<table>
<thead>
<tr>
<th>Trait category</th>
<th>Individual trait(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth &amp; beef</td>
<td>Feed conversion efficiency</td>
</tr>
<tr>
<td></td>
<td>Liveweight</td>
</tr>
<tr>
<td></td>
<td>Muscularity</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>FRANCE</th>
</tr>
</thead>
</table>
| **Growth & beef traits** | Feed conversion efficiency  
Liveweight  
Muscularity |
| **Breed(s)** | Normande, Montbéliarde |
| **Trait definition and unit(s) of measuring** | Feed conversion efficiency is measured between 140 and 310 days of age (in grams)  
Liveweight at 300 days (in kilograms)  
Muscularity is scored on a linear 1-15 scale |
| **Type of recording and evaluation** | Own performance test |
| **Time period for data inclusion** | Since 1969 (for Normande)  
Since 1982 (for Montbéliarde) |
| **Genetic parameters** | $h^2_{\text{feed conversion efficiency}} = 0.40$  
$h^2_{\text{300 days weight}} = 0.40$  
$h^2_{\text{muscularity}} = 0.40$ |
| **Sire categories evaluated** | AI bulls |
| **Environmental effect pre-adjustment evaluation model** | None  
Two models are applied separately for evaluation of all traits:  
Mobile average: contemporary groups with station and time period  
ST BLUP AM: Station x year x season |
| **Base for age adjustment** | None |
| **Method (model) of genetic evaluation** | Two models are applied separately for evaluation of all traits:  
Mobile average  
ST BLUP AM |
| **Evaluation system validation** | Data quality control |
| **Expression of proof** | RBV with $M = 100$ and phenotypic SD = 20, higher values more desirable |
| **Genetic (reference) base** | Mobile average: 3 months station average  
ST BLUP AM: fixed, average RBV of bulls born from 1982 to 1990 |
| **Criteria for official publication of sire proofs** | Mobile average: only 1 proof per bull is published (at end of his test period)  
ST BLUP AM: All bulls with completed test |
| **Number of evaluations/publications per year** | Mobile average: every month. The mobile average is calculated only once for each bull, at the end of the control  
ST BLUP AM: once per year |
| **Use in total merit index** | $0.5 \times (\text{feed conversion efficiency} + \text{muscularity score})$ |
| **Key reference on methodology applied** | - |

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