Using integrated solutions to achieve high levels of performance recording in Beef Herds

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Riga, Latvia
A quick look on the map
Beef Production in Ireland*

2 million cows
• 1 000 000 beef cows
• 17 cows / herd
• 6 major beef breeds
• 350k Dairy cows also bred to beef sires

Destination
• 22% replacement
• 16% Live export
• 62% Slaughtered in Ireland

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Key Components To Successful Integration

- There are a number of key components to achieving high levels of performance recording falling into three categories
  - Systems
  - Processes
  - Culture of cooperation across the industry
- Inevitably, success is dependent on synergy between the systems and processes, which is supported by the appropriate culture.
Key Components To Successful Integration

• Ireland’s Dept of Agriculture Systems
• Setting up of ICBF and the cattle breeding database
• Animal Events recording
• Animal Welfare, Recording and Breeding Scheme
• A culture of sharing and cooperation
Systems – Dept of Agriculture (DAFF)

- In 1996, the concept of a lifetime identifier (tag) was introduced in Ireland. This would allow a multitude of identifiers of animals to be replaced over time by one form of identification.
- The identification and registration system was complimented by a comprehensive animal movement system (CMMS).
- These systems were very well implemented in Ireland by DAFF and its agents, and have since been fundamental to the integration of data across systems.
- These systems are the subject of on-going improvement programmes under the Animal Identification and Movement System (AIM).
- DAFF have facilitated the use of the data for cattle breeding purposes.
Systems – Central Cattle Breeding Database

- In 1998, Irish Cattle Breeding Federation (ICBF), with Dr. Brian Wickham as chief executive was set up.
- Having set up the organisation, the first main task was to set up the central cattle breeding database.
- This was a significant task, with data and processes from over 30 different sources needing to be consolidated.
- The following slide gives a geographical overview of those shareholders involved in the set-up of ICBF.
One Database, Many Partners
less duplication and cost for farmers

AI
- Munster AI
1 - Dairygold
2 - Kerry
3 - SWS
4 Progressive Genetics
5 Dovea AI

Milk Recording
1 Dairygold
2 Kerry
3 SWS
4 Progressive Genetics
6 Arrabawn
7 Tipperary
8 Connacht Gold

Herdbooks
- Holstein Friesian 11
- Belgian Blue 12
- Angus 13
- Aubrac 14
- Blonde d'Aquataine 15
- Charolais 16
- Hereford 17
- Limousin 18
- Normande 19
- Parthenais 20
- Piedmontese 21
- Shorthorn 22
- Simmental 23
- Jersey 24
- Kerry 25
- MRI 26
- Montbeliarde 27
- Rotbunt 28
- Saler 29

Farm Organisations
9 IFA
10 ICMSA

ICBF 30
Animal Events Recording

- Prior to the setting up of ICBF, there was no mainstream process for recording the sires of calves at birth.
- In 2002, Animal Events recording was launched.
- It’s key objective was to allow mainstream recording of sires at birth, and remove duplication
  - White cards
  - Pedigree birth cards
  - AI calving survey
  - Milk/Beef Recording
    - Enrollment
    - Calving Dates
- The following slide gives an example of the original Animal Events sheet
This is the form used by cattle breeding herds to register calves (for DAF, herd book and performance recording). There is also an electronic version produced by the most widely used farm management PC packages. DAF on-line systems are also now available.

Pedigree name to trigger herd book registration.

Please ensure you have fully completed Section 1a and signed & dated this form before posting.
Animal Welfare, Recording, and Breeding Scheme (AWRB)

- Launched on Jan 1st 2008
- Has revolutionised beef performance recording in Ireland
- Brought over 40k herds into main-stream recording through the roll-out of Animal Events
- Has both a welfare and breeding focus
- Is sustainable
- Electronic and Paper based recording

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Key Elements of the Suckler Cow Welfare Scheme

- Driven by DAFF and Farmer Representative Organisations
- **Sire** of calf and calving ease recorded at birth via Animal Events
- Disbudding by 21 days
- Recording of castrations
- Meal feeding introduction – min 4 weeks prior to weaning, 2 weeks after weaning
- Calf quality and calf docility scores at weaning
- From a cattle breeding perspective, the results have been dramatic.
ICBF Database has 90% coverage of breeding animals in Ireland

Cumulative Number of Herds Signed Up to ICBF Database
(Now 90% of all registered calves)
**Fostering and Developing a Culture of Sharing and Cooperation**

- Having a culture of ‘working together for the benefit of cattle farmers’ is critical in order to maximise the benefit of systems and processes.
- The culture of sharing has been fundamental to ICBF since its inception.
- ICBF’s status as a ‘non-profit’ making entity has been helpful in this regard.
- Government support though the Dept of Agriculture in terms of data sharing has been hugely beneficial.
- Farmers and their cooperatives have been very supportive – each of the 75,000 herd-owners have given individual permission to access their data for cattle breeding purposes.
The Result (so far)
Sire Recording Levels – Dramatic Increase

Calves with Sires (By Year of Birth)

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Live-Weight Recording Levels – Dramatic Increase
Slaughter Weight Recording Levels – Dramatic Increase

Animals With Slaughter Records

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### Beef Bull €uro-Star Evaluation

#### Overall Index – SBV in €

<table>
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<th>Rank</th>
<th>Star Rating</th>
<th>Index and Traits</th>
<th>€uro-Value</th>
<th>% Rank</th>
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<tr>
<td>98%</td>
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<tr>
<td>1%</td>
<td>★</td>
<td>Daughter Milk</td>
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#### Sub Indexes – in €

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<td>Calving Difficulty (% 3 or 4)</td>
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<td>99%</td>
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<td>Gestation Length (Days)</td>
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<tr>
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#### Key traits phenotype units

Data Reliability: 40% - 60% = Average
20 - 40% = Below Average
< 20% = Poor
The Next Stage
Key areas to progress further

- Increase the number of live-weight records
- Develop the integration with laboratories to the next level to assist with health performance recording
In Summary….

- A central cattle breeding database has removed duplication across the cattle breeding industry and provided a platform to improve farm profitability through breeding.
- A supportive DAFF has helped create a synergy between regulatory data and cattle breeding.
- Creating a culture of sharing of data across the industry removes duplication and cost, and increases value.