional/ blanc	23	W
417	6 i	Number of daugthers	13	
423	6 i	Number of Herds	13	
429	2 i	Repeatability/Reliability		
431	6 i(S)	national proof (*100)	19	
437	6 i(S)	DYD (*100)	19,13	
443	6 i(S)	YD (*100)	19,14	
449		**TRAIT 11**		
449	1	Type of trait	21	L
450	3 a	Short name	22	FTP
453	1 a	WHFF agreed / Optional/ blanc	23	W
454	6 i	Number of daugthers	13	
460	6 i	Number of Herds	13	
466	2 i	Repeatability/Reliability		
468	6 i(S)	national proof (*100)	19	
474	6 i(S)	DYD (*100)	19,13	
480	6 i(S)	YD (*100)	19,14	
486		**TRAIT 12**		
486	1	Type of trait	21	L
487	3 a	Short name	22	TTL
490	1 a	WHFF agreed / Optional/ blanc	23	W
491	6 i	Number of daugthers	13	
497	6 i	Number of Herds	13	
503	2 i	Repeatability/Reliability		
505	6 i(S)	national proof (*100)	19	
511	6 i(S)	DYD (*100)	19,13	
517	6 i(S)	YD (*100)	19,14	
523		**TRAIT 13**		
523	1	Type of trait	21	L
524	3 a	Short name	22	UDP
527	1 a	WHFF agreed / Optional/ blanc	23	W
528	6 i	Number of daugthers	13	
534	6 i	Number of Herds	13	
540	2 i	Repeatability/Reliability		
542	6 i(S)	national proof (*100)	19	
548	6 i(S)	DYD (*100)	19,13	
554	6 i(S)	YD (*100)	19,14	
560		**TRAIT 14**		
560	1	Type of trait	21	L
561	3 a	Short name	22	RUH
564	1 a	WHFF agreed / Optional/ blanc	23	W
565	6 i	Number of daugthers	13	
571	6 i	Number of Herds	13	
577	2 i	Repeatability/Reliability		
579	6 i(S)	national proof (*100)	19	
585	6 i(S)	DYD (*100)	19,13	
591	6 i(S)	YD (*100)	19,14	
597		**TRAIT 15**		
597	1	Type of trait	21	L
598	3 a	Short name	22	CLG
601	1 a	WHFF agreed / Optional/ blanc	23	W
602	6 i	Number of daugthers	13	
608	6 i	Number of Herds	13	
614	2 i	Repeatability/Reliability		
616	6 i(S)	national proof (*100)	19	
622	6 i(S)	DYD (*100)	19,13	
628	6 i(S)	YD (*100)	19,14	
634		**TRAIT 16**		

634	1	Type of trait	21	L
635	3 a	Short name	22	RTP
638	1 a	WHFF agreed / Optional/ blanc	23	W
639	6 i	Number of daugthers	13	
645	6 i	Number of Herds	13	
651	2 i	Repeatability/Reliability		
653	6 i(S)	national proof (*100)	19	
659	6 i(S)	DYD (*100)	19,13	
665	6 i(S)	YD (*100)	19,14	
671		**TRAIT 17**		
671	1	Type of trait	21	C
672	3 a	Short name	22	FRM
675	1 a	WHFF agreed / Optional/ blanc	23	W
676	6 i	Number of daugthers	13	
682	6 i	Number of Herds	13	
688	2 i	Repeatability/Reliability		
690	6 i(S)	national proof (*100)	19	
696	6 i(S)	DYD (*100)	19,13	
702	6 i(S)	YD (*100)	19,14	
708		**TRAIT 18**		
708	1	Type of trait	21	C
709	3 a	Short name	22	DRC
712	1 a	WHFF agreed / Optional/ blanc	23	W
713	6 i	Number of daugthers	13	
719	6 i	Number of Herds	13	
725	2 i	Repeatability/Reliability		
727	6 i(S)	national proof (*100)	19	
733	6 i(S)	DYD (*100)	19,13	
739	6 i(S)	YD (*100)	19,14	
745		**TRAIT 19**		
745	1	Type of trait	21	C
746	3 a	Short name	22	MAS
749	1 a	WHFF agreed / Optional/ blanc	23	W
750	6 i	Number of daugthers	13	
756	6 i	Number of Herds	13	
762	2 i	Repeatability/Reliability		
764	6 i(S)	national proof (*100)	19	
770	6 i(S)	DYD (*100)	19,13	
776	6 i(S)	YD (*100)	19,14	
782		**TRAIT 20**		
782	1	Type of trait	21	C
783	3 a	Short name	22	FTL
786	1 a	WHFF agreed / Optional/ blanc	23	W
787	6 i	Number of daugthers	13	
793	6 i	Number of Herds	13	
799	2 i	Repeatability/Reliability		
801	6 i(S)	national proof (*100)	19	
807	6 i(S)	DYD (*100)	19,13	
813	6 i(S)	YD (*100)	19,14	
819		**TRAIT 21**		
819	1	Type of trait	21	C
820	3 a	Short name	22	OVC
823	1 a	WHFF agreed / Optional/ blanc	23	W
824	6 i	Number of daugthers	13	
830	6 i	Number of Herds	13	
836	2 i	Repeatability/Reliability		
838	6 i(S)	national proof (*100)	19	
844	6 i(S)	DYD (*100)	19,13	
850	6 i(S)	YD (*100)	19,14	
856		**TRAIT 22**		
856	1	Type of trait	21	L

857	3 a	Short name	22	LOC
860	1 a	WHFF agreed / Optional/ blanc	23	O
861	6 i	Number of daugthers	13	
867	6 i	Number of Herds	13	
873	2 i	Repeatability/Reliability		
875	6 i(S)	national proof (*100)	19	
881	6 i(S)	DYD (*100)	19,13	
887	6 i(S)	YD (*100)	19,14	
893		**TRAIT 23**		
893	1	Type of trait	21	
894	3 a	Short name	22	
897	1 a	WHFF agreed / Optional/ blanc	23	
898	6 i	Number of daugthers	13	
904	6 i	Number of Herds	13	
910	2 i	Repeatability/Reliability		
912	6 i(S)	national proof (*100)	19	
918	6 i(S)	DYD (*100)	19,13	
924	6 i(S)	YD (*100)	19,14	
930		**TRAIT 24**		
930	1	Type of trait	21	
931	3 a	Short name	22	
934	1 a	WHFF agreed / Optional/ blanc	23	
935	6 i	Number of daugthers	13	
941	6 i	Number of Herds	13	
947	2 i	Repeatability/Reliability		
949	6 i(S)	national proof (*100)	19	
955	6 i(S)	DYD (*100)	19,13	
961	6 i(S)	YD (*100)	19,14	
967		**TRAIT 25**		
967	1	Type of trait	21	
968	3 a	Short name	22	
971	1 a	WHFF agreed / Optional/ blanc	23	
972	6 i	Number of daugthers	13	
978	6 i	Number of Herds	13	
984	2 i	Repeatability/Reliability		
986	6 i(S)	national proof (*100)	19	
992	6 i(S)	DYD (*100)	19,13	
998	6 i(S)	YD (*100)	19,14	
1004		**TRAIT 26**		
1004	1	Type of trait	21	
1005	3 a	Short name	22	
1008	1 a	WHFF agreed / Optional/ blanc	23	
1009	6 i	Number of daugthers	13	
1015	6 i	Number of Herds	13	
1021	2 i	Repeatability/Reliability		
1023	6 i(S)	national proof (*100)	19	
1029	6 i(S)	DYD (*100)	19,13	
1035	6 i(S)	YD (*100)	19,14	
1041		**TRAIT 27**		
1041	1	Type of trait	21	
1042	3 a	Short name	22	
1045	1 a	WHFF agreed / Optional/ blanc	23	
1046	6 i	Number of daugthers	13	
1052	6 i	Number of Herds	13	
1058	2 i	Repeatability/Reliability		
1060	6 i(S)	national proof (*100)	19	
1066	6 i(S)	DYD (*100)	19,13	
1072	6 i(S)	YD (*100)	19,14	
1078		**TRAIT 28**		
1078	1	Type of trait	21	
1079	3 a	Short name	22	

1082	1 a	WHFF agreed / Optional/ blanc	23
1083	6 i	Number of daugthers	13
1089	6 i	Number of Herds	13
1095	2 i	Repeatability/Reliability	
1097	6 i(S)	national proof (*100)	19
1103	6 i(S)	DYD (*100)	19,13
1109	6 i(S)	YD (*100)	19,14
1115		**TRAIT 29**	
1115	1	Type of trait	21
1116	3 a	Short name	22
1119	1 a	WHFF agreed / Optional/ blanc	23
1120	6 i	Number of daugthers	13
1126	6 i	Number of Herds	13
1132	2 i	Repeatability/Reliability	
1134	6 i(S)	national proof (*100)	19
1140	6 i(S)	DYD (*100)	19,13
1146	6 i(S)	YD (*100)	19,14
1152		**TRAIT 30**	
1152	1	Type of trait	21
1153	3 a	Short name	22
1156	1 a	WHFF agreed / Optional/ blanc	23
1157	6 i	Number of daugthers	13
1163	6 i	Number of Herds	13
1169	2 i	Repeatability/Reliability	
1171	6 i(S)	national proof (*100)	19
1177	6 i(S)	DYD (*100)	19,13
1183	6 i(S)	YD (*100)	19,14
1189		**TRAIT 31**	
1189	1	Type of trait	21
1190	3 a	Short name	22
1193	1 a	WHFF agreed / Optional/ blanc	23
1194	6 i	Number of daugthers	13
1200	6 i	Number of Herds	13
1206	2 i	Repeatability/Reliability	
1208	6 i(S)	national proof (*100)	19
1214	6 i(S)	DYD (*100)	19,13
1220	6 i(S)	YD (*100)	19,14
1226		**TRAIT 32**	
1226	1	Type of trait	21
1227	3 a	Short name	22
1230	1 a	WHFF agreed / Optional/ blanc	23
1231	6 i	Number of daugthers	13
1237	6 i	Number of Herds	13
1243	2 i	Repeatability/Reliability	
1245	6 i(S)	national proof (*100)	19
1251	6 i(S)	DYD (*100)	19,13
1257	6 i(S)	YD (*100)	19,14
1263		**TRAIT 33**	
1263	1	Type of trait	21
1264	3 a	Short name	22
1267	1 a	WHFF agreed / Optional/ blanc	23
1268	6 i	Number of daugthers	13
1274	6 i	Number of Herds	13
1280	2 i	Repeatability/Reliability	
1282	6 i(S)	national proof (*100)	19
1288	6 i(S)	DYD (*100)	19,13
1294	6 i(S)	YD (*100)	19,14
1300		**TRAIT 34**	
1300	1	Type of trait	21
1301	3 a	Short name	22
1304	1 a	WHFF agreed / Optional/ blanc	23

1305	6 i	Number of daugthers	13
1311	6 i	Number of Herds	13
1317	2 i	Repeatability/Reliability	
1319	6 i(S)	national proof (*100)	19
1325	6 i(S)	DYD (*100)	19,13
1331	6 i(S)	**YD (*100)**	19,14
1337		**TRAIT 35**	
1337	1	Type of trait	21
1338	3 a	Short name	22
1341	1 a	WHFF agreed / Optional/ blanc	23
1342	6 i	Number of daugthers	13
1348	6 i	Number of Herds	13
1354	2 i	Repeatability/Reliability	
1356	6 i(S)	national proof (*100)	19
1362	6 i(S)	DYD (*100)	19,13
1368	6 i(S)	YD (*100)	19,14
1374		**TRAIT 36**	
1374	1	Type of trait	21
1375	3 a	Short name	22
1378	1 a	WHFF agreed / Optional/ blanc	23
1379	6 i	Number of daugthers	13
1385	6 i	Number of Herds	13
1391	2 i	Repeatability/Reliability	
1393	6 i(S)	national proof (*100)	19
1399	6 i(S)	DYD (*100)	19,13
1405	6 i(S)	YD (*100)	19,14
1411		**TRAIT 37**	
1411	1	Type of trait	21
1412	3 a	Short name	22
1415	1 a	WHFF agreed / Optional/ blanc	23
1416	6 i	Number of daugthers	13
1422	6 i	Number of Herds	13
1428	2 i	Repeatability/Reliability	
1430	6 i(S)	national proof (*100)	19
1436	6 i(S)	DYD (*100)	19,13
1442	6 i(S)	YD (*100)	19,14
1448		**TRAIT 38**	
1448	1	Type of trait	21
1449	3 a	Short name	22
1452	1 a	WHFF agreed / Optional/ blanc	23
1453	6 i	Number of daugthers	13
1459	6 i	Number of Herds	13
1465	2 i	Repeatability/Reliability	
1467	6 i(S)	national proof (*100)	19
1473	6 i(S)	DYD (*100)	19,13
1479	6 i(S)	YD (*100)	19,14
1485		**TRAIT 39**	
1485	1	Type of trait	21
1486	3 a	Short name	22
1489	1 a	WHFF agreed / Optional/ blanc	23
1490	6 i	Number of daugthers	13
1496	6 i	Number of Herds	13
1502	2 i	Repeatability/Reliability	
1504	6 i(S)	national proof (*100)	19
1510	6 i(S)	DYD (*100)	19,13
1516	6 i(S)	YD (*100)	19,14
1522		**TRAIT 40**	
1522	1	Type of trait	21
1523	3 a	Short name	22
1526	**1** a	WHFF agreed / Optional/ blanc	23
1527	6 i	Number of daugthers	13

1533	6 i	Number of Herds	13
1539	2 i	Repeatability/Reliability	
1541	6 i(S)	national proof (*100)	19
1547	6 i(S)	DYD (*100)	19,13
1553	6 i(S)	YD (*100)	19,14

Notes:

1. Always 131, indicating WHFF breeding value for type record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply.
(see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should not be used

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. For designation of genetic base the following convention should be followed :
(Intrebull Guidelines november 2001) :
of the Holstein breed."1) A letter indicating breed of evaluation(e.g; A, B, G, H, J, or S
for the breeds Ayrshire, Brown Swiss, Guernsey, Holstein, jersey or Simmental,
X for multiple breeds in the base definition);
2) Two digits indicating the year of base established (e.g; 00 for year 2000);
3) A letter inducating type of animals included (e.g. C, or B, for cows or bulls);
4) A letter indicating the event used (e.g.B, or C, for birth or calving);
5) Two digits to indicate the event's year (e.g. 95 for year 1995). For example
H00CB95 which means a base defined in 2000 (00), based in Holstein (H),

11. Unit of expression of national proof and daugther yield deviation in the country sending this information. KGS is lilogram, LRT is litre, LBS is pound, RBV is Reklative Breeding Value, BCA is Breed Class Average

12. BV is Breeding Value, TA is transmitting Ab ility (half BV).

13. Refers to sires' proofs only (field is zero filled is this record is for a female)

14. Refers to females' proofs only (field is zero filled is this record is for a sire)

15. Type of proof:
    00 unknown
    11 domestic proof
    12 First and second crops
    13 second crop only (imported proven bulls)
    21 pedigree index
    31 converted index
    41 MACE proof

16. Incorpotation of foreign proof: Y if converted proof from another country is incorporated in this national proof, N if not.

17. Official publication of proof: Y if the proof met national standards for official publication, N if not.

18. Animal's Status:
    00 unknown
    10 AI bull
    20 other bull

19. DYD is Daugther Yield Deviation
YD is Yiled deviation
National Proof expressed as either estimated BV or TA (note 8) in base and units for the country sending this information (nots 6 & 7) and multiplied by 100 to include two decimal points.
For missing national proof, DYD or YD fill in 9s:
eg. Missing stature national proof +99999
Missing chest width DYD +99999

20. For optional traits (Please supply a list with trait descriptions if any of these field is used)

21. Type of Trait :
    L = Linear Trait
    C = Composite Trait

22. Linear Trait : Short Name (see APPENDIX 5)

23. Type of agreement : W = WHFF agreed ; O = Optional (including Research trait) ; Blanc = Other trait (2 countries can exchange traits who are'nt areed by WHFF, neither optional)

General: Numeric fields right justified. All alpha fields upper case. Missing integer values are filled with zeros except missing EBV; DYD or YD which are filled with 9's.

Record type: 132 — 31 March 2006
Record name: Breeding Value for Udder Health Record — Length : 148

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	132
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	CAN
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	8	i	Date of national evaluation (YYYYMMDD)		
51	7	a	Reference base definition	10	
58	3	a	Unit of measurement	11	
61	2	a	Genetic merit definition of national proof	12	
63	2	i	Type of proof	15	
65	1	a	Incorporation of foreign proof	16	
66	1	a	Official publication of proof	17	
67	6	i	Date of birth of first AI daughters in the country		
73			sending this information (YYYYMM)		
73	2	i	Status	18, 13	
75	2	i	No of own lactations in proof	14	
77	3	i	No of own testdays in proof	14	
80	2	i	Avg no of daughters' lactations (avg *10)	13	
82	3	i	Avg no of daughters' testdays (avg *10)	13	
			SOMATIC CELL PROOF		
85	6	i	Number of daughters	13	
91	6	i	Number of herds	13	
97	2	i	Repeatability/Reliability		
99	6	i(S)	national proof (* 100)	19	
105	6	i(S)	DYD (* 100)	19, 13	
111	6	i(S)	YD (* 100)	19, 14	
			CLINICAL MASTITIS PROOF		
117	6	i	Number of daughters	13	
123	6	i	Number of herds	13	
129	2	i	Repeatability/Reliability		
131	6	i(S)	national proof (* 100)	19	
137	6	i(S)	DYD (* 100)	19, 13	
143	6	i(S)	YD (* 100)	19, 14	

Notes:

1. Always 132, indicating WHFF breeding value for udder health record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply.
(see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should be used only for bytes 73 to 74
and for a number who is different from IT

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. For designation of genetic base the following convention should be followed (Interbull guidelines november 2001):

1) A letter indicating breed of evaluation (e.g. A, B, G, H, J, or S for the breeds Ayrshire, Brown Swiss, Guernsey, Holstein, Jersery or Simmental, X for multiple breeds in the base definition);
2) Two digits indicating the year of base established (e.g. 00 for year 2000);
3) A letter indicating type of animals included (e.g. C, or B, for cows or bulls);
4) A letter indicating the event used (e.g. B, or C, for birth or calving);
5) Two digits to indicate the event's year (e.g. 95 for year 1995).
For example, H00CB95 which means a base defined in 2000 (00),
based on Holstein (H) Cows (C) Born (B) in 1995 (95)

11. Unit of expression of national proof and daughter yield deviation in the country sending this information. KGS is kilogram, LTR is litre, LBS is pound, RBV is Relative Breeding Value, BCA is Breed Class Average

12. BV is Breeding Value, TA is Transmitting Ability (half BV).

13. Refers to sires' proofs only (field is zero filled if this record is for a female)

14. Refers to females' proofs only (field is zero filled if this record is for a sire)

15. Type of proof:
00 unknown
11 Domestic proof
12 First and second crops
13 second crop only (imported proven bulls)
21 pedigree index
31 converted proof
41 MACE proof

16. Incorporation of foreign proof: Y if converted proof or DYD from another country are incorporation in this national proof, N if not.

17. Official publication of proof: Y if the proof met national standards for official publication.

18. Animal's status:
00 unknown
10 AI bull
20 Other bull

19. DYD is Daughter Yield Deviation.
YD is Yield Deviation
National proof expressed as either estimated BV or TA (note 8) in base and units for the country sending this information (notes 6 & 7) and multiplied by 100 to include two decimal points.
For missing national proof, DYD or YD fill in 9s:
eg. Missing somatic cell national proof +99999
missing udder health DYD +99999

General: Numeric fields right justified. All alpha fields upper case. Missing integer fields are filled with zeros except missing EBV, DYD or YD which are filled with 9's

Record type: **150** **31 March 2006**
Record name: **Extract Record** **Length: 139**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	150
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	PHF
14	3	a	Country	5	FRA
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	IT
27	3	a	Country of origin	7	FRA
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	0894180324
			Receiving Organisation		
43	3	a	Code		HAC
46	3	a	Country		CAN
49	1	i	Number of generation	10	1
50	3	i	Record type requested 1	11	115
53	1	a	Occurrence number 1	14	
54	3	i	Record type requested 2	12	
57	1	a	Occurrence number 2	14	
58	3	i	Record type requested 3	13	
61	1	a	Occurrence number 3	14	
62	7	a	Filler		
			If Record 115 is asked :Specific fields for each record for asking DNA record (" 115) -pos 69 à 132		
69	15	a	name of requesting laboratory	15	LABOGENA
84	10	a	Code ISAG of the Laboratory		F/S
94	8	a	laboratory ID of animal (or test reference)		123456
102	30	a	Name of animal		
132	8	i	Birth date of the animal		

Notes:

1. Always 150, indicating WHFF extract record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply (see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   - IT :International Number : normally, number given for the first time to an animal
   - IB : International Number given by Interbull
   - EU: Europeen Communauty ID Number (when different from IT number)

   Local :
   - LC : Local number (Often HerdBook Number, when different from IT Numbers)

   For International Exchanges, Local number (LC) should be used only for bytes 73 to 74

and for a number who is different from IT

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.
If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. Number of generations :
1 = Animal + parents + grand-parents,
2 = Animal + parents + grand-parents + greats- grand-parents,
3, 4, 5, 6 , 7 , 8 : etc…
9 = all generation in the file (only applicable with 110 record)
parents and grand-parents and great grand-parents plus the service sire's records (if applicable) OR 990 to indicate ALL records of this animal and the parents and grand-parents plus the service sire's records (if applicable)

11. Type of record 1:
110, 120, etc…
990 to indicate ALL records of this animal and
generation 1 and 2 if asked (Number of generation = 1 or 2)
(Type record 123 will be delivered for animal only)

12. Type of record 2:
110, 120, etc…(If Type of record 1 =/= 990) or blank

13. Type of record 3:
110, 120, etc…(If Type of record 1 =/= 990) or blank

14. Used to request occurrence number of Type of record . 1 is first occurrence, L is lastest occurrence, A is all occurrences.

General: Numeric fields right justified. All alpha fields upper case.
Missing integer values are filled with zeros.

15. Usual Name

Record type: **151** **31 March 2006**
Record name: **Delivery Record** **Length: 89**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	151
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
			Receiving Organisation		
43	3	a	Code		HFS
46	3	a	Country		GBR
49	3	i	Record type requested 1	10	110
52	3	i	Record type requested 2	11	120
55	3	i	Record type requested 3	12	
58	1	a	Delivery code	13	Y
59	1	a	filler		
60	30	a	Cause of non delivery or partial delivery for the animal	14	

Notes:

1. Always 151, indicating WHFF delivery record.

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variaables may apply.
(see Appendix 1)

5. ISO alpha country code. (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
International :
IT :International Number : normally, number given for the first time to an animal
IB : International Number given by Interbull
EU: Europeen Communauty ID Number (when different from IT number)
Local :
LC : Local number (Often HerdBook Number, when different from IT Numbers)
For International Exchanges, Local number (LC) should be used only for bytes 73 to 74
and for a number who is different from IT

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
.Left justified, leave trailing blanks as is
If Factor ID is equal to IB (Interbull)
.Right justified, leading blanks as zeros.

If Factor ID is equal to LC (Local)
.Left or right justified (in accordance with the choice of the country giving the Local

10. Type of record 1:
110, 120, etc…
990 to indicate ALL records of this animal and
generation 1 and 2 if asked (Number of generation = 1 or 2)
(Type record 123 will be delivered for animal only)

11. Type of record 2:
110, 120, etc…(If Type of record 1 =/= 990) or blank

12. Type of record 3:
110, 120, etc…(If Type of record 1 =/= 990) or blank

13. Y indicates that the requested record has been delivered. N indicates that the requested record is unavailable…..

General:Numeric fields right justified. All alpha fields upper case.
Missing integer values are filled with zeros.

14. Only letters : A to Z and Figures: 0 to 9

Record type: **160** **31 March 2006**
Record name: **Progeny Requests Record** **Length: 46**

Starting byte	Lenght	format	description	notes	Examples
1	3	a	Record type	1	160
4	6	i	Version of format (200603) - mandatory	2	200603
10	1	a	Version of format - optionnal	3	
11			Organisation		
11	3	a	Code	4	HUK
14	3	a	Country	5	GBR
17	8	i	Extract date (YYYYMMDD)		20060101
25			International ID of animal		
25	2	a	ID factor	6	
27	3	a	Country of origin	7	GBR
30	1	a	Sex of animal	8	F
31	12	a	ID number	9	
43	1	a	Progeny required	10	A
44	3	a	Type of output required	11	110

Notes:

1. Always 160, indicating WHFF progeny requests record

2. Version of format : Month year (AAAAMM) - See summary for the last version for record

3. Version of format - optional - to use only if you need to update this format according to the receiving country

4. Code for organisation sending record and for which definition of variables may apply (see Appendix 1)

5. ISO alpha country code (see Appendix 2)

6. ID Factor -mandatory :design the origin the ID number is given :
   International :
   IT :International Number : normally, number given for the first time to an animal
   IB : International Number given by Interbull
   EU: Europeen Communauty ID Number (when different from IT number)
   Local :
   LC : Local number (Often HerdBook Number, when different from IT Numbers)
   For International Exchanges, Local number (LC) should be used only for bytes 73 to 74 and for a number who is different from IT

7. ISO alpha country code. (see Appendix 2)

8. F is female, M is male

9. If Factor ID is equal to IT or EU
   .Left justified, leave trailing blanks as is
   If Factor ID is equal to IB (Interbull)
   .Right justified, leading blanks as zeros.
   If Factor ID is equal to LC (Local)
   .Left or right justified (in accordance with the choice of the country giving the Local ID number)

10. M. male progeny or F, female progeny or A, all progeny for the specified animal.

11. Any of the WHFF record types (eg 110 for Animal Pedigree Records) or RPT for a listing of the required progeny.

General:Numeric fields right justified. All alpha fields upper case.
Missing integer values are filled with zeros.

APPENDIX 1
October 2004

ORGANISATION CODES FOR MEMBERS OF

THE WHFF COMMITTEE FOR ELECTRONIC STANDARDS

Organisation Code	Organisation	Country
ACA	Association Criadores de Holando Argentino	ARG
HFA	Holstein-Friesian Association of Australia Inc	AUS
HAT	Holstein Austria	AUT
VRV	Vlaamse Rundveeteelt Vereniging	BEL
HCA	Holstein Canada	CAN
AHC	Asociacion Holstein de Chile	CHL
DAC	Dairy Association of China	CHN
HBC	Holstein Cattle Breeders Association Of the Czech Republic	CZE
ACO	Association Holstein de Colombia	COL
SDM ? DHB ?	SDM Danish Holstein	DNK
EBA	Estonian Black and White Cattle Breeding Association	EST
FAB	Finnish Association of Animal Breeding	FIN
PHF	PRIM'HOLSTEIN FRANCE	FRA
DHV	Deutscher Holstein Verband e V	DEU
AHD	Asociation Holstein Dominicana	DOM
HAH	Holstein Association of Hellas	GRC

HHA	Hungarian Holstein Association	HUN
IRO	IROST	IRN
IHF	Irish Holstein Friesian Assocation	IRL
ICB	Israel Cattle Breeders'Association	ISR
AFI	Associazione Nazionale Allevatori Bovini della Razza Frisona Italiana	ITA
HCJ	Holstein Cattle Association of Japan	JPN
KHF	Kenya Holstein Frisian Cattle Society	KEN
AAL	Animal Breeders' Association of Latvia	LVA
LHA	Lithuanian Holstein Cattle Breeders' Association	LTU
HLU	Fédération des Herd Books Luxembourgeois	LUX
SEG	Service Elevation Genetique	LUX
AHM	Asociacion de Criadores Holstein Friesian de Mexico	MEX
NRS	Organisation NRS	NLD
NZH	NZ Holstein Friesian Association	NZL
NAB	National Animal Breeding Centre	POL
APC	Associaçao Portuguesa dos Criadores Da Raça Frisia	PRT
SLH	Slovak Holstein Association	SVK
CFE	Confederacion des Associaciones de Frisona Española	ESP
SHA	SA Holstein	ZAF
SWH	Swedish Holstein Association	SWE
HCH	Holstein Association of Switzerland	CHE

THA	Thai Holstein Frisian Association	THA
CAT	Cattle Breeders' Association of Turkey	TUR
HUK	Holstein UK	GBR
HA	Holstein Association USA	USA
INT	INTERBULL	SWE

APPENDIX 2
October 2004

WORLD HOLSTEIN FRIESIAN FEDERATION

COUNTRY CODES (ISO 3166)

Member Country	Country Code
Argentina	ARG
Australia	AUS
Austria	AUT
Belgium	BEL
Brazil	BRA
Bulgaria	BGR
Canada	CAN
Chile	CHL
China	CHN
Czech Republic	CZE
Colombia	COL
Denmark	DNK
Dominican Republic	DOM
Ecuador	ECU
Estonia	EST
Finland	FIN
France	FRA
Germany	DEU
Greece	GRC
Hungary	HUN
Iran	IRN
Ireland (Republic of)	IRL
Israel	ISR
Italy	ITA
Japan	JPN
Kenya	KEN
Latvia	LVA
Lithuania	LTU
Luxembourg	LUX
Mexico	MEX
Netherlands, The	NLD
New Zealand	NZL

Poland	**POL**
Portugal	**PRT**
Slovakia	**SVK**
Slovenla	**SVN**
Spain	**ESP**
South Africa	**ZAF**
Sweden	**SWE**
Switzerland	**CHE**
Thailand	**THA**
Turkey	**TUR**
United Kingdom	**GBR**
Unites States of America	**USA**

The country code ISO 3166 is used. Above is given a sub-list (non restrictive) with Holstein Cattle.

APPENDIX 3.1
June 2004

WORLD HOLSTEIN FRIESIAN FEDERATION
BREED CODES

Main breed name	Breed code	Main breed name	Breed code
Abondance	AB	Holstein	HO
Tyrol Grey	AL	Hereford, polled	HP
Angus	AN	Jersey	JE
Aubrac	AU	Limousin	LM
Ayrshire	AY	Maine-Anjou	MA
Belgian Blue	BB	Murray-Grey	MG
Blonde d'Aquitaine	BD	Montbéliard	MO
Buffalo (Bubalis bubalis)	BF	Marchigiana	MR
Beefmaster	BM	Normandy	NO
Brangus	BN	Piedmont	PI
Braford	BO	Pinzgau	PZ
Brahman	BR	European Red Dairy Breed	RE
Brown Swiss	BS	Romagnola	RN
Chianina	CA	Holstein, Red and White	RW (or WW)
Charolais	CH	South Devon	SD
Dexter	DR	Santa Gertrudis	SG
Galloway	GA	Shorthorn	SH
Guernsey	GU	Salers	SL
Gelbvieh	GV	Simmental	SM
Hereford, horned	HH	Sahiwal	SW
Highland Cattle	HI	Tarentaise	TA
		Welsh Black	WB

The above codes are recommended by ICAR for breed identification.

APPENDIX 3.2
June 2004

WORLD HOLSTEIN FRIESIAN FEDERATION
BREED CODES

Main breed name

English name		National name
Angus	including:	Aberdeen Angus
		Canadian Angus
		American Angus
		German Angus
Ayrshire	including:	Ayrshire in Australia
		Ayrshire in Canada
		Ayrshire in Colombia
		Ayrshire in Czech Republic
		Ayrshire in Finland
		Ayrshire in Kenya
		Ayrshire in New Zealand
		Ayrshire in Norway (NRF)
		Ayrshire in Russia
		Ayrshire in South Africa
		Ayrshire in Sweden (SRB) and SAB
		Ayrshire in UK
		Ayrshire in US
		Ayrshire in Zimbabwe
Belgian Blue	French:	Blanc-bleu Belge
	Flamish:	Witblauw Ras van Belgie
Brown Swiss	German:	Braunvieh
	Italian:	Razza Bruna
	French:	Race Brune
	Spanish:	Bruna, Parda Alpina
	Serbo-Croatian:	Slovenacko belo
	Czech:	Hnedy Karpatsky
	Romanian:	Shivitskaja

	Russian:	**Bruna**
	Bulgarian:	**B'ljarska kafyava**
European Red Dairy Breed	**including:**	**Danish Red**
		Angeln
		Swedish Red and White
		Norwegian Red and White
		Estonian Red
		Latvian Brown
		Lithuanian Red
		Byelorus Red
		Polish Red Lowland
		Ukrainian Polish Red
Galloway	**including:**	**Black and Dun**
		Galloway
		Belted Galloway
		Red Galloway
		White Galloway
Holstein, Black and White	**Dutch:**	**Holstein Swartbont**
	German:	**Deutsche Holstein, schwarzbunt**
	Danish:	**Sortbroget Dansk Malkekvaeg**
	British:	**Holstein Friesian**
	Swedish:	**Svensk Låglands Boskaap**
	French:	**Prim'Holstein**
	Italian:	**Holstein Frisona**
	Spanish:	**Holstein Frisona**
Holstein, Red and White	**Dutch:**	**Holstein, roodbunt**
	French:	**Prim'Holstein**
	German:	**Holstein, rotbunt**
	Danish:	**Roedbroget Dansk Malkekvaeg**
Piedmont	**Italian:**	**Piemontese**
Shorthorn	**including:**	**Dairy Shorthorn**
		Beef Shorthorn
		Polled Shorthorn
Simmental	**including dual purpose and beed use**	

	German:	**Fleckvieh**
	Italian:	**Razza Pezzata Rossa**
	Czech:	**Cesky strakatý**
	Slovakian:	**Slovensky strakaty**
	Romanian:	**Baltata românească**
	Russian:	**Simmentalskaja**
Tyrol Grey	**German:**	**Tiroler Grauvieh**
		Oberinntaler Grauvieh
		Rätisches Grauvieh
	Italian:	**Razza Grigia Alpina**

APPENDIX 4
September 2004

WHFF - RECESSIVE/DOMINANT PROFILE GENES CODES

MASTER LIST

Expression Code: F = tested and noncarrier, C = Tested carrier

Name of abnormality or gene	Description	Gene Codes	Gene and Expression codes
BLAD	Bovine Leucocyte Adhésion Deficiency	BL	BLC = Tested carrier of BLAD; BLF = Tested noncarrier of BLAD
MULEFOOT	Mule-Foot	MF	MFC = Tested carrier of Mulefoot ; MFF = Tested noncarrier of Mulefoot
DUMPS	Deficiency of Uridine Monophosphate Synthase	DP	DPC = Tested carrier of Dumps ; DPF = Tested noncarrier of Dumps
CVM	Complex Vertebral Malformation	CV	CVC = Tested carrier of CVM; CVF = Tested noncarrier of CVM
BULLDOG	Bulldog	BD	BDC = Tested carrier of Bulldog; BDF = Tested noncarrier of

			Bulldog
RED FACTOR	**Red factor (red hair colour)**	**RF**	**RFC = Tested carrier of Red factor ; RFF = Tested noncarrier of Red factor**
BLACK/RED	**Black/Red**	**BR**	**BRC = Tested carrier of Black/Red**

OTHER LIST

Name of abnormality or gene	**Description**	**Gene Codes**	**Gene and Expression codes**
VKCN	**Kapa Casein**	**KC**	**KCAA = Carrier of alleles AA; KCAB = Carrier of alleles AB; KCBB = Carrier of alleles BB**
POLLED	**Polled**	**PL ?**	**PLC = Carrier of Polled (dominant)**

Note: Some of the above genes code may not be recorded in all WHFF member countries.

APPENDIX 5
November 2003

WHFF - LINEAR TRAITS

Last updated:

Linear Traits	Shorts name	Type of agreement (WHFF AGREEMENT/OPTIONAL /
STATURE	STA	W
CHEST WIDTH	CHW	W
BODY DEPTH	BDD	W
ANGULARITY	ANG	W
RUMP ANGLE	RPA	W
RUMP WIDTH	RPW	W
REAR LEGS REAR VIEW	RLR	W
REAR LEGS SIDE VIEW	RLS	W
FOOT ANGLE	FTA	W
FORE UDDER ATTACHEMENT	FUA	W
FRONT TEAT PLACEMENT	FTP	W
TEAT LENGHT	TTL	W
UDDER DEPTH	UDP	W
REAR UDDER HEIGHT	RUH	W
CENTRAL LIGAMENT	CLG	W
REAR TEAT PLACEMENT	RTP	W
LOCOMOTION	LCM	O
BALANCE	BLC	O
BODY CONDITION SCORE	BCS	O
ETC		

WORLD HOLSTEIN FRIESIAN FEDERATION

ELECTRONIC DATA EXCHANGE AMONGST WHFF ORGANISATIONS

TECHNICAL DIRECTORY

; Issue No 4 - April 2006

ELECTRONIC DATA EXCHANGE AMONGST WHFF ORGANISATIONS

TECHNICAL DIRECTORY

Issue 4 - April 2006

Country	Association
AUSTRALIA	Holstein Australia
E-mail address :	enquiry@holstein.com.au
FTP address :	
Web site :	www.holstein.com.au
Contact person :	?
	Tel: 03 9835 7600

Country	Association
BELGIUM	Vlaamse Rundveeteelt Vereniging (VRV)
E-mail address :	vrv@vrv.be
FTP address :	
Web site :	www.vrv.be
Contact person :	IPAR–Erwin Speybroeck
	Tel : + 32 93639210

Country	Association
CANADA	Holstein Canada
E-mail address :	gcherry@holstein.ca
FTP address :	CP 610, Brantford, ON Canada N3T 5R4
Web site :	www.holstein.ca
Contact person :	Glenn Cherry
	Tel : 1 519-756-8300 ext:233

Country	Association
CHILE	Asociacion Holstein de Chile
E-mail address :	holsteinchile@hotmail.com
FTP address :	
Web site :	
Contact person :	SUSANA HERRERA R
	Tel : 56-2-6834738

Country	Association
DENMARK	SDM - Danish Holstein
E-mail address :	okh@landscentret.dk
FTP address :	
Web site :	www.sdm-dh.dk
Contact person :	Ole Klejs Hansen
	Tel : + 45 8740 5295

Country	Association
DOMINICAN REPUBLIC	Asociacion Holstein Dominicana, Inc (AHD)
E-mail address :	ahddom@hotmail.com
FTP address :	
Web site :	
Contact person :	Sabrina Biffi
	Tel : (809) 535-7167 / 534-5761

Country	Association
FRANCE	Prim'Holstein FRANCE
E-mail address :	jean.rainaut@primholstein.com
FTP address :	
Web site :	www.primholstein.com
Contact person :	Jean Rainaut
	Tel : 33 2 41 37 66 51

Country	Association
GERMANY	Deutscher Holstein Verban eV (DHV)
E-mail address :	wilse@vit.de - info@holstein-dhv.de
FTP address :	
Web site :	www.holstein-dhv.de
Contact person :	Wilfried Ilse/ Egbert Feddersen
	Tel: + 49-4231-955121 / + 49 228-91 447 51

Country	Association
ISRAEL	Israel Cattle Breeders' Association
E-mail address :	hmb-hboaz@icba.org.il
FTP address :	?
Web site :	www.icba-israel.com
Contact person :	?
	Tel: +972 4627 9700

Country	Association
ITALY	ANAFI
E-mail address :	Giorgiocivati@anafi.it
FTP address :	
Web site :	www.anafi.it
Contact person :	Giorgio Civati
	Tel : + 39 0372474218

Country	Association
JAPAN	Holstein Cattle Association of Japan
E-mail address :	hcaj@group.lin.go.jp
FTP address :	?
Web site :	www.group.lin.go.jp/hcaj/
Contact person :	?
	Tel: +81 3 3564 8221

Country	Association
MEXICO	Holstein de Mexico AC
E-mail address :	holstein@prodigy.net.mx
FTP address :	?
Web site :	?
Contact person :	?
	Tel: +52 442 120 269

Country	Association
THE NETHERLANDS	CR Delta
E-mail address :	koorn.d@cr-delta.nl
FTP address :	
Web site :	www.nrs.nl
Contact person :	M. Dick Koorn
	Tel. + 31-26-3898 700

Country	Association
SOUTH AFRICA	SA Holstein
E-mail address :	Gerrie@saholstein.co.za
FTP address :	
Web site :	www.saholstein.co.za
Contact person :	Gerrie du Preez
	Tel : + 27-51-4479123

Country	Association
SPAIN	CONAFE (Confederation de Associaciones de Frisona Espanola)
E-mail address :	Joseluis.tejeda@conafe.com
FTP address :	www.conafe.com
Web site :	www.conafe.com
Contact person :	Jose Luis Tejeda
	Tel : + 34 91 895 24 12

Country	Association
SWEDEN	Swedish Holstein Association
E-mail address :	gill.zeilon@telia.com
FTP address :	?
Web site :	www.holsteinsweden.se
Contact person :	?
	Tel: +46 41516465

Country	Association
SWITZERLAND	Holstein Association of Switzerland
E-mail address :	Monteleone@holstein.ch
FTP address :	
Web site :	www.holstein.ch
Contact person :	Pascal Monteleone
	Tel : + 41 26 305 59 05

Country	Association
UNITED KINGDOM	Holstein UK
E-mail address :	Suzanne@holstein-uk.org
FTP address :	
Web site :	www.holstein-uk.org
Contact person :	Suzanne Harding
	Tel : + 44 1923 695 200