

**VALUE FOR MONEY REVIEW**

**OF THE**

**BOVINE ANIMAL IDENTIFICATION**

**AND**

**TRACEABILITY SYSTEM**

**(2004 – 2007)**

**Department of Agriculture, Fisheries  
and Food**

**2009**



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## **Executive Summary**

### **1. Background**

The Government approved 92 formal reviews under the Value for Money and Policy Review Initiative for the 2006 – 2008 round. The Bovine Animal Identification and Traceability System is included in 11 reviews selected as part of DAFF's programme under the round. This VFM review was confined to the period from the birth of a bovine to the slaughter of a bovine within a 2004 – 2007 timeframe.

### **2. Steering Group**

A Steering Group comprising representatives from the relevant executive and policy divisions of the Department of Agriculture, Fisheries and Food (DAFF) and the Public Expenditure Division (PED) of the Department of Finance, was established to oversee this review of the Bovine Animal Identification and Traceability System.

### **3. Methodology**

A review of relevant literature was undertaken and primary and secondary data were used to address the issues raised by the Terms of Reference. Questionnaires were used to enhance the impact of interviews and meetings with representatives of DVOs and other Divisions within DAFF. Submissions were invited from farm organisations as an appropriate mechanism to obtain the views of key stakeholders. In the course of the review the Group visited the United Kingdom and the Netherlands to obtain information of the operation of the bovine identification and registration system in other Member States. The draft review was the subject of an independent evaluation prior to finalisation of the report.

### **4. Terms of Reference**

- Identify the objectives of the Bovine Animal Identification and Traceability System.
- Examine the current validity of those objectives and their compatibility with the overall strategy of the Department of Agriculture, Fisheries and Food and in particular to consider whether this system can be simplified and/or this system's potential to contribute further to simplification in the SPS context.
- Define the outputs associated with the Bovine Animal Identification and Traceability System and identify the level and trend of those outputs.
- Examine the extent that the programme's objectives have been achieved, and comment on the effectiveness with which they have been achieved.
- Identify the level and trend of costs and staffing resources associated with the Bovine Animal Identification and Traceability System and thus comment on the efficiency with which it has achieved its objectives.
- Evaluate the degree to which the objectives of the Bovine Animal Identification and Traceability System warrant the allocation of public funding on a current and ongoing

basis and examine the scope for alternative policy or organisational approaches to achieving these objectives on a more efficient and/or effective basis (e.g. through international comparison.)

- Specify potential future performance indicators that might be used to better monitor the performance of the Bovine Animal Identification and Traceability System.

## **5. The Bovine Animal Identification and Traceability System**

The review contains a detailed description of the Bovine Animal Identification and Traceability System. The Cattle Movement Monitoring System (CMMS) was developed from the mid 1990s in response to consumer demands for assurances about the safety of beef products primarily as a result of the emergence of concerns relating to BSE at that time. Regulation (EC) No 1760/2000 provides the legislative basis for Bovine Identification and Registration systems in EU Member States. The Regulation lists four pillars of identification for bovine animals including eartags, identity cards, on-farm registers and computerised databases containing information on animal identity and location. The CMMS has now been replaced by the Animal Identification and Movement (AIM) system.

A number of components of the system are outsourced including supply of bovine animal identification tags and birth registration documents, the processing of farm-to-farm movements and on-farm death notifications and the birth registration and passport system. Internet-based technology is used at livestock marts, slaughter premises and live export points to record movements of cattle while events involving direct sales from farmer to farmer are notified both by the seller and purchaser of the animal for loading onto the central database subsequently. Farmers may avail of *Agfood.ie* facilities for a range of activities including to register calves, apply for a Certificate of CMMS Compliance to move animals farm to farm, view a bovine herd profile and to enter animal event details for the Animal Welfare Recording and Breeding Scheme.

The development of the traceability system facilitated a wide range of uses of the system. The traceability system provides a high degree of assurance on animal identification and the traceability of the animals and facilitates compliance with EU and national identification requirements. The database is used routinely as a management tool for disease control purposes and to highlight and follow up anomalies in animal origin and location. CMMS/AIM works in tandem with AHCS in facilitating the maintenance of a high health status of the animals. The database facilitates compliance with other EU and national requirements and provides data to facilitate identification and segregation of bovines for disease testing, tracing of cohorts and progeny, compensation payments and cross compliance inspections.

More specifically, the system is used in the pre-clearance process for live exports and to assist in the testing and certification requirements for specific export markets and is an

integral part of the ante-mortem process at factories and to identify animals that must be sampled for BSE testing. It provides general assurances to consumers on the origin and identification of Irish beef. It is employed as a marketing tool for Ireland's beef export industry and is highly regarded by visiting trade delegations from Member States and third countries as providing the requisite assurances in regard to animal health and food safety.

The management of the cross compliance inspections, which are an integral part of the Single Payment Scheme, is facilitated by use of the traceability database. The CMMS/AIM system is used to verify a range of aspects included in Animal Welfare Recording and Breeding Scheme for Suckler Herds and farmers may submit data in electronic or paper format for the recording of animal events in the scheme. The database is used to prove that minimum stocking density requirements have been met for the Compensatory Allowances Scheme. DAFF utilises the traceability database to ensure that all keepers participating in the Rural Environment Protection Scheme (REPS) stay within the prescribed limits for organic nitrogen. The traceability system is essential to DAFF in its monitoring and enforcement of the Nitrates Regulations. The database provided an appropriate mechanism to validate premia payments under coupled EU schemes prior to the introduction of the Single Payment Scheme in 2005.

The CMMS Statistics Report is made available to a wide range of stakeholders and data are provided to the CSO.

## **6. Rationale for the Bovine Animal Identification and Traceability System**

There is a clear rationale for the existence of the traceability system based on the regulatory framework set down in EU legislation. The primary objectives of the traceability system are to provide assurances to customers and consumers on the origin and traceability of beef, protect animal and human health and secure and maintain markets for Irish cattle and beef. In addition, the traceability system facilitates the delivery of a range of measures including cross compliance inspections under the Single Payment System, Rural Environment Protection Scheme, Animal Welfare Recording and Breeding Scheme for Suckler Herds and Compensatory Allowances Scheme and facilitates compliance the Nitrates Directive.

The review assessed the validity of the objectives and compatibility of the traceability system with current national policies by reference to the Programme for Government (A Blueprint for Ireland's Future 2007 – 2012) and a range of documents published by DAFF including key documents such as the Statement of Strategy 2005 – 2007, the Information Communication and Technology (ICT) Strategy 2004, Agri-vision 2015 Action Plan and The Towards 2016 Framework.

The system operates to service the requirements of an indigenous industry based on a cattle population of over 6 million providing a significant level of employment in rural areas, where

cattle farming is the dominant enterprise on half the farms and a very high proportion of cattle and livestock products exported to the high-value internal EU marketplace. The system has been delivered in an effective manner which ensures that all bovine animals born in, and imported into the State are identified in the manner provided for in Regulation (EC) No 1760/2000 and that subsequent movements and disposal details are recorded onto a central database. The traceability system supports the delivery of programmes and activities that protect animal and human health, provides requisite assurances to customers as to the origin and traceability of cattle thereby securing and maintaining markets and assists with delivery of a range of EU and national programmes.

The review showed that the capability of the database to identify and trace animals and their cohorts has made a significant contribution to the operation of control and eradication measures for diseases of major economic importance resulting in the eradication of Brucellosis, the drop in BSE levels and the reduced number of TB reactors in the last decade. The reliable and reputable identification system has played a key role in underpinning the live cattle exports and livestock exports in a competitive marketplace. This was particularly so in the case of the beef industry which is worth €2 billion annually to a country that is the 4<sup>th</sup> largest beef exporter in the world with some 90% cent of the output of the Irish beef industry exported. The system also underpinned dairy product exports which are worth €2.36 billion a year as well as contributing to the delivery of a range of other programmes including aspects of the Single Payment Scheme.

The review concluded that in addition to fulfilling the mandatory requirements for the existence of a traceability system set down by the EU in Regulation 1760/200, the contribution of the system to implementing other measures and the public good dimension provided clear grounds for the existence of the traceability system. The analysis of the policy documents concluded that the objectives of the traceability system continue to be valid and compatible with DAFF and national policies.

## **7. Efficiency of the Bovine Animal Identification and Traceability System**

Efficiency is concerned with comparing inputs to outputs with the aim of optimising the ratio of inputs to outputs. The costs incurred by the Department on the identification and traceability system include the sum of the costs of (a) the outsourced contracts, (b) DAFF staff deployed to administer and implement the system and (c) investment in facilities and equipment. Some costs are also incurred by industry for example on tags and inputting of material at marts and meat plants.

The review demonstrated that the outputs of the system were delivered in a comprehensive and timely manner in compliance with national and EU legislation. The outputs include issue of tags, registration of calf births, issue of passports, issue of CMMS Compliance Certificates,

issue of herd profiles, recording and validation of slaughterings at factories and local authority abattoirs, recording and validation of movements at livestock marts and at exports points for live cattle, recording of cattle deaths, and publication of the annual CMMS statistics report.

The cost of DAFF staff administering and implementing the programme amounting to almost €19 million a year was significant but must be considered in the context of the wide range of benefits derived from the availability of the system. Administration accounts for approximately 72% of the overall cost of the traceability system at over €26 million. Over 80% of the administration costs of managing the traceability system occurs in DVOs while NBAS Division accounts for 11% of the administration costs. The review concluded that the outsourced contracts for bovine registration and issue of farm-to-farm movement certificates were delivered in an efficient manner. The outsourced contractor received €4.128 million on average over the years 2004 – 2007. Expenditure on postage was €1.9 million per annum and on average €1.382 million was spent per annum on capital costs and maintenance of CMMS IT systems.

The review identified a number of measures that could be adopted now to improve the system and to achieve further staffing and other savings in the light of its current stage of development and the operation of the AHCS and there are a series of recommendations to achieve savings and efficiencies under a number of headings. The review also considered that there is a strong business case for maintaining the outsourcing arrangements for delivery of the bovine registration and farm-to-farm movement aspects due to the efficiencies involved. The ICT infrastructure and corporate knowledge provide a solid foundation to drive a modernisation process aimed at improving internal processes and operational efficiencies to deliver a higher quality service on an ongoing basis grounded on reducing the reliance on traditional paper based arrangements.

## **8. Effectiveness and Impact of the Bovine Identification and Traceability System**

The effectiveness of a system is measured against the achievement of the objectives of that system. The traceability system has been enhanced on an ongoing basis and its effectiveness was greatly enhanced with the introduction of AHCS, which has proved to be an effective method of verifying the data on CMMS/AIM and triggers a procedure to address any anomalies arising. The review concluded that the traceability system is sufficiently robust so as to guarantee the origin and traceability of Irish cattle and beef. The system has been judged to provide the requisite assurances by FVO and veterinary authorities from a number of countries.

The review also showed that the identification and traceability system in place plays a fundamental role in the management of the control and eradication measures for diseases including Brucellosis, Tuberculosis and BSE (as detailed in paragraph 6) and played a key role in containing Foot and Mouth in 2001. The interaction of the CMMS/AIM database with AHCS coupled with reduced disease levels has enabled administrative staff numbers in DVOs to be reduced from 625 in 2004 to 474 in 2007 while further staff savings are now also attainable, for example reduced supervision of marts and of reactor collection.

The key characteristics of Full Traceability and Quality Assurance underpin Bord Bia's marketing strategy for Irish beef. The traceability system plays an important role in guaranteeing the sources of live cattle for the live export trade.

The traceability system provides an effective mechanism for validations and checks on cattle under a range of programmes and it plays a key role in facilitating compliance with EU and national requirements and in the management of a range of DAFF programmes other than those relating to animal health and food safety. Statistics are provided to facilitate the work of Bord Bia and CSO while the Annual Statistics Report is published and circulated to a wide range of stakeholders.

The system has been successful in fulfilling its objectives to provide assurances to customers and consumers about the origin and traceability of beef, protect animal and human health and secure and maintain markets for Irish cattle and beef. The system has also contributed to the delivery of a range of programmes not directly related to the foregoing.

## **9. Allocation of Public Funding**

The provision of public support for the system was determined initially to secure early and full compliance with the traceability legislation and to enable Ireland to demonstrate the existence of an effective system at a time when the livestock industry was facing major challenges arising from BSE issues in the U.K. A significant level of public money continues to be invested in the cattle traceability system where the capital costs, maintenance and other costs in delivering the system are borne by the Exchequer with the exception of the costs of tags and some inputs at marts and meat plants which are incurred by keepers and industry. The review concluded that a clear justification exists for the provision of some level of public funding for the system on the basis that it delivers a public good where all citizens derive a benefit from its operation.

The review concluded that as the situation has evolved and the system is well established, it is appropriate at this juncture to review the levels of Government support and staffing, involved with administering the system. In particular, it is prudent to assess whether costs can be reduced and if they are apportioned appropriately between public and private sectors.

The completion of the further development of AIM planned for 2009 will facilitate the introduction of greater competition amongst potential operators for both the farm-to-farm movements and birth registrations aspects. Efficiencies could be enhanced with consequential savings to the Exchequer by optimising the use of technology in the administration of the system – for example by increasing numbers interacting on-line with the system, by assigning greater responsibility and costs to the industry to correct discrepancies and registration errors and by transferring costs of some aspects of postage to farmers under the next tender process. Components of the NL model could be considered for adaptation to the Irish system including generation of passports via internet in *pdf* format only for animals destined for export, selection of tag suppliers on basis of demonstration of delivery of a service in compliance with Commission Regulation 911/2004 outside of a tender process and dispensing with the requirement for a herd register where a keeper has access to the database via the internet and printing facilities. The review proposes that when these efficiencies are in place, the level of future public support should be considered against a background that it is reasonable that industry including keepers of cattle should carry a significant portion of the costs of the traceability system because it confers significant benefits on them.

#### **10. Contribution to simplification in the context of the Single Payment System.**

The possibility of the traceability system contributing further to simplification in the SPS context was reviewed. A saving will be made in 2009 when the Integrated Controls Unit will carry out all the IDR inspections under a single set of guidelines and financial sanctions. Hand held scanner technology is being tested to introduce efficiencies checking bovine passports against the Cross Compliance Report (CCR). The implementation of recommendations relating to passports and herd registers in addition to improvements in the quality and timeliness of the data on the AIM and AHCS databases associated with enhancements in database functionality should lead to reduced negative findings at SPS inspections and a reduced administrative burden on keepers.

#### **11. New Performance Indicators**

The external Performance Indicators are considered to be appropriate and internal Performance Indicators are included in Work Programmes and Role Profiles. However, the review identified that more specific internal Performance Indicators are desirable to allow for improved measurement of levels of compliance and to enable procedures to be improved and targeted as required. While the external indicators are considered to be appropriate, it is considered that they should be reviewed continually and updated as the operation of the programme changes and evolves.

## **12. Conclusion**

The review of the Bovine Animal Identification and Traceability system found that the system provides value for money in terms of cost, efficiency of delivery and achievement of objectives, and it merits public funding. However while there is a clear justification for the provision of some level of public funding for the system, it is appropriate to adapt aspects of the arrangements in place and to review the levels of Government support and to examine all possibilities for reducing costs and the apportionment of costs between public and private sectors. Opportunities for further efficiencies are set out in the recommendations.

## **13. Recommendations**

### **Recommendation Number 1**

Consider transferring the cost of postage for the registration, farm to farm movement and other procedures to the industry (in practice to farmers) in the next tender procedure(s).

### **Recommendation Number 2**

Consider dispensing with recording of testing and movement details on passports thereby facilitating (a) restricting the issue of passports to occasions when animals are being moved/exported and (b) changing the documentation required to be used.

### **Recommendation Number 3**

Proceed with development of departmental capacity to validate applications for registrations and to facilitate greater competition for providers of Compliance Certificates.

### **Recommendation Number 4**

Introduce a consistent approach at DVO level for late registrations and consider transferring costs of dealing with late registrations to keepers or the industry generally.

### **Recommendation Number 5**

Continue efforts to reduce levels of errors by farmers and others by inter alia promotion of the online facilities available at Agfood.ie including herd profiles and in particular undertake efforts to increase levels of electronic notification (by dairy herds in particular).

### **Recommendation Number 6**

Strictly apply provisions of the Discrepancy circular No. ER 08 of 2008 and continue to keep these and Departmental resources devoted to this under review.

**Recommendation Number 7**

Following adoption or otherwise of the foregoing, consider whether charges should be introduced to cover the remaining cost of the system (with higher charges for those continuing to use paper arrangements).

**Recommendation Number 8**

The Department should continue to keep the overall arrangements (including staffing) under ongoing review with a view to achieving reductions by adopting the proactive approaches to encouraging recourse to electronic communications, deployment of staff and passing greater responsibilities to industry (e.g. in relation to resolving discrepancies).

**Recommendation Number 9**

Ensure that the Department is positioned in terms of technology, skills, business processes and cost base to underpin required change in providing a higher quality of service in a more technically demanding environment on a continuing basis.

**Recommendation Number 10**

The Department should retain the current outsourcing approach to conducting certain components of the operations while also developing systems to increase competition amongst potential providers of services.

**Recommendation Number 11**

Review the selection process for tag suppliers having regard to the practice used in a number of Member States.

**Recommendation Number 12**

Examine the possibility of dispensing with the requirement for a manual herd register when a keeper notifies births and movements using the online facility.

**Recommendation Number 13**

Adopt more specific performance indicators for the NBAS Division so as to allow for improved measurement of performance and to facilitate appropriate targeting.

## Chapter 1

### Introduction

#### 1.1 Background to the Value for Money Expenditure Review Process

The Comptroller and Auditor General (Amendment) Act 1993, the Strategic Management Initiative and the Public Service Management Act 1997 emphasised the need for increased efficiency and effectiveness in the use of public resources and thus set the background for the Expenditure Review process.

The reform agenda set out in the second report of the Co-ordinating Group of Secretaries entitled **Delivering Better Government** provided the background to the introduction of the Expenditure Review process by the Department of Finance in 1997. One of the aims of Delivering Better Government was to put in place a process of modern business planning across the Civil Service, based on informed resource allocation decisions and enhanced accountability for the results achieved for these resources. The Expenditure Review process was an evaluation process aimed at improving the efficiency and effectiveness of expenditure by analysing systematically the achievements of each programme and providing quality information to facilitate more informed decision making on the allocation of resources and the prioritisation of work programmes.

In June 2006, the Value for Money and Policy Review Initiative was introduced to replace the Expenditure Review Initiative. The Government approved 92 formal reviews for the 2006 – 2008 round. Under this round, 11 reviews, which account for €193 million in expenditure, were selected as part of DAFF's programme. The Bovine Animal Identification and Traceability System is amongst the programmes selected. In 2007 this programme accounted for €26.3 million out of a total provision of €1.67 billion voted expenditure.

The Value for Money Review (VFM) process is overseen by the Central Steering Committee (CSC) on Programme Evaluation and chaired by the Secretary General of the Department of Finance. Each VFM is undertaken by a joint steering committee representing the relevant spending Department or Office and the Department of Finance. The process is managed in the Department of Agriculture, Fisheries and Food by a Management Committee (MAC) subgroup, chaired at Assistant Secretary level.

Under this initiative DAFF is carrying out Value for Money and Policy Reviews on major spending programmes on a periodic basis to:

- (a) assess the objectives, efficiency and effectiveness of the programmes and to identify mechanisms to improve the delivery of specific programmes; and

- (b) identify indicators, which will improve monitoring of the performance of the programmes and of the success in meeting their objectives.

The Financial Management Commitments provided at paragraph 3.1.2 in the Statement of Strategy 2005 – 2007 include the undertaking of the 2005 – 2007 Expenditure Review Programme. *Goal 4 - Schemes Delivery and Financial Management* - sets down a requirement to operate all our schemes and programmes in an efficient and effective manner, and ensure the highest standards of corporate and financial management and accountability in all our activities. Furthermore, Strategic Action No. 4.5 provides that the Department “Undertake regular evaluations of key spending areas through the expenditure review programme”.

The **Statement of Strategy 2008-2010** includes a commitment to undertake regular evaluations of key spending areas through the Value for Money and Policy Review programme at Goal Number 5.7.

## **1.2 Review Team**

A Steering Group was established for the purpose of overseeing this review of the Bovine Animal Identification and Traceability System, comprising representatives from the relevant executive and policy divisions of DAFF and the Public Expenditure Division (PED) of the Department of Finance, to guide the review process as set down below.

- Martin Farrell, PO, National Beef Assurance Division and Chairman of the Steering Committee
- Bridget Hickey, AP, National Beef Assurance Division
- Peter Maher, SVI, ERAD/ National Beef Assurance Division
- David Buckley, AAI, Economic and Planning Division
- Jack Nolan, AI, Integrated Control Division
- Pat O’Hara, AP, Single Payment Unit
- Mick Farrell, AP, IT Unit, Market Support and Animal Health
- Noelle Croghan, HEO, National Beef Assurance Division
- Terry Jennings, Department of Finance

The first meeting of the Steering Committee took place on 24 July 2007 and meetings were held on a regular basis up to June 2008 to provide both specific input and general direction to the review and to advance and finalise the project.

### **1.3 Terms of Reference**

The Terms of Reference were agreed as set down below.

1. Identify the objectives of the Bovine Animal Identification and Traceability System.
2. Examine the current validity of those objectives and their compatibility with the overall strategy of the Department of Agriculture, Fisheries and Food and in particular to consider whether this system can be simplified and/or this system's potential to contribute further to simplification in the SPS context.
3. Define the outputs associated with the Bovine Animal Identification and Traceability System and identify the level and trend of those outputs.
4. Examine the extent that the programme's objectives have been achieved, and comment on the effectiveness with which they have been achieved.
5. Identify the level and trend of costs and staffing resources associated with the Bovine Animal Identification and Traceability System and thus comment on the efficiency with which it has achieved its objectives.
6. Evaluate the degree to which the objectives of the Bovine Animal Identification and Traceability System warrant the allocation of public funding on a current and ongoing basis and examine the scope for alternative policy or organisational approaches to achieving these objectives on a more efficient and/or effective basis (e.g. through international comparison.)
7. Specify potential future performance indicators that might be used to better monitor the performance of the Bovine Animal Identification and Traceability System.

### **1.4 Context**

The VFM review takes place against a background of a challenge for the Department to maintain and upgrade this system to support animal and public health measures and to develop the online services to provide better customer service in a manner that will get a increased take-up of the services, leverage administrative efficiencies, and improved timeliness and accuracy of the data while the agricultural industry is challenged to adapt and adjust to the changes taking place in the marketplace on an ongoing basis.

### **1.5 Scope**

The scope of this VFM review is confined to the period from the birth of a bovine to the slaughter of a bovine and excludes any references to labelling of beef. The timeframe of the review was confined to the 2004 – 2007 period. The key factors considered in examining the continued use of scarce public funding for the bovine animal identification and tracing system were the legal responsibilities of the Department in enforcement of EU and national law, the contribution that a reliable identification and traceability system can make to the development of a competitive bovine industry and the provision of assurance to consumers as to the origin and traceability of Irish cattle.

## **1.6 Methodology**

The Terms of Reference were developed in accordance with the template provided by the Department of Finance. A review of relevant literature, including previous reviews and evaluations, was undertaken, with an initial focus on VFM reports published by DAFF, and background information in NBAS Division, to provide a solid foundation to the project.

The Steering Group utilised primary and secondary data (see Appendices 1 and 2) in the VFM review process to address the issues raised by the Terms of Reference. Primary data were collected from appropriate Divisions in the Department. Secondary Data were obtained from the Department publications.

The Programme Logic Model, which provides a model for identification of the pertinent components of AIM/CMMS for review, will be discussed further in Chapter 3. In addition to desk top research, questionnaires were used to aid the process of obtaining high quality information in interviews and meetings with representatives of DVOs and other Divisions within DAFF. Submissions were invited from farm organisations as an appropriate mechanism to obtain the views of key stakeholders. In the course of the review the Group visited the United Kingdom and the Netherlands to obtain in-depth information of the operation of the bovine identification and registration system in other Member States. The nature and extent of the consultation process including the use of surveys, stakeholder questionnaires and study visits were an integral part of the review process designed to add to the quality of the analysis and validity of the conclusions and recommendations.

In line with the methodology used in the Value for Money process, the draft review was the subject of an independent evaluation, which was conducted by Raymond Burke Consulting, a member of the Independent Panel of Evaluation Experts, prior to finalisation of the report. The Steering Group acknowledges the contribution of the external evaluator to finalisation of the text.

## Chapter 2

### The Bovine Animal Identification and Traceability System

#### 2.1 Introduction

This chapter outlines the impetus provided by consumer demand for assurances on the safety of beef on the development of the Cattle Movement Monitoring System (CMMS) and sets down the regulatory framework governing the Bovine Animal Identification and Traceability System. An overview of the operation of the system including objectives, critical components, operation of the database, validation and control measures in place and a wide range of the uses of the system are provided also. A diagrammatic representation of the linkages in the system is included at Figure 2.1.

#### 2.2 Background

The Department introduced a bovine identification and tracing system involving the use of tattoos on commencement of the voluntary Bovine Tuberculosis Eradication Scheme in 1954. The use of metal eartags and corresponding identity cards commenced on the introduction of the national TB eradication campaign in 1958. The DVO's supplied the metal tags to be used by Private Veterinary Practitioners, to identify the national herd associated with the annual bovine TB tests, and issued the identity cards which were used principally to record test details under this eradication scheme.

In compliance with Council Directive 92/102/EEC, the Department introduced the requirement for farmers to register calf births, to have passports for all cattle and to maintain herd registers from the mid 1990s.

The Cattle Movement Monitoring System (CMMS) database was developed from the mid 1990s in response to consumer demands for assurances about the safety of beef products primarily as a result of the emergence of BSE at that time. The availability of a comprehensive record of the origin, identity and life history of Irish cattle for animal health controls and for checking animals before entering the food chain and movement remains the principal and primary use of the CMMS and it's successor the Animal Identification and Movement (AIM) system.

## **2.3 Regulatory Framework**

The concept of bovine tagging and accompanying identity cards in Ireland predated Ireland's entry to the European Economic Community in 1973 and the adoption of EU provisions on cattle identification and tracing in the 1990s.

The legislative basis for Bovine Identification and Registration systems in EU Member States is now enshrined in Regulation (EC) No 1760/2000 of July 17 2000<sup>1</sup>. The Regulation lists four pillars of identification for bovine animals including eartags, identity cards, on-farm registers and computerised databases containing information on animal identity and location. The Regulation is complemented by a number of Commission Regulations, S.I. No. 276 entitled European Communities (Identification and Registration of Bovine Animals) Regulations, 1999 and S.I. No. 277 entitled Bovine Tuberculosis (Attestation of the State and General Provisions) Order, 1999. See Appendices 3 and 4 for a full list of relevant EU and national legislation.

The objective of the identification system is to ensure that all bovine animals born in, and imported into the State are identified in the manner provided for in Regulation (EC) No 1760/2000 and that subsequent movements and disposal details are recorded onto a central database. Such information can be used for a variety of purposes including disease control, protecting public health and reassuring consumers at home and abroad.

## **2.4 The Bovine Animal Identification and Traceability System**

The Irish bovine animal identification and tracing system consists of four main elements in compliance with Regulation (EC) No 1760/2000 as follows

- Bovine Tagging;
- Passports/Cattle Identity Cards;
- On-farm Herd Register; and
- Computerised Database.

### **2.4.1 Bovine Tagging**

A herd number is used to identify bovine herds in Ireland and it is not possible to trade in cattle legally without an official herd number.

A legal requirement is in place since 1996 that requires keepers to tag all cattle by the insertion of an identical yellow official plastic tag in each ear within 20 days of birth. The tag

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<sup>1</sup>Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97

number consists of a 12-digit numeric sequence in addition to the country code, IE. A bar code of the tag number is included on the tag.

Keepers of cattle are obliged to ensure that all cattle in their possession and under their control bear official tags obtained only from sources approved by the Department. A corresponding Calf Birth Registration Form accompanies each set of tags issued to the keeper. The Regulation requires that an animal is tagged and registered within 27 days of birth. Animals that are not identified and registered in accordance with the legislation may not be moved, exported or accepted for slaughter.

Since 1996, animals retain the same identity number from birth to death. If an animal loses a tag, a replacement tag, bearing the same number as the original tag, must be ordered as soon as possible from the official tag supplier approved by the Department. Replacement tags will not be issued to a holding other than the holding where the animal is currently located according to the database.

While the Department funded or part funded the costs of tags at the outset, keepers now pay for tags and associated costs.

#### **2.4.2 Passports/Cattle Identity Cards**

Cattle identity cards based on tag numbers have been in operation in Ireland since the 1950s and were introduced originally for identification of animals for disease testing purposes. Initially the cards contained information on the animal's identity, herd of origin and disease testing status. Additional details relating to the animal have been recorded since 1996.

Since 1998 a passport replaced the Cattle Identity Card. The passport contains information on the keepers and identity, origin, disease testing history and movements of the animals. Passports are issued when the birth of the animal is registered by the official agency contracted by DAFF. The passport must accompany the animal and must be presented each time the animal is moved. Costs of issuing passports are borne by this Department.

Prior to 1996 the Irish cattle identification system was based on tags and cattle identity cards only. In 1996, a national Calf Birth Registration Agency, operated by a commercial contractor on behalf of the Department, was established to record all calf births onto a central database. The Calf Birth Registration Agency accepts all calf birth registrations from keepers and issues passports where validations are satisfied.

The keeper is required to register the birth of each bovine animal with the Calf Birth Registration Agency within 7 days of tagging (and within 27 days of birth) using one of three methods set down below.

- Registration forms (called white cards), which are pre-printed with the tag numbers, are supplied to keepers with each box of ear-tags. The completed forms are sent by post to the Calf Birth Registration Agency where the data are processed on a daily basis.
- Animal Events Sheets used by clients of ICBF for recording calving and other relevant details – the use of the Animal Events Sheet is a requirement for participants in the Animal Welfare Recording and Breeding Scheme for Suckler Herds introduced in 2008.
- Electronic methods of registration through the Department's website, approved electronic herd register packages or by mobile telephone.

On receipt of the calf registration details at the Calf Birth Registration Agency the information is subjected to a range of validation checks to ensure the relevant data is supplied and that it is consistent with other information before it can be entered onto the database. Where a calf birth registration application fails any one of the validations the Calf Birth Registration Agency will issue a correction letter to the keeper outlining the error and offering him/her an opportunity to correct the error.

The Calf Birth Registration Agency issues a Passport based on a valid registration. Each keeper is obliged to notify movement and disposal details of each animal to the CMMS database.

### **2.4.3 On-Farm Herd Registers**

Keepers have been obliged to keep a written record of all animals present in a herd since 1996. Since 1998, this record has taken the format of a single hard-back book issued by the Department to each herd owner. The Herd Register must be kept up to date by the herd keeper and must be made available for inspection by officers of the Department. Herd Registers must be kept for at least seven years from the date of the last record. There is provision also for keeping the herd register in an electronic format on farms. A number of herd register packages have been approved by the Department to facilitate maintaining a herd register in an electronic format.

The keeper is obliged to record the ear-tag number, date of birth, breed/colour and sex of all bovines born on the holding, that die on the holding and that move into or out of the holding. Furthermore the keeper must record the source of cattle moved into the holding and the destination of cattle moved off the holding together with the dates of such movements.

The Department has carried the cost of providing hard copy herd registers and replacements to keepers.

#### **2.4.4 Computerised Database**

During 1997, work commenced on the development of the computerised Cattle Movement Monitoring System (CMMS). The CMMS system was phased in with effect from September 1998. In the development of CMMS, maximum use was made of electronic recording mechanisms.

The CMMS became Ireland's centralised database required by EU legislation on bovine animal registration and traceability and has been fully operational since 1 January 2000. The computerised database contains comprehensive data recorded on the registration, origin, identity, movements and life history of cattle – in essence it identifies and traces each animal continuously throughout its natural life in Ireland.

The database holds the following information for each individual bovine animal:

- ear-tag number;
- sex;
- breed;
- date of birth;
- date of registration;
- herd of origin; and
- ear-tag number of dam.

Each keeper is obliged to notify movement and disposal details of each animal to the CMMS database. The cost of developing and maintaining the database is borne by the Department.

The Department's Strategic Information Systems Plan (SISP), published in January 2000, identified the need to upgrade and integrate all major IT applications. Accordingly, work commenced in 2003 on the development of a generic Animal Identification and Movement (AIM) system for all species using internet-compliant technology. AIM is being developed in modules and it is replacing and enhancing a number of existing animal identification systems, including CMMS. AIM is integrated with the new corporate systems to record animal health data (AHCS) and customer data (CCS) and provides online services in accordance with the eGovernment policy.

#### **2.5 Operation of the Database**

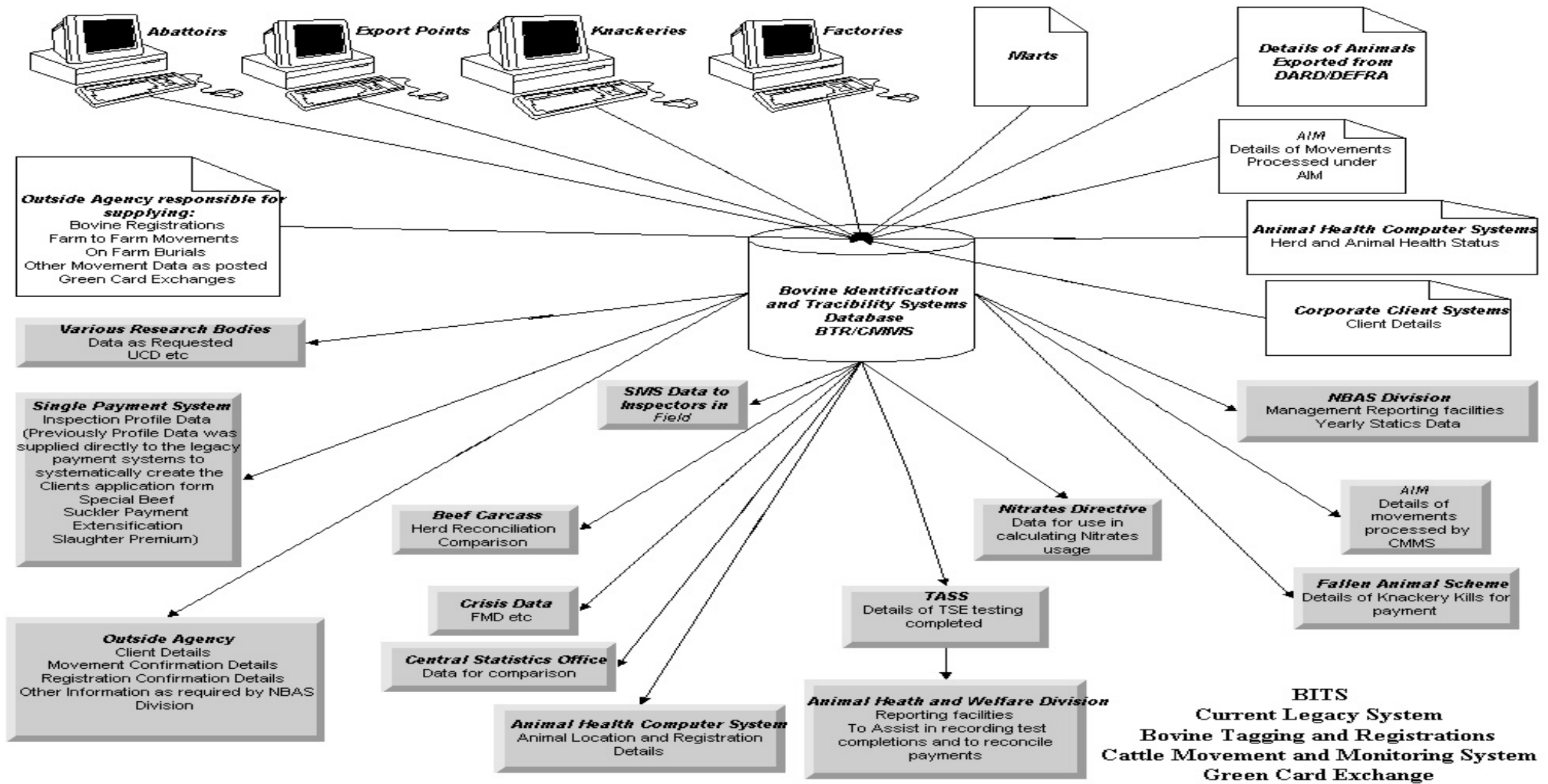
The database is used routinely as a management tool for disease control purposes to highlight and follow up anomalies in animal origin and location. Maximum use is made of electronic recording mechanisms in the operation of CMMS and its successor AIM. Livestock

marts, slaughter premises and live export points record movements of cattle on to AIM using internet-based technology. However, in the case of private sales, e.g. direct sales from farmer to farmer, the movement is notified both by the seller and purchaser of the animal for loading onto the central database subsequently.

The capital cost of developing CMMS and AIM is fully financed by the Exchequer which to date amounts to approximately €19m. Over the 2004 – 2007 period expenditure on maintenance of the database was approximately €1.38m per annum. At the outset, the costs associated with recording details of births and all types of movements, (mart movements, exports, slaughter, shows, deaths, private and other miscellaneous events) including postage have been borne by the Exchequer.

The development of the AIM database and the introduction of online services provides an opportunity for reducing the costs associated with the animal identification and movement database. Under AIM, meat plant staff input data to be validated and livestock marts are now responsible for the hardware and communication costs associated with the notification of mart movements and the export of animals to NI. These costs were previously borne by the Exchequer under CMMS. Farmers can now register calf births and apply for compliance certificates online thus saving on postage. The continued implementation of AIM will lead to further savings. In particular, the availability of AHCS coupled with completion of the birth registration and farm movement modules under AIM could allow for the removal of cattle passports (except for exports or movements), which would result in considerable savings for the Exchequer.

Figure 2.1 Overview of inputs to database and its uses



### **2.5.1 Livestock Marts**

Livestock marts are key collection points for information on cattle movements. Over 1.6 million cattle movements take place through marts annually. On each sale day, marts record electronically the movement of cattle onto the premises (including the ear-tag number and herdnumber of the vendor), herdnumber of the purchaser, date of sale and mart approval number). The system confirms the disease status of the animal and compliance with the database prior to sale. This information is transmitted electronically to the Department's database on a daily basis.

### **2.5.2 Private Sales**

The notification system for private sales has been in operation since September 1998. Since 2004, all movements of bovines from farm to farm, with the exception of emergency replacement calves, must be cleared in advance against the central database and the animals being moved must be accompanied by a Certificate of CMMS Compliance. The destination of the animals is confirmed after the event. Confirmation of the movement (signed by both parties) is submitted within 7 days to the Movement Notification Agency. The Department carries the costs (mainly postage) for this clearance and notification system.

### **2.5.3 On-farm deaths**

With occasional exceptions, all animals that die on farm are removed to a licensed knackery for disposal. An official DAFF form is completed by the keeper and countersigned by the knackery giving details of the animal collected and the date of death. This document is forwarded to the Cattle Movement Notification Agency where the data are subject to a number of validation checks to ensure accurate information is entered onto the database. As is the case with private sales, all on-farm deaths are notified by freepost to the database within seven days of the event.

DAFF subsidises the collection of fallen bovine stock. This subsidy will not be paid unless valid notification of the death has been received and the movement to the knackery appears on the database.

### **2.5.4 Movements for Slaughter**

Beef slaughter plants in Ireland are divided into two types - large capacity slaughterhouses, which are approved and supervised by the Department and small capacity slaughterhouses supervised by the Local Authority.

Details of animals destined for slaughter at large capacity slaughter plants are inputted by plant staff and subjected to on-line database validation prior to slaughter. Animals may be accepted for slaughter only if the tag number is constructed properly, the animal is alive and

is located in the herd consigning it for slaughter. After slaughter, DAFF staff at the slaughter plant update the record of the animal on CMMS to indicate that it has been slaughtered.

Approval for slaughter must be obtained, in advance, from DVOs, for animals being slaughtered at Local Authority plants. The operator must obtain [in advance] a document confirming the animal may be slaughtered from the DVO. This clearance document must be available for inspection by the Local Authority veterinarian at the ante-mortem stage. Clearance for slaughter will be given only if the animal is under thirty months of age and is CMMS compliant. The BSE-testing age was increased to 48 months for slaughter animals from January 2009.

The veterinarian attached to the Local Authority confirms the slaughter of the animal in writing to the DVO where the record of the animal is updated on the database.

### **2.5.5 Live Export Points**

Export ports and lairages that are approved for the live export trade, are linked on-line to the central database. Animals are cleared against the database prior to acceptance for export. The movement of the animal into the export lairage is recorded and the AIM database is interrogated to verify the origin, identity and life history of the animals. The export destination is recorded and the continuation sheet for the veterinary certificate is printed from the system.

## **2.6 Outsourced Contracts**

Outsourcing involves entering into a contract with private sector operators for the provision of services. Contractors deliver a number of key components of the traceability system. The process of competitive tendering is used on a regular basis to deliver value for money for the outsourced elements of the traceability system. Three contracts are entered into for delivery of a number of critical outputs of the system as set down below.

- [1] Supply of Bovine Animal Identification Tags and associated Birth Registration Documents
- [2] Handling, processing and verification of farm-to-farm movements and on-farm death notifications
- [3] Passport issue and birth registration system.

The contract document signed on behalf of the contracting authority and the Department for each of the above three services acts as a Service Level Agreement.

## **2.7 Outputs/Uses of Database**

The development and evolution of the traceability system facilitated a wide range of uses of the system as set down below.

### **2.7.1 Traceability System**

CMMS/AIM is the traceability system, which provides a high degree of assurance on animal identification and the traceability of the animals and facilitates compliance with EU and national requirements.

### **2.7.2 Documents**

A range of documents are produced in the traceability process including white cards, passports, replacement passports, compliance certificates to move animals farm to farm, and herd profiles.

### **2.7.3 Animal Health Computer System (AHCS)**

In addition to providing a high degree of assurance on traceability, CMMS/AIM works in tandem with AHCS in facilitating the maintenance of an high health status of the animals. When herd tests are being undertaken, the AHCS database takes a herd profile from the AIM system, which is used by the Private Veterinary Practitioners (PVPs) to record test results in the TB and Brucellosis eradication programmes. The TB test records obtained on an annual basis are used to exercise a quality control function on AIM/CMMS data as PVPs identify animal identification discrepancies for resolution prior to signoff on TB test data. The advanced computer systems aid the keeper by highlighting issues for reconciliation. The databases facilitate compliance with EU and national requirements and provide data to facilitate identification and segregation of bovines for disease testing (e.g. BSE Testing at meat plants and knackeries), tracing of cohorts and progeny, compensation payments and cross compliance inspections.

### **2.7.4 General Disease Control**

The CMMS database can be used to identify and locate animals under a range of headings so that in the event of an outbreak of a disease animals may be traced and the disease contained as appropriate. The databases facilitate compliance with EU and national requirements and provide data to facilitate segregation of bovines for disease testing including determination of age, tracing of cohorts and progeny and the calculation of compensation payments.

### **2.7.5 Certification Requirements for Specific Export Markets**

The database is used to assist in the testing and certification requirements for specific export markets including certification of beef for Russia.

### **2.7.6 Ante-Mortem Process**

The database has become an integral part of the ante-mortem process at factories and identifies animals that must be sampled for BSE testing.

### **2.7.7 Live Exports**

The database is used in the pre-clearance process for live exports.

### **2.7.8 Consumer**

It provides general assurances to consumers at home and abroad about the origin and identification of Irish beef.

### **2.7.9 Marketing**

Data are provided to Bord Bia to facilitate projections of supply of cattle and beef and the marketing effort in international marketplace. It is employed as a marketing tool for Ireland's beef export industry and is highly regarded by visiting trade delegations from OMS (Other Member States) and third countries as providing the requisite assurances in regard to animal health and food safety.

### **2.7.10 Annual Statistics**

The CMMS Statistics Report is produced on an annual basis. The report is made available to a wide range of stakeholders including abattoirs, Agri-Aware, Bord Bia, Breed Societies, CSO, Farm Organisations, FSAI, IBEC, livestock marts, meat factories, Teagasc, Veterinary Ireland and Veterinary Officers Association.

### **2.7.11 CSO**

There are some differences in the cattle numbers provided by the CMMS data and CSO data. The differences are explained by the fact that the reference date for the CSO livestock survey is the 1st of December, while data in the published CMMS report is for the 31st of December. In addition CSO uses a representative sample of about 30,000 farmers.

### **2.7.12 Animal Welfare Recording and Breeding Scheme for Suckler Herds**

Farmers may submit data in electronic or paper format for the recording of animal events under the Animal Welfare Recording and Breeding Scheme for Suckler Herds introduced in 2008. A total of 53,962 farmers out of 65,000 Suckler farmers in Ireland and over 80% of all suckler cows in the country are in the scheme. The objective of this scheme with a budget of €250 million over 5 years is to encourage the adoption of high levels of animal welfare and to improve the quality of breeding cattle. The specific objectives of the scheme are to:

- Enhance welfare standards for animals produced from the suckler cow herd.
- Improve husbandry standards at weaning time leading to reduced illness and mortality and enhanced health of the National herd.
- Provide education and knowledge building among herd owners on best practice in suckler herd health and welfare.

- Improve the genetic quality of the National suckler herd.
- Improve the competitiveness and quality of product of the Irish beef industry.

The Irish Cattle Breeding Federation (ICBF), which was established in 1997 to develop cattle breed improvement programmes to achieve the greatest possible genetic improvement in the beef and dairy herds, plays a key role in the scheme. The CMMS/AIM system is used to verify a range of aspects included in this scheme.

### **2.7.13 Compensatory Allowances Scheme**

The database is used to prove minimum stocking density requirements have been met for the Compensatory Allowances Scheme.

### **2.7.14 Nitrates Regulations - Calculation of Annual Nitrogen and Phosphorus**

#### **Statement**

The European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006<sup>2</sup> (the so called 'Nitrates Regulations') facilitates implementation of the National Action Programme under the Nitrates Directive.

As part of the Single Payment Scheme farmers are required to respect the various Statutory Management Requirements (SMRs) set down in EU legislation including Directives and Regulations on the environment, public, animal and plant health and animal welfare and to maintain land in Good Agricultural and Environmental Condition (GAEC). Cross-compliance obligations incorporate the Nitrates Directive and include the requirement that the amount of livestock manure applied in any year to land on a holding, added to what the livestock deposit directly does not exceed an amount containing 170 kg of nitrogen to the hectare unless a derogation has been approved by DAFF to allow them to apply up to 250 kg of nitrogen. DAFF issues each keeper with an annual Nitrogen and Phosphorus Statement to assist them to comply with this requirement and for this purpose DAFF utilises the stocking numbers that exist on the CMMS database, when calculating a keeper's nitrogen and phosphorus statement.

The Department also set up a facility within its website to enable all registered users to access their current and previous years N and P statements. Since September 2008 District Veterinary Offices (DVOs) have access to this "Nitrates System" which means a farmer can access his/her current and previous N and P statements from the local DVO.

The traceability system facilitates the production of annual reports on "derogation keepers" as required by the Commission and its auditors. The traceability system is therefore essential to

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<sup>2</sup> Statutory Instrument S.I. No. 378 of 2006.

DAFF in its monitoring and enforcement of the European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006.

### **2.7.15 Rural Environment Protection Scheme**

DAFF utilises the traceability database to ensure that all keepers participating in the Rural Environment Protection Scheme (REPS) stay within the prescribed limits for organic nitrogen. Keepers participating in REPS are restricted to a limit of 170kg/ha of organic nitrogen from livestock manure. However under REPS 4, keepers above the limit 170kg/ha of organic nitrogen from livestock manure with a valid Nitrates Derogation may enter the scheme. The use of the database for REPS offers the EU Commission assurance that Ireland is controlling the 170 kg/ha limits and adhering to all relevant regulations.

### **2.7.16 Coupled EU Schemes**

The database provided an appropriate mechanism to validate premia payments under coupled EU schemes prior to the introduction of the Single Payment Scheme in 2005.

### **2.7.17 Inspections**

Cross-compliance is an integral part of the Single Payment Scheme. Council Regulation 1782/2003 requires that payment of the Single Payment is conditional on compliance with a total of 19 Statutory Management Requirements (SMRs), one of which relates to the requirements relating to identification and registration of bovine animals set down in Regulation (EC) No 1760/2000. The management of the cross compliance inspections under the Single Payment Scheme is facilitated by use of the traceability database. The rate of on-farm inspection required for cross-compliance is generally 1% of those farmers to whom the SMRs apply or Good Agricultural and Environment Condition (GAEC).

However a comprehensive inspection regime which predated the Single Payment Scheme monitors compliance with the requirements set down in Regulation (EC) No 1760/2000. Commission Regulation (EC) No 494/98<sup>3</sup> lays down detailed rules for the implementation of minimum administrative sanctions for the identification and registration of bovine animals and provides for the imposition of animal movement/herd restriction where there is non-compliance with the requirements of the Regulation. Commission Regulation (EC) No 1082/2003 of 23 June 2003<sup>4</sup> sets down the minimum control levels (5% of holdings to be subject to on the spot checks in the case of Ireland due to the establishment of a functioning database) and the format of reporting of checks to the Commission. Member States are permitted to carry out on the spot checks in conjunction with other schemes established under

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<sup>3</sup> Commission Regulation (EC) No 494/98 of 27 February 1998 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the application of minimum administrative sanctions in the framework of the system for the identification and registration of bovine animals.

<sup>4</sup> Commission Regulation (EC) No 1082/2003 of 23 June 2003 laying down detailed rules for the implementation of Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards the minimum level of controls to be carried out in the framework of the system for the identification and registration of bovine animals

community legislation (mainly SPS) on the basis of risk analysis criteria specified in the Regulation. The majority of bovine identification inspections are carried out under Cross-Compliance rules and the remainder of the inspections are carried out by DVO staff (veterinary/technical) in relation to non-SPS applicants, welfare cases, disease risk cases and other random selection criteria. The Department selects herds for inspection on the basis of the risk criteria described in Circular No. ER 23/2005 *Instruction to staff concerning herd selection for 1760/2000 ('820/97') inspections* – see Appendix 5

Each MS is required to make an annual return detailing the number and results of inspections carried out. The report provides general information on animals and inspections and breaches found by category. The bovine inspections undertaken under cross-compliance, together with the inspections carried out by staff at the DVOs, are taken into account when furnishing the Commission with statistics on bovine identification and registration. The Commission (since 2006) requires cross-reporting of inspections which means that all Regulation (EC) No 1760/2000 inspection breaches must be taken into account when calculating sanctions/financial penalties under SPS.

## **2.8 Online Services**

Farmers have access to a range of departmental online services – see paragraph 2.8.1. Some 7,500 applications for the Single Payment Scheme were completed online in 2007 and by the end of the year approximately 30,000 farmers were registered for online services themselves or through an approved agent. The Department also interacts electronically with private veterinary practices, animal tag vendors, livestock marts and cattle export lairages using dedicated services over the internet. An AIM system interactive mobile phone service was made available to farmers to enable them to receive herd profiles and to request a Certificate of CMMS Compliance to move a bovine animal to another farm. Uptake of this service has been disappointing and feedback from farmers has indicated that they find it difficult and cumbersome to use the mobile phone for anything more than the most basic of data entry tasks.

### **2.8.1 Online Schemes and Services**

*Agfood.ie* facilities have been provided to enable farmers to:

- Register the birth of calves;
- Apply for a Certificate of CMMS Compliance to move animals farm to farm;
- View details of compliance certificates sent to them;
- View their current bovine herd profile or for any specified day;
- View movements of animals in and out of their bovine herd,
- View and print specific bovine animal details (breeds etc.);
- Enter animal event details for the Suckler Cow Welfare Scheme;
- View all current and previous SPS applications;

- ❑ View and print off colour land parcel maps;
- ❑ View all SPS payment information and
- ❑ Submit SPS application information sent to and received by the Department.

Registered customers are provided with a Personal Access Code (PAC) and password for secure interaction with existing and future services

### **2.8.2 Pilot Online Promotion Campaign**

In 2008, a pilot online promotion campaign was operated in Wexford which included:

- Local media advertising campaign of *Agfood.ie* online services;
- Use of a mobile multi-media facility at Enniscorthy Livestock Mart;
- Late night opening for the District Veterinary Office in Enniscorthy;
- Help Desk support; and
- One-to-one assistance for farmers with the online registration process.

This pilot programme was discontinued following an analysis of the results of the campaign. The campaign did not trigger a significant increase in online activities. *Agfood.ie* promotion campaigns take place at national farming events such as the National Ploughing Championships.

### **2.8.3 Other Developments**

A Committee for Increasing the Uptake of Knowledge Society Technologies in Agriculture (CUITA) was established in July 2007 to accelerate the adoption of ICT by the farming sector and rural families. The Committee will publish an interim report in early 2009.

## **2.9 Food and Veterinary Office**

The Food and Veterinary Office of the EU Commission carries out missions to Member States to examine the implementation of legislation. The FVO missions on a range of animal health areas have examined the traceability mechanisms in place.

## **2.10 Conclusion**

This chapter outlined the main features of the traceability system. The origins of a bovine identification and tracing system go back to the introduction of the voluntary Bovine Tuberculosis Eradication Scheme in 1954. The use of eartags and corresponding identity cards commenced on the introduction of the national TB eradication campaign in 1958.

Consumer demand for assurances on the safety of beef provided the impetus for the development of the bovine animal registration and traceability system called Cattle Movement Monitoring System (CMMS). The CMMS has been fully operational since 1 January 2000 in

accordance with the requirements of Regulation (EC) No 1760/2000 which lists four pillars of identification for bovine animals including eartags, identity cards, on-farm registers and computerised databases containing information on animal identity and location. The computerised database contains comprehensive data recorded on the registration, origin, identity, movements and life history of cattle and identifies and traces each animal continuously throughout its natural life in Ireland. Contractors are engaged on foot of a competitive tendering process to assist the Department in delivering a number of key components of the traceability system.

The information on the central database is used primarily in disease control, protecting public health and reassuring consumers at home and abroad. In addition, the traceability system facilitates delivery of a wide range of measures including cross compliance inspections under the Single Payment System, Rural Environment Protection Scheme, Animal Welfare Recording and Breeding Scheme for Suckler Herds, Compensatory Allowances and facilitates compliance with the Nitrates Directive.

## Chapter 3

### Rationale for the Bovine Animal Identification and Traceability System

#### 3.1 Introduction

Although there is a clear rationale for the existence of the traceability system based on the regulatory framework set down in EU legislation [Regulation (EC) No 1760/2000 of July 17 2000] and national legislation (see Appendix 3), this Chapter examines the evaluation criterion of “rationale” for the animal identification and traceability system and its compatibility with overall Department and public policy.

The primary objectives of the traceability system are to:

- provide assurances to customers and consumers on the origin and traceability of beef;
- protect animal and human health; and
- secure and maintain markets for Irish cattle and beef.

In addition, this system operated in Ireland facilitated the delivery of a range of measures as detailed in Chapter 2.

#### 3.2 Importance of the Agri – Food Sector

The agri – food sector continues to be one of Ireland’s most important indigenous industries accounting for 6.3% of Gross Domestic Product (GDP) and 8.2% of employment<sup>5</sup>. A number of key indicators for 2007 below sets the context emphasising the importance of cattle rearing and production.

- cattle population of 6.16 million at 31/12/2007
- cattle farming is the dominant enterprise on 51% of farms with dairying being the dominant enterprise on a further 23% of farms
- employment in the agri-food sector was 160,000 broken down between 109,700 whose principal source of income was agriculture and 49,700 in food processing.
- agri-food exports of €9.2 billion representing 10.5% of total exports
- beef exports valued at €1.56 billion and dairy exports at €2.4 billion
- beef and milk account for approximately 56% of agricultural output at producer prices
- 219,757 live cattle exports in 2007

In 2007, beef exports continued to increase, although at a slower level than in recent years, with almost 235,000 tonnes exported to the higher value Continental EU markets. Despite the

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<sup>5</sup> Fact Sheet on Irish Agriculture, October 2008. [www.agriculture.gov.ie/publications](http://www.agriculture.gov.ie/publications)

increasing competitive challenge posed by competitors, particularly at retail level, volumes increased in all major markets except Italy. The UK is the largest single market realising a 4% increase in 2007 to over 275,000 tonnes. Exports to international markets declined during 2007 due to the availability of more lucrative and reliable outlets within the EU with Russia remaining the principal destination. The net result of these trends is that more than 95% of our beef exports now go to the high-value internal EU marketplace.

Despite the continuation of the shift in Irish exports towards Continental Europe, efforts continued during 2007 to reopen international markets. Both the Saudi Arabian and South African markets were reopened during 2007 and discussions are well advanced with a number of countries including Indonesia, Singapore, the Philippines and Japan. A Market Access Group has also been established to facilitate trade in Irish beef to non-EU markets.

### **3.3 Exchequer Support**

Public expenditure of some €3 billion annually is provided for the agri-food sector including a wide range of measures including direct payments and on-farm investment grants. The traceability system may be viewed as a public good in that all citizens in society and consumers of the product by way of assurance on the origin and traceability of beef and by extension the producers of cattle and livestock products derive a benefit from the presence of an effective animal identification and traceability system. The assurance provided to consumers on the origin and traceability of cattle is underpinned by the contribution of the traceability system in protecting animal health, which in turn provides the framework to protect human health. The existence of a reputable identification and traceability system supports the agri-food industry, that represents a significant sector in the economy, in obtaining access to international markets and growing market share in those markets. The exchequer provision of a significant degree of support to the traceability system has to be viewed against a background that cattle is the dominant enterprise on half the farms in Ireland, a very high proportion of cattle and livestock products are exported to the high-value internal EU marketplace.

### **3.4 The Bovine Traceability System and Policy of DAFF and Government**

This section examines how the system fits in with current national policies by assessing the extent to which the scheme's rationale is compatible with a number of significant documents set down below.

- a) Statement of Strategy 2005 – 2007<sup>6</sup>
- b) Customer Service Action Plan 2005 - 2007
- c) Information Communication and Technology (ICT) Strategy 2004
- d) Agri-vision 2015 Action Plan

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<sup>6</sup> The goals relating to the traceability system are unchanged by the Statement of Strategy 2008 - 2010

- e) The Towards 2016 Framework
- f) The National Development Plan 2007 – 2013
- g) The Rural Development Plan 2007 – 2013
- h) Programme for Government – A Blueprint for Ireland’s Future 2007 – 2012
- i) Food Safety Action – The Safe Food Chain.

### **3.4.1 Statement of Strategy 2005 – 2007**

The Statement of Strategy sets out the mission, goals, strategies and priorities of the Department, which are in line with the priorities in the Programme for Government. The mission statement of the Department of Agriculture, Fisheries and Food is *“to lead the sustainable development of a competitive consumer-focused agri-food sector and to contribute to a vibrant rural economy and society”*.

Divisional business plans and role profiles, which are based on the goals and strategies in the Statement of Strategy, are the mechanisms used to implement plans and policies. Four of the five high level goals are relevant to the management of the Identification System. Each goal is accompanied by Strategic Actions, which indicate how each goal is to be achieved together with Performance Indicators for that goal.

#### **Goal 1. Agri-food development and trade in a national and international framework**

Develop an internationally competitive consumer-focused agri-food sector and support and facilitate trade in agriculture and food.

Implementation of Agri Vision 2015 Plan of Action is set down as a high level Performance Indicator for this goal. The achievement of this goal is influenced by the presence of effective systems of testing and certification of product underpinned by a reliable traceability system. The bovine Identification and Traceability System plays a significant role regarding beef traceability, food safety and quality beef assurance schemes which contribute to the high reputation of Irish beef in a national and international framework. The traceability system is particularly important in the context of underpinning the high volume and value of beef exports in the development of an internationally competitive consumer-focused agri-food sector.

#### **Goal 2 Food safety, animal health and welfare, plant health**

Ensure the highest standards of food safety and consumer protection, animal health and welfare, and plant health.

A number of High Level Performance Indicators are set down for this goal including:

- Status of food safety, animal health and welfare and feed safety as indicated by verification reports of external agencies e.g. FSAI, FVO;
- Enhanced animal health as evidenced by changes in disease incidence; and

- Level of adherence with regulatory control systems including cross-compliance measures

As health and food safety issues impact upon purchasing decisions, the protection of the health of consumers is an integral component of agriculture and food policy. The identification and traceability system has a significant role to play in the management of effective control systems to facilitate the production of safe food, consumer protection and a high standard of animal health and welfare. The achievement of this goal is influenced by the presence of effective monitoring, inspection and control programmes. The Department provides a range of assurance and control systems that provide transparency on the origin and quality of food including traceability for beef.

#### **Goal 4 Schemes Delivery and Financial Management**

Operate all our schemes and programmes in an efficient and effective manner, and ensure the highest standards of corporate and financial management and accountability in all our activities.

The High Level Performance Indicators set down for this goal are:

- degree to which payment and service target dates specified in CSAP and Protocol are achieved; and
- maintenance of high standard of financial management and controls as verified by external monitoring agencies e.g. audit reports, C & AG, etc.

The management of the finances of the operation complies with all the procedures required by the Department to operate financial management, control and accounting systems in compliance with financial reporting, accounting and governance requirements. Risk management is an integral part of the financial management system. The management of traceability system is enhanced by identification and management of risks under strategic, operational, financial, reputational headings in the Risk Management Programme. On-line access is provided to divisional reports in the Management Information Framework (MIF), including financial information and performance delivered against the key performance indicators in divisional business plans.

A rigorous approach is adopted to ensure that the system is operated in an efficient and effective manner, high standards of financial management are applied to the use of resources and that a quality service is delivered to the customer. Emerging technologies are exploited for greater efficiency and control of the operation on a continuing basis.

## **Goal 5 Operational Capabilities and the Modernisation Agenda**

Develop our human and physical resources, our operational capabilities and ensure the delivery of quality service to our customers, both internal and external while implementing Government policy on decentralisation and public service modernisation.

A number of High Level Performance Indicators are set down for this goal including:

- implementation of relevant elements of the Programme for Government and Sustaining Progress;
- implementation of the corporate governance agenda, e.g. CSAP, HR Strategy, ICT Strategy, Training Strategy, Business Planning Guidelines, etc; and
- management of programme of change and cross cutting issues.

The operation of the system is carried out with a strong emphasis on effective and efficient delivery of a quality service underpinned by development of staff and associated with a continuous improvement in work processes, systems, physical resources. There is a commitment in the Division to delivery of PMDS processes. On occasions requests relating to traceability issues have been made to obtain information under Freedom of Information legislation. A number of appeals on traceability issues have been made to the Agriculture Appeals Office, which provides a statutory independent appeals service to farmers who are dissatisfied with decisions of the Department.

Every effort is made to pursue eGovernment strategy to ensure that all significant services that are suitable for provision through electronic channels are made available to customers.

The traceability system is compatible with the goals contained in the Statement of Strategy. Continued expenditure of public monies on the system is warranted based on the VFM analysis. However, a number of recommendations, targets and additional key performance indicators will be added to improve the service delivery.

### **3.4.2 Customer Service Action Plan**

The Customer Service Action Plan sets out standards of quality service to meet the obligations under the Customer Charter in line with the Government's Quality Customer Service Initiative. The Charter of Rights for Farmers contains specific commitments on service delivery targets for farmers. Progress on activities, pertinent to the Customer Service Action Plan, is monitored by a Monitoring Committee with an independent chairperson, comprised of representatives of the Department and the farmer representative associations. The information on the databases is used as a basis for calculating SPS payments and it is vital that this data is both accurate and timely to ensure that the Charter of Rights for Farmers and Customer Service Action Plan target dates are achieved.

### **3.4.3 Information Communication and Technology (ICT) Strategy 2004**

The Strategy indicates that eGovernment is at the centre of automated service delivery to the citizen and must be included in all projects undertaken by the IT Group. AIM/CMMS was prioritised as one of a number of eGovernment initiatives.

Governance was identified as a critical issue in delivery of IT projects. The IT Director is an Assistant Secretary General and is directly responsible for the resources of the IT Group. The IT Steering Committee (ITSC), which is chaired by the Secretary General, approves project initiation, prioritises projects and assumes responsibility for their success at the highest level.

Project Governance is a responsibility of both the business and IT Group. A Project Board is established for all significant ICT development projects and is chaired by the appropriate ASG who leads the business area for which an ICT development project is being undertaken. The Project Board is responsible for the overall success of the project and seeks to ensure that resources are made available to the project. The IT Group provides the Project Management, and is responsible for the day-to-day project management. The Project Board approves project documentation, assesses progress against plans, monitors the finances, and manages the risks.

The Animal Identification and Movement System is managed actively by the Project Board operating in accordance with criteria for governance set down in the ICT Strategy.

The ICT Strategy identified lack of infrastructure including broadband and levels of PC ownership as risks in delivery of IT. The Identification System, in line with the ICT Strategy, endeavours to use Information Technology to give added business value to the Department and to facilitate strategic change. The replacement of CMMS with AIM is compatible with staying abreast of general technology trends and industry leading practices in order to ensure that the most effective technologies, in terms of costs, service delivery and risk mitigation, are employed to deliver its solutions.

### **3.4.4 Agri-Vision 2015 Action Plan**

The Agri-Vision 2015 Committee was established to review the strategy and recommendations contained in the Agri Food 2010 Report. The 2015 Action Plan, launched in March 2006, sets out a positive vision for the future of the agricultural sector against a background of a changing environment in trading conditions. The Plan highlights the importance of competitiveness, innovation and consumer-focused marketing and emphasises that delivering safe, high-quality, nutritious food, produced in a sustainable manner, to well-informed consumers in high-value markets is the way forward for the Irish food industry.

The Plan sets out 167 actions to be taken to fulfil this vision. The significant action for the traceability system is Action Point 4 which states “existing systems on animal traceability will be further developed by DAFF in line with emerging health and consumer concerns”. Action Point 8 refers to use of the traceability system for marketing while Action Point 66 refers to competitive advantage against low cost imports.

The second progress report on Agrivision 2015 sets down the measures taken and the status of each measure. In particular the summary of the report acknowledges the development and implementation of a sophisticated animal traceability system as a contributing factor to enhancing and guaranteeing the production of a safe and healthy food supply.

### **3.4.5 Towards 2016**

Towards 2016 is the government’s ten-year framework Social Partnership Agreement 2006-2016. The agriculture provisions in the document were agreed with the Farming Social Partners. Five key objectives are set down in the document including *a competitive agri-food sector providing quality and safe foods on the domestic and international market place*. The national policies to implement the five key objectives will be implemented by pursuing the priorities set out in the Agri-Vision 2015 Action Plan and will include relevant measures under the 2007 – 2013 National Rural Development Programme.

There is a strong emphasis on North/South co-operation in the document. The Government and Social Partners remain committed to full implementation of the Good Friday Agreement. North/South co-operation needs to be at the heart of strategic planning on the island. There is a focus on mutual gains to demonstrate that the economic and social success of each part of Ireland is advantageous to the other.

Regarding telecommunications, the progressive enhancement of broadband services in the telecommunications market is a Government priority within its overall telecommunications goal.

### **3.4.6 National Development Plan 2007 – 2013**

The National Development Plan aims to spend over €8 billion under the programme promoting the continuing modernisation and competitiveness of the farming and food processing sector as well as the enhancing the quality of the rural environment. The proposed expenditure under this plan is in line with the strategies as set out in the Agri – Vision 2015 Action Plan including the actions associated with AIM/CMMS in contributing to the production of high quality traceable food to the highest possible standards remains a top priority of DAFF and other relevant Departments and Agencies.

#### **3.4.7 The Rural Development Plan 2007 – 2013**

The Rural Development Plan [RDP] has an allocation of almost €5.8 billion and includes a range of support measures relating to competitiveness, environment, quality of life and diversification. The RDP includes measures on early retirement, farm investment, agri-environmental supports, installation aid and the disadvantaged areas. In relation to the consumer, the RDP states that Ireland should “focus on the *requirements of the consumer at every stage in the value chain, especially in ensuring the highest standards of food safety*”.

Axis 1 of the RDP which aims to improve the competitiveness of farm and forest enterprises through support for restructuring and innovation, is especially important in terms of food safety. The measures under Axis 1 combine to respond to issues identified that impact on the competitiveness of the agriculture and food sectors and aim to progress restructuring and investment for the challenging era ahead.

A SWOT analysis was conducted as part of the framing of the RDP. One of the opportunities it cited was that "the continued good health and welfare status of our national herd contributes to the development of a sustainable agri-food sector and a vibrant export sector". This opportunity must be exploited in a manner that ensures the highest level of food safety and with regard to the environment and animal welfare.

#### **3.4.8 Programme for Government - A Blueprint for Ireland's Future 2007-2012**

The management of the Department is integrated with achievement of the objectives of the Programme for Government whereby the focus of management is to ensure that the commitments contained in the Programme for Government are being met. The operation of the identification and traceability system is compatible with the undertakings specified in the Programme for Government in relation to food products including:

- to further exploit the potential of existing animal traceability systems for the marketing and labelling of food products; and
- in the beef sector, ensure that our high standards of food safety, quality labelling and traceability will be vigorously promoted to provide a competitive advantage against low cost imports.

#### **3.4.9 Food Safety Action – The Safe Food Chain**

Safe Food Chain emphasises that the safety of the consumer is the overriding principle in the production of food and that businesses involved at each link of the chain have primary responsibility for ensuring safe food standards are met. Accordingly the primary objective of the Department is to safeguard animal health and public health by preventing, controlling and eradicating animal and zoonotic diseases. The traceability system plays a key role in

providing traceability in the food chain with the herd registration and animal identification system as well as providing an effective database for use in the control of animal diseases.

### **3.5 Conclusion on the Evaluation Criteria of Rationale**

It is evident from the foregoing apart from the precise EU requirement there is a clear rationale for the existence of the traceability system based on the “public good” dimension. The traceability system is one of a broad range of measures designed to protect animal health and public health and makes a significant contribution in assisting Ireland’s agri-food sector in obtaining access to export markets. The analysis of the policy documents referred to in paragraph 3.4 has demonstrated that the objectives of the traceability system are compatible with DAFF and national policies as enunciated in a number of key government and departmental documents.

## Chapter 4

### Efficiency of the Bovine Animal Identification and Traceability System

#### 4.1 Introduction

The Chapter addresses the third and fifth aspects of the terms of reference of this review which are as follows:

- (a) Define the outputs associated with the Bovine Animal Identification and Traceability System and identify the level and trend of those outputs; and
- (b) Identify the level and trend of costs and staffing resources associated with the Bovine Animal Identification and Traceability System and thus comment on the *efficiency* with which it has achieved its objectives.

Efficiency is concerned with comparing the level of inputs to outputs<sup>7</sup> in a system to establish the extent to which the same level of outputs and results could be achieved with fewer inputs at lower cost and furthermore to establish whether a higher quality or quantity of outputs could be achieved from a fixed amount of input. Accordingly efficiency is concerned with comparing inputs to outputs with the aim of optimising the ratio of inputs to outputs. An analysis of efficiency involves an assessment of the input mix in addition to an examination of outputs including the level of outputs, cost of outputs, quality of outputs, timing of outputs and allocation of resources. The analysis should explore possibilities regarding maximisation of outputs from a defined set of inputs or if fewer inputs could be used to achieve the same level of outputs and results including quality with a lower cost base.

Economy is concerned with the cost of inputs to a system and involves procuring resources at the lowest cost consistent with desired quality<sup>8</sup>. The Department is subject to all of the normal public procurement and scrutiny of expenditure arrangements including audits to assess efficiency of expenditure carried out by the Internal Audit Unit and the Comptroller and Auditor General. Invitations to tender are issued on a regular basis in respect of outsourced contracts to ensure that DAFF is receiving the best value possible on the outsourced services. Contracts for outsourced services are entered into for a one year period with extensions possible up to a maximum of two years. Likewise, Information Technology resources are engaged by a tender procedure. The staff in the Department that are assigned to the system are on fixed salary scales and accordingly a focus on economy is on reducing staff numbers assigned to the system to achieve the same or a better result or obtaining a better result with the current staff numbers.

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<sup>7</sup> The Department of Finance Value for Money and Policy Review Initiative Guidance Manual – 7<sup>th</sup> March 2007.

<sup>8</sup> [http://audgen.gov.ie/documents/vfmreports/56\\_improvingPerformance.pdf](http://audgen.gov.ie/documents/vfmreports/56_improvingPerformance.pdf)

The costs incurred by the Department on the identification and traceability system (including that for the database used to operate the system and its development) arise from the mandatory requirement introduced under EU legislation to have an identification and traceability system in place. The cost involved includes the sum of the costs of (a) the outsourced contracts, (b) DAFF staff deployed to administer and implement the system and (c) investment in facilities and equipment. Costs that may be incurred by keepers in completing documentation and others in inputting and transmitting data are not taken into account for the purpose of this exercise.

In considering the overall efficiency of the system, the examination includes a focus on the efficiency of delivery of the two outsourced “bovine registration” and “farm to farm movement” contracts and delivery of the programme by DAFF staff. A third contract exists for the supply of bovine animal identification tags and birth registration documents to keepers of animals. The tags contract differs from the “bovine registration” and “farm to farm movement” contracts in that the costs incurred by the Department relate only to the administration of the tender process and management of the contractual arrangements as the keepers pay the contractor directly for the tags (estimated at €6.46 million a year for new and replacement tags). The efficiency exercise in relation to the value for money of the outsourced contracts involves calculating unit costs for a number of components of the system including the registration of a bovine, issuing of a replacement passport, issuing of a herd profile, processing of a movement notification form and staff costs. The treatment of efficiency related to the management of staff costs extends to the impact of the use of technology in releasing of staff to higher quality activities.

#### **4.2 Programme Logic Model**

The Value for Money and Policy Review Initiative Guidance Manual, published by the Central Expenditure Evaluation Unit in the Department of Finance in March 2007, recommends using the Programme Logic Model in the VFM process. The Programme Logic Model maps out the shape and logical linkages of a programme and provides a systematic mechanism for presenting and understanding the cause-effect relationship between inputs, activities, outputs and outcomes. Appendix 6 provides a diagrammatic representation of inputs, activities, outputs and outcomes of the Bovine Animal Identification and Traceability System in a Programme Logic Model.

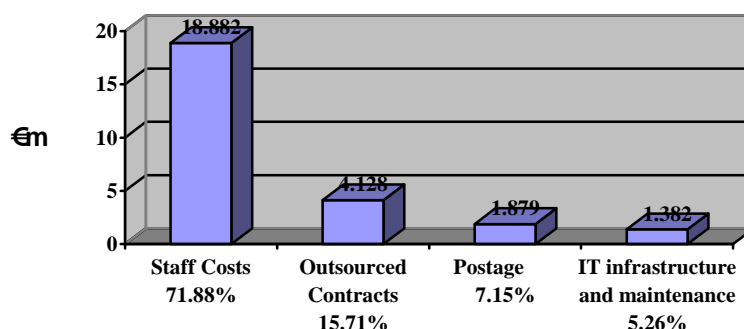
The model shows that the average annual input cost of the outsourced contracts is €4.128m (excluding postage). The outputs received by the Department as a result of these inputs include 2.1million calf births registered and passports issued and 527,000 movement forms processed. The movement forms processed include 800,000 to 900,000 farm to farm movements annually. See table 4.4 for detailed breakdown of movements recorded. The

activities undertaken by the contractor and Department staff to deliver these outputs are detailed in the Programme Logic Model.

### 4.3 Inputs to the Bovine Animal Identification and Traceability System

The inputs to the system are illustrated in figure 4.1 below and relate to the cost to the Department of outsourcing the calf birth registration and farm-to-farm movement contract, the cost of DAFF personnel implementing the system and also the cost of IT Infrastructure and maintenance.

**Figure 4.1 Average input costs 2004 - 2007**



The average costs per annum for the outsourced contract for bovine registration was €3.164<sup>9</sup> million and the farm-to-farm movement contract €0.964million<sup>10</sup> over the period 2004 – 2007. While the Exchequer does not pay for tags, a significant amount of staff resources and time is committed to the procurement process and management of the contractual arrangements. Average annual expenditure on IT infrastructure (maintenance and development) over the 2004 – 2007 period was €1.382 million<sup>11</sup>. Staff costs at HQ and local levels are estimated at €18.882 million (see para 4.17). Average annual postage costs for the period were an additional €1.879m. Thus the average total Exchequer cost of the system is €26.271 million a year. In this regard, while EU legislation provides for the possibility of charges being imposed in connection with the operation of the system, such charges have not been applied here.

As detailed elsewhere in the report, the system underpins the beef and dairy sectors and also supports a significant number of DAFF schemes and operations and this expenditure should be considered in that context.

<sup>9</sup> This figure is the average for the period 2004 – 2007 and covers payments to the designated authority made from GL code 111701 for the passport issue and registration service excluding the postage element. Costs for replacement passports and herd profiles are included.

<sup>10</sup> This figure is the average for the period 2004 – 2007 and covers payments to the designated authority made from GL code 111802 excluding the postage element.

<sup>11</sup> This excludes the development costs of AIM

#### **4.4 Activities in the Bovine Animal Identification and Traceability System**

The activities contributing to the Bovine Animal Identification and Traceability System relate to all interactions with the database and communication with keepers. The activities extend to compilation of statistics, financial reporting, contract management and inspections to ensure compliance with traceability requirements. These activities are represented diagrammatically in the program logic model in Appendix 6.

#### **4.5 Key Outputs of the Bovine Animal Identification and Traceability System**

The analysis identified the following outputs of the system in 2007:

- 2,189,487 sets of tags were issued to 82,523 herds;
- 2.1 million calf births were registered and a similar number of passports were issued;
- 289,502 replacement passports issued;
- 115,788 herd profiles issued;
- 386,888 compliance certificates issued;
- 527,418 movement forms processed;
- The annual CMMS statistics report produced;
- 6,832 animal identification inspections were conducted;
- 1.694 million factory slaughterings were recorded
- 77,958 slaughterings at local authority abattoirs were processed;
- 219,757 live cattle exports were dealt with and 1,625,290<sup>12</sup> movements through marts were recorded;
- 247,000 cattle deaths were recorded<sup>13</sup>.

#### **4.6 Outcomes of the Bovine Animal Identification and Traceability System**

The underlying reason for having an identification and traceability system for cattle is to meet EU legislation requirements that are in place since the mid 1990s. Ireland's system has been approved at EU level and has been demonstrated to and well received by veterinary services both within the EU and in Third Countries. Apart from this, the system is used to operate and underpin a variety of schemes and activities as detailed in Chapter 2. Of particular importance has been the contribution of the system to measures to deal with disease control and eradication and to underpin consumers and Government authorities confidence on food safety. Ireland has been successful in reducing the incidence of a number of diseases due in no small part to having a system in place to identify and trace animals and their cohorts for testing, etc. For example Brucellosis has been eradicated here and BSE levels have fallen significantly. At no stage during the BSE crisis was Ireland alone prohibited from exporting cattle or livestock products even though it had the second highest number of BSE cases of the disease in the EU. On the other hand, the UK was banned from export markets for a

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<sup>12</sup>This figure includes 129,583 movements where the animal was unsold at the mart

<sup>13</sup>Excludes stillborn animals

period of almost 10 years. In addition Portugal, where the number of BSE cases was lower than in Ireland, was also banned from exporting partly because its traceability system was considered inadequate by the Commission. Throughout this period Ireland's access to all EU and most other markets for beef continued reflecting consumer and EU Commission confidence in the Irish control and traceability systems.

In recent years, CMMS/AIM has been used widely in the contexts of implementing the TB and Brucellosis schemes, for identifying cattle for BSE testing and for validating the origin of cattle being slaughtered and exported, maintaining consumer confidence and retention of access to export markets. In this way as well as contributing to the success of disease and traceability measures, the interactions of CMMS/AIM and AHCS have yielded major staff savings at local offices. The system has also facilitated the operation of the premia schemes, the SPS, the Animal Welfare Recording and Breeding Scheme for Suckler Cows, the Nitrates Directive, etc.

#### **4.7 Outsourced Contracts**

Contractors selected on the basis of competitive tendering to deliver value for money for the outsourced elements of the traceability system are responsible for delivering a number of outputs of the system including;

- issue of new and replacement tags;
- registration of calf births and issue of passports;
- issue of replacement passports;
- processing of movement notification forms and issue of CMMS Compliance Certificates;
- issue of herd profiles; and
- follow up of issues in specified cases.

The contract document, which is signed on behalf of the contracting authority and the Department, acts as a Service Level Agreement. In addition, meat plants and marts staff contribute to validation of origin and other aspects for animals being slaughtered or being sold respectively against the Department's database. An examination of alternative approaches to outsourcing is provided at paragraph 6.5.

#### **4.8 Registration of Calf Births**

Keepers register calf births at the Calf Birth Registration Agency (See paragraph 2.4.2). The total number of registrations is dictated by the number of calves born on farms and imports. The data in Table 4.1 show that annual number of registrations decreased by 4.2% over the 2004 – 2007 period. Numbers of calves born vary throughout the year but peak in February to May when more than 70% of births occur (See appendix 17 for details). A number of methods are used by keepers to register calf births and the way they do so is changing over time with

a movement away from a high dependence on the individual white card issued with tags to a greater usage of Animal Events system and a significant increase in the number of electronic registrations. The use of the white card for calf registration decreased by 20% since 2004 and accounted for approximately 66% of total birth registrations in 2007. The number of calf births registered using Animal Events<sup>14</sup> increased by 38% in the 2004 – 2007 period and accounted for almost 22% of total calf birth registrations in 2007. Increased usage of Animal Events is expected with the mandatory requirement to use Animal Events to register a calf for participants in the Animal Welfare Recording and Breeding Scheme for Suckler Cows, which was introduced in 2008.

**Table 4.1: Total Calf Birth Registrations 2004 – 2007**

<b>Year</b>	<b>Total Number of Calf Birth Registrations</b>	<b>Animal Event Sheet</b>	<b>White Card</b>	<b>Electronic Registrations<sup>15</sup></b>
<b>2004</b>	2,221,483	342,532	1,753,046	125,905
<b>2005</b>	2,188,202	387,454	1,649,674	151,074
<b>2006</b>	2,170,720	473,439	1,511,370	181,723
<b>2007</b>	2,127,529	473,463	1,408,253	245,810
<b>% Change 04 - 07</b>	<b>- 4.2%</b>	<b>+ 38%</b>	<b>- 20%</b>	<b>+ 95%</b>

The number of keepers using electronic registration has increased steadily since the facility was provided and accounted for 12 per cent of calf registrations in 2007 while predictions for 2008 are that 10 per cent of keepers will register 17 per cent of calves using electronic registration. As online registrations are more accurate and less costly, the objective has been to increase the level of electronic registrations and this is also in line with eGovernment strategy. In particular, appropriate promotion opportunities are availed of to emphasise the benefits of the use of online services. The increased availability of broadband and the increase in the band width over time will facilitate keepers to avail of online AIM facilities.

The data in Table 4.2 indicate that the overall cost of registrations in 2007 was 3.7% lower than in 2004. The average cost of registering a calf birth has increased only marginally from €2.04 in 2004 to €2.05 in 2007, an increase of less than 0.5% but is well down on 2005 and 2006 costs. The price per registration includes the cost of inputting and validation of data as well as producing passports and dealing with queries and any postage associated with the registration.

<sup>14</sup> All participants in the Animal Welfare, Recording and Breeding Scheme for Suckler Herds 2008 – 2012 must use the Animal Events Book. This will have the effect of decreasing significantly the number of white cards being used to register bovines.

<sup>15</sup> This covers DAFFs online system and electronic registrations using approved farm management packages

**Table 4.2: Estimated Cost per Calf Birth Registered including Postage, 2004 – 2007**

<b>Year</b>	<b>Total Number of Calf Birth Registrations</b>	<b>Cost of Calf Birth Registration<sup>16</sup></b>	<b>Cost of each Calf Birth Registered</b>	<b>Cost of Postage per annum<sup>17</sup></b>	<b>Cost of Postage as % of Total Costs</b>
<b>2004</b>	2,221,483	€4,525,487	€2.04	€1,465,325	32%
<b>2005</b>	2,188,202	€4,610,752	€2.11	€1,496,669	32%
<b>2006</b>	2,170,720	€4,508,874	€2.08	€1,431,009	32%
<b>2007</b>	2,127,529	€4,358,978	€2.05	€1,433,961	33%
<b>% Change 04 – 07</b>	<b>- 4.2%</b>	<b>- 3.7%</b>	<b>+ 0.5%</b>	<b>-2.1%</b>	<b>+3%</b>

The cost of postage (all of which is paid for by the Department) as a percentage of the total cost of the calf birth registration contract over the 2004 – 2007 period remained constant at 32 – 33 per cent. The freepost service, provided for keepers when submitting white cards and Animal Events Sheets, accounts for 27 – 30 per cent of total postage costs with the balance of the postage costs accounted for mainly by the return of passports from the contractor to individual keepers and follow up of errors.

The provision of free postage dates from the time that the new arrangements were being introduced and were intended to encourage keepers to register calves within the prescribed timescale. However, now that the system is well bedded in, consideration could be given to transferring some or all of the costs of postage in the registration process to keepers to reduce the burden on the Exchequer. For example up to 30% of the costs could be saved by transferring the postage cost of submitting white cards and Animal Events Sheets while a further significant sum could be saved if postage costs incurred in the issue of passports was passed on to individual keepers. However, such changes could be made only in the context of a new tender/contract.

#### **4.9 Passports**

Under current arrangements, subject to passing various validation checks, each registration triggers the production of a passport, which is forwarded automatically to the keeper with the full cost borne by the Exchequer. EU legislation specifies that when identification and traceability systems have been approved, passports are required only for animals that are

<sup>16</sup> This cost is derived from GL Code 111701 and excludes the payments relating to Herd Profiles and Replacement Passports.

<sup>17</sup> Postage includes the free post service and an additional notional postage charge per registration as set out in Appendix 1 of the contract. The notional amount is calculated with reference to the number of registrations. The actual postage cost per registration will vary depending on the number of error letters issued or the number of passports posted together.

destined for export to other countries and in 2007 these amounted to 220,000 animals. Thus the issue of passports in all cases in Ireland is not essential under EU legislation and exceeds what is done in a number of Member States. Here passports have been used in the past (a) to indicate premia status of animals, (b) to record both movements and TB/Brucellosis test details and (c) by meat plants and (more recently) marts for validation of animals. The requirements at (a) and (b) are no longer absolutely essential for different reasons<sup>18</sup> but meat plants and marts will wish to continue to use the barcodes on passports or on other documents (such as Compliance Certificates) in the validation process as otherwise they would have to key in a wide range of data. Cost savings in the registration process could be achieved by issuing passports only where these are required by keepers at movement or export stages. Consideration could also be given to the quality of paper used for passports as they would be used far less frequently in the new circumstances. (The legal position is set down at Article 6, paragraph 3 of Regulation (EC) No 1760/2000 and requires that “*animals shall be accompanied by their passports only when they are moved from the territory of the Member State concerned to the territory of another Member State, in which case the passport shall contain information based on the computerised database.*”)

#### **4.10 System Development**

Currently all attempts at bovine registration are subjected to a series of primary and secondary validations by the Calf Birth Registration Agency before a passport can issue and the birth registration details can be recorded onto the database. Primary validations include checks on the validity of the calf and dam tag numbers, of the breed details and of the declared date of birth (must be a valid date of birth prior to the date of receipt of registration). Secondary validations include checks against the CMMS/AIM database in respect of the location, status, age, breed and previous calving history of the dam and of the timeliness of registration.

In 2009 the birth registrations module will be developed under the AIM system which will enable the Department conduct the entire validation process for all birth registrations. The birth registration applications received by the contractor will be transferred to the Department for validation against AIM. A response will then be sent to the Birth Registration Agency confirming whether a passport or error letter can issue. Provision of this facility will facilitate a greater number of companies to tender for the issue of passports.

#### **4.11 Errors**

The number of errors made by farmers in completing calf registration forms is significant although these have fallen from almost 19% in 2004 to 13.5% in 2007. There is still a significant cost in dealing with errors as each generates a letter to the keeper and the postage

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<sup>18</sup> Since Ireland has a computerised identification database and a database on which disease testing information is available (Animal Health Computer system (AHCS) database), there is scope to amend national legislation that now requires all animals to be issued with passports at birth.

cost is incurred by the Department. The error rates for electronic registrations are lower than for paper registration methods [In 2008 the error rate for electronic methods was 7.5% and 15% for paper methods]. However, despite efforts to increase uptake, the number of keepers using electronic means to register calves remains relatively low – 10% of keepers registered 17% of calves born in 2008. There is significant scope to further increase uptake of this means of registration particularly by dairy herd owners. Accordingly there should continue to be a strong focus on increasing the uptake of electronic registrations both in the interests of achieving savings and increased accuracy in registration while also continuing with efforts to reduce errors in paper registrations.

#### **4.12 Late Registrations**

A proportion of calf birth registrations are submitted by some farmers outside the timeframe laid down in EU regulations, which stipulate that calves must be tagged and registered within 27 days of birth. If a keeper tries to register the birth of a calf that is over 27 days of age, the contractor cannot process the application but notifies the keeper that a registration can proceed with the lodgement of a ER94C<sup>19</sup> form at the DVO. This form ensures that the DVO is satisfied that a bona fide application, for the registration of a calf, is furnished by the keeper. The rate of late registrations fell from 7% in 2001 to just over 3% in 2007.

Notwithstanding the improvement, it is considered that further steps should be taken to secure further reductions in the numbers of late registrations. Accordingly it is proposed that the approach to late registrations used successfully in a number of DVOs should be adopted as “best practice” approach in all DVOs. Alternatively, consideration should be given to transferring costs of dealing with late registrations either to relevant keepers or the industry.

#### **4.13 Replacement Passports**

Replacement passports are issued when an existing passport is full, damaged, lost or requires amendment at a cost of cost of €348,000 in 2007 which is met by the Department. The main reason for issuing replacement passports (details in Table 4.3) is that there is a limited space provision on the passport for recording TB and Brucellosis testing details. However, in present circumstances, consideration could be given to dispensing with the requirement to record such details as well as details of movements on passports in the light of the recent enhancements to the development of AHCS and AIM (in particular the bringing of marts online). This approach coupled with implementation of general changes for issuing passports (Recommendation 2) would significantly reduce demand for replacement passports. If this is not feasible, consideration should be given to transferring the costs of dealing with replacement passports to the industry.

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<sup>19</sup>ER94(c) is a form used by the Keeper to register an animal if he has lost/damaged the white registration card which comes with his tag order (a white registration card issues for each tag). The keeper completes the ER94(c) and brings it to the DVO who carries out a number of checks, dates and stamp it (copy to file) and send the original form to contractor.

**Table 4.3: Cost of Issuing Replacement Passports, 2004 – 2007**

Year	No. of Replacement Passports Issued	Cost of Postage	Cost of Contractor	Cost per Replacement Passports Issued
2004	254,794	126,567	160,756	€1.13
2005	256,663	130,963	165,068	€1.15
2006	262,663	135,750	171,102	€1.17
2007	289,502	153,963	194,058	€1.20
<b>% Change 04 – 07</b>	<b>+14%</b>	<b>+22%</b>	<b>+ 21%</b>	<b>+ 6%</b>

#### 4.14 Farm-to-Farm Movement Contract

All farm-to-farm movements of cattle into or out of a keeper's holding must be notified to the designated Movement Notification Agency. The data in Table 4.4 provide information on the range and volume of documents processed by the Agency, including CMMS Compliance Certificates, Feedlot Movements, On Farm Burials, Disposals at a Knackery; Veterinary Laboratory, Emergency Calf and Dealer Movements. In 2007 a total of 527,418 forms were processed by the Movement Agency representing an increase of 37% over the period 2004 – 2007. The highest workload is associated with the processing of over 280,000 CMMS Compliance Certificates and over 205,000 disposals at knackeries in 2007.

**Table 4.4 Details of the number of Compliance Certificates and other Movement Forms processed by the Movement Notification Agency, 2004 – 2007<sup>20</sup>**

Year	A	B	C	D	E	F	G	Total
<b>2004</b>	179,734	3,211	278	166,487	1,166	24	32,703	383,603
<b>2005</b>	202,266	4,618	289	189,305	1,696	9	34,870	433,053
<b>2006</b>	226,579	4,582	256	203,530	1,823	2	33,461	470,233
<b>2007</b>	280,562	5,204	182	205,761	2,229	11	33,469	527,418
<b>% Change 04 - 07</b>	<b>+56%</b>	<b>+62%</b>	<b>-35%</b>	<b>+24%</b>	<b>+91%</b>	<b>-54%</b>	<b>+2%</b>	<b>+37%</b>

The data in Table 4.5 show that the cost of these arrangements increased from 2004 to 2007 due to higher (a) numbers of forms processed and compliance certificates issued and (b) postage costs. Total expenditure (including postage) on the farm-to-farm contract increased from just under €1 million in 2004 to almost €1.6 million in 2007. The unit cost, including postage, of processing a movement notification form increased from €2.61 in 2004 to €3.02 in 2007 due to higher contract and postal charges. Overall postage costs increased from

<sup>20</sup> A – Compliance Certificates; B – Feedlot Movement; C – On Farm Burials; D – Disposal at Knackery; E – Vet Lab; F – Emergency Calf; G – Dealer Movement.

€0.21m in 2004 to €0.35m in 2007 reflecting an increase of 38% in the number of forms processed in 2007 relative to 2004.

**Table 4.5: Cost per Movement Notification Form Processed, 2004 – 2007**

<b>Year</b>	<b>No of Compliance Certificates Issued</b>	<b>Total Forms Processed</b>	<b>Cost of Movement notification contract</b>	<b>Total Postage Cost</b>	<b>Total cost per form processed</b>
<b>2004</b>	291,328	383,603	€792,870	€206,894	€2.61
<b>2005</b>	312,474	433,053	€860,484	€293,019	€2.66
<b>2006</b>	375,253	470,233	€993,830	€293,902	€2.74
<b>2007</b>	386,888	527,418	€1,242,606	€349,496	€3.02
<b>% Change 2004 – 2007</b>	<b>+33%</b>	<b>+38%</b>	<b>+56%</b>	<b>+69%</b>	<b>+16%</b>

The data in Tables 4.4 and 4.5 identify that in 2007 the Movement Agency issued 386,888 CMMS Compliance Certificates while keepers returned 280,562 for processing representing a return rate of 72.5%. The CMMS Compliance Certificates may provide details on a maximum of 10 animals. As the contractual payment system provides for payment based on the number of completed Compliance Certificates returned, the rate of payment is not influenced by the number of Compliance Certificates issued or the number of animals on the Certificate.

The further development of the AIM project foresees the provision of alternative arrangements for dealing with farm-to-farm movements involving development of advanced in-house processing capacity over the next year that is expected to lead to additional external bodies (such as marts) being able to deliver aspects of the farm-to-farm movements system. It would be desirable that this aspect should be progressed as quickly as possible. At the same time, consideration should also be given to transferring postage costs to keepers now that the system is bedded in.

#### **4.15 Herd Profiles**

A herd profile is an extract from the AIM database of all cattle recorded in a keeper's herd on a specific date. Herd profiles are issued periodically to enable keepers reconcile herd records held on the farm with records held on the database. Keepers may also download herd profiles from the database over the internet.

**Table 4.6 Cost of Each Herd Profile Issued, 2004 – 2007**

Year	Number of Herd Profiles	Total cost of Herd Profiles (excl postage)	Postage cost per herd profile	Total postage Costs	Total cost per herd profile
2004	96,596	€46,752	€0.48	€46,366	€0.96
2005	235,747	€97,180	€0.48	€113,159	€0.89
2006	349,395	€143,742	€0.48	€167,777	€0.89
2007	115,788	€47,631	€0.54	€62,526	€0.95

The cost of issuing herd profiles by post to all keepers is €110,000 while postage costs account for more than half of the total cost. The cost of postage increased from €0.48 cent per profile to €0.54 per profile between 2004 and 2007 reflecting the increase in the price of postage in 2006. While introduction of charges for paper herd profiles would encourage recourse to the online service, on the other hand there would be significant additional administrative cost in collecting the charges involved and less frequent availability of herd profiles to herd owners may result in less accurate information on the system.

#### **4.16 Discrepancies**

A discrepancy arises when/if the identification and movement records of a bovine animal held on the AIM database differ from the information captured at a herd test and held on the Animal Health Computer System (AHCS). Substantial departmental resources have been devoted to the reconciliation of identification and animal health databases and exceed what is required under Regulation (EC) No 1760/2000 and similar efforts were not in evidence in the Member States visited as part of this review. The level of discrepancies has decreased from 5.2% of bovine population in 2006 to 0.75% currently. Since AIM has gone live in all livestock marts in 2008, the level of discrepancies has further decreased. It is desirable that a consistent procedure for dealing with discrepancies should be implemented across DVOs and that responsibility for resolving them should be assigned to farmers and other keepers has been provided for in the recent circular (No. ER 08 of 2008) to DVOs.

#### **4.17 Analysis of the Efficiency of Administration Costs**

Based on the results of a questionnaire, approximately 900 DAFF staff in various locations including local offices, factories, export points and NBAS Division are signed up as users of the CMMS/AIM system but no indication was given on the intensity of use of the CMMS/AIM system by the staff. Full details of the breakdown of staff costs are provided in Appendices 7 to 13. The purpose of the questionnaire was to estimate the proportion of time spent by the various staff groups on tasks related to CMMS/AIM. An indicative list of CMMS/AIM tasks was included with the questionnaire to ensure standardisation of replies. It should be noted that no objective assessment of the answers as regards interpretation or consistency of approach has been carried out. A staff survey/questionnaire was undertaken in conjunction

with ERAD and was utilised in both this VFM review and in the VFM Review of the Bovine Tuberculosis Eradication Programme (1996 – 2006).

#### Technical Staff in DVOs

The technical staff in DVO's conduct the field operations component of the traceability system as part of their work. In a questionnaire issued to staff in DVO's, technical staff indicated their involvement in CMMS/AIM operations and 1760/2000 inspections – this entailed inter alia controls on identification and registration under Commission Regulation (EC) No 1082/2002 i.e. inspection of holdings, physical check of bovines and documentary check of registrations and movement notifications. The number of staff involved was 199 Full Time Equivalents (FTEs) in 2008. The cost of technical staff involvement is estimated at €4.985m per annum in the 2004 - 2007 period. (See appendix 8 for details of breakdown.) In addition technical staff in factories have access to AIM for the purposes of verifying eligibility of cattle presented for slaughter.

#### Administrative Staff in DVOs

The administrative staff in DVO's interface with keepers on issues relating to the identification and traceability system and include duties such as resolving inconsistencies between CMMS/AIM and AHCS data, resolving queries from keepers in relation to herd profiles, ordering replacement passports and dealing with error letters issued to keepers in relation to registrations. Total numbers of administrative staff numbers employed on disease eradication and traceability work in DVO's have been falling in recent years as a result of efficiencies arising from the introduction of AHCS and its inter-linkage with AIM. The total number of administrative staff in DVOs is 476 (FTEs). The amount of time involved in implementing the CMMS/AIM system varies according to grade of staff. The cost of administrative time on CMMS/AIM work only is estimated at €3.452m per annum.

#### Veterinary Staff in DVOs

Veterinary staff in DVOs devote approximately 7% of their time to identification and certification issues using the AIM/CMMS system. There are 169 veterinary staff attached to DVOs. The data in Appendix 10 shows that the estimated cost of veterinary staff on this work is €2.148m per annum.

#### Special Investigation Unit

The SIU investigates alleged irregularities/illegal activity concerning DAFF legislation and in particular legislation regarding animals, animal products and animal by-products. The CMMS regional teams investigate irregularities and/or illegal activity regarding the registration, identification and movement of animals. The CMMS Regional Teams, based in the SIU, account for staff costs of €1.340m per annum.

#### National Beef Assurance Division

Staff in NBAS Division are involved in the development and implementation of the National Bovine Animal Identification and Tracing System and ancillary activities and the day to day management of the system. The number of staff in National Beef Assurance Division involved in the programme was from 25 full time equivalents in 2007 at an estimated cost of €1.649m per annum.

#### IT Animal Health and Market Support Division

IT Animal Health and Market Support Division has a dual role in relation to the traceability system and supporting the business requirements of the NBAS Division. The CMMS IT Team is involved in processing movement data and maintaining synchronicity with AIM system while the AIM project team develops and delivers the prioritised software modules identified in the AIM project plan and any changes to this plan as directed by the AIM Project Board. The number of ISD staff involved in the programme decreased from 6.4 FTEs in 2003 to 4.4 FTEs in 2006 representing an average of 4.95 FTEs over the review period. The data in Appendix 13 estimates that the annual staff costs of the ISD Division apportioned to CMMS/AIM programme is €0.308m per annum.

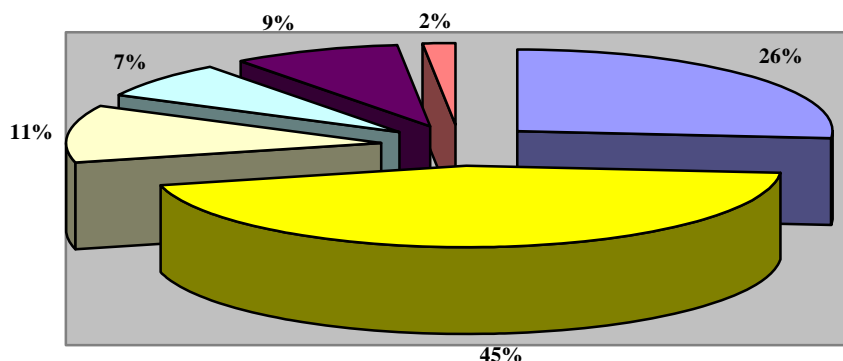
#### **4.18 Staff Costs**

The total costs of administering the identification and traceability system, was estimated €18.882m per annum in 2007. A breakdown of the expenditure between the divisions in percentage terms is outlined in Figure 4.1. Over 80% of the administration costs of managing the traceability system occurs in DVOs with 45% of the cost attributable to administrative staff while one quarter of the costs is consumed by technical staff and a further 11 per cent of the costs assigned to veterinary staff in DVOs. The technical staff in the CMMS teams which work in DVO locations account for 7% of the administration costs. NBAS Division accounts for 11% of the administration costs while ISD is responsible for 2% of the administration costs.

The cost of staff assigned to and other costs associated with the traceability system represent a significant public investment in cattle traceability. The current arrangements on costs were for the most part, adopted when the system was being rolled out in the middle of a BSE crisis in the 1990s and it was essential to put user friendly arrangements in place to ensure its success from the outset. In overall terms, the system put in place has delivered its main objective and its degree of accuracy has contributed to the delivery and effectiveness of schemes as described elsewhere and contributed to staff savings on these (for example numbers of administrative staff assigned to DVOs have fallen from 625 administrative staff in 2004 to 474 in 2007). However, now that the system is well established, it is appropriate that the levels of Government support provided and staff involvement for example in reconciling discrepancies, etc should be kept under review. In addition, to ensure that maximum value for money is obtained for this investment there should be an increased focus on specific

indicators as elaborated on in Chapter 7 for each stream of staff and each relevant Division contributing to the system.

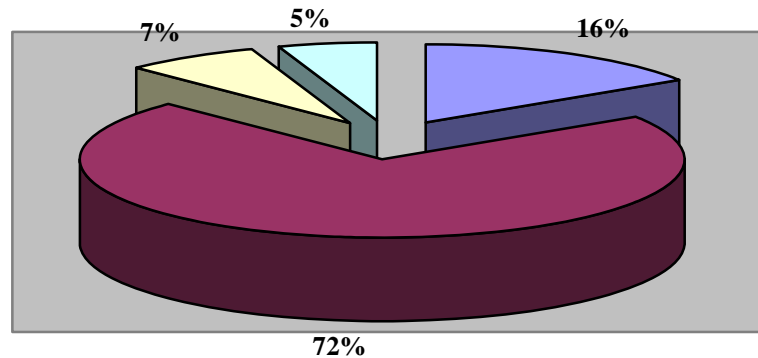
**Figure 4.2 Breakdown of DAFF Staff Costs Attributable to the Identification and Traceability System, 2007**



■ Technical DVO 
 ■ Admin DVO 
 ■ Veterinary DVO 
 ■ SIU 
 ■ NBAS 
 ■ IT Group

The information in Figure 4.2 shows that the most significant cost of operating the identification and traceability system to the Department is associated with staff, which account for 72% of the costs of the programme amounting to €18.88 million of a total spend by the Department of €26.27 million. Outsourced contracts cost €6.02 million per annum. The postage spend of €1.88 million accounts includes a notional amount to cover the cost of the postage elements incorporated in the unit cost of issuing a passport. A further €1.38 million on average was spent per annum on capital and maintenance costs of the CMMS IT systems for which the cost of the telecommunications element increased over the period 2004 – 2007. Keepers spend an additional €6.46 million per annum on new tags and replacement tags bringing the annual cost of running the identification system to €32.7 million. While the total cost can be attributed to the national herd of 6.16 million animals, significant costs are incurred per annum on the tagging and registration of 2.14 million calves and 1.14 million notified movements.

**Figure 4.3. Composition of Expenditure on the Identification and Traceability System, 2004 - 2007**



■ Registration & Movement Contract ■ DAFF Staff Costs ■ Postage ■ Maintenance and Capital Costs

Efficiencies introduced as a result of implementation of the AHCS system (which utilises data from the CMMS database) and the improved disease position resulted in a decrease in administrative staff numbers in local offices which deal with disease eradication and CMMS/AIM from 625 staff in 2004 to 474 staff in 2007. It is expected that total staff costs attributable to the traceability system can be reduced over the coming years. The enhancement of the ICT facilities, especially the introduction of AIM and AHCS, has introduced a number of efficiencies in the workplace which allowed staff numbers to decrease with a concurrent improvement in the quality of the system and service delivery. The quality and timeliness of notifications to the system has improved and with increasing usage of on-line systems and reconciliation of data between systems will have the effect of reducing error rates and by extension a saving in staff time devoted to carrying out amendments.

The introduction of the AHCS has enabled electronic links to be established between all the Department's offices and private veterinary practitioners to provide greater efficiency in the gathering and usage of data. AHCS, which uses CMMS/AIM data, has eliminated many manual data entry tasks involved in the recording of TB and Brucellosis scheme data. These data are now transmitted electronically to the Department. This has significantly reduced administrative work in local offices. The integration of AHCS with CMMS/AIM provides for independent verification of the data held on the traceability system.

The Department invests in ICT with the aim of combining efficiencies and cost savings in the internal operations and processes and for national and EU purposes. Thus the Department has an advanced ICT infrastructure to underpin ongoing development of business processes. The Department has made extensive use of web interfaces for farmers and other clients including meat factories, livestock marts and vets. Advanced computer processes provide process improvements, faster transactions and reduced error levels leading to acceleration of efficiency in internal processes and improvements in service delivery to the clientele.

Mandatory notifications to the system are validated instantly thus reducing error rates providing a benefit to the client and the Department. AIM has a large dataset and thus delivery of effective services is dependent on optimum use of information intensive systems.

Future management focus should facilitate the development of a capability to respond to ongoing challenges associated with innovation complemented by creativity, initiative, vision as well as a strong desire to implement improvements on a continuous basis that underpin the foundations for future efficiencies. The rapidly changing business environment and contribution of IT to the changes present considerable challenges for the future in the evolution and development of services. There is a significant body of corporate knowledge, associated with the existence of an experienced, highly skilled, trained and motivated staff, in the business and ISD areas, which creates a good environment to respond rapidly to ongoing challenges. An important catalyst for the introduction of new technology at the appropriate standard is experienced, skilled, trained and motivated staff.

A significant level of investment has been devoted to AIM/CMMS in terms of facilities and staff. The nature of technology based innovation is influenced by a combination of a pattern of change driven by new technology, internal processes, outsourcing and harnessing the contribution of clients. Labour intensive techniques in the administration of the system will be superseded by technological advancements thus transferring staff from laborious, time consuming and routine tasks to utilise expertise in a more effective manner. Advances in technological and process innovation will allow for increased output at lower costs.

Administration costs could be reduced with the elimination or reduction of duplication and inefficiencies concurrent with an improvement in the level and quality of the services delivered. AIM can provide the basis for improving the operational efficiency of the Department, which in turn can lead to the delivery of a higher quality and level of service. AIM facilitates a modernisation process and can act as a catalyst for innovation, leadership, partnership and teamwork.

#### **4.19 Conclusions on the Evaluation Criteria of Efficiency**

The foregoing demonstrates that the outsourced “Bovine Registration” contract is delivered efficiently as evidenced by the fact that the cost of calf registration has not increased over the 2004 – 2007 period. In relation to the “farm to farm” movement contract, it was noted that while the cost per form processed increased by 16%, and the price was obtained under open tender procedure and the increase was less than the increase (17.2%) in the Consumer Price Index for the same period. The contractor met all of the key performance indicators for the contract.

It is also the position that the outputs of the system were identifiable in qualitative and quantitative terms and were delivered in a comprehensive and timely manner in compliance

with national and EU legislation. The high level of manual interventions associated with a heavy reliance on traditional paper based arrangements continued to be required to maintain the system resulting in higher staff costs associated with a heavier processing work load and greater level of errors and higher postage costs. The cost of DAFF staff administering and implementing the programme was very significant accounting for approximately 72% of the cost of the traceability system. Staff reductions have already been achieved and further savings can be made arising directly from availability of CMMS/AIM. Efficiencies can be further enhanced by adapting some of the current arrangements and by optimising the use of technology in the administration of the system and by assigning greater responsibility and costs to the industry to meet a higher proportion of the costs and in resolving problems e.g. discrepancies. In addition, certain costs could be transferred to the industry.

The extent of recovery of Exchequer expenditure is influenced by national priorities, which vary in different Member States. There is an optional provision in EU legislation for levying charges associated with implementing the system. While there was a strong case for public intervention in Ireland when the identification system was launched, the position has moved on. While the analysis shows that the system operates reasonably efficiently, other savings are attainable and it would be appropriate that consideration should be given to altering the balance of the costs to be borne by the private and by the public sectors when mechanisms are in place to deliver these. There should be an ongoing assessment of all aspects of the processes to see whether costs are appropriately apportioned between public and private sources.

#### **4.20 Recommendations**

Arising from the foregoing, the following recommendations are made:

##### **Recommendation Number 1**

Consider providing for transferring of the cost of postage for the registration, farm to farm movement and other procedures process to the industry (in practice to farmers) in the next tender procedure(s).

##### **Recommendation Number 2**

Consider dispensing with recording of testing and movement details on passports thereby facilitating (a) restricting the issue of passports to occasions when animals are being moved/exported and (b) changing the documentation required to be used.

##### **Recommendation Number 3**

Proceed with development of departmental capacity to validate applications for registrations and to facilitate greater competition for providers of Compliance Certificates.

**Recommendation Number 4**

Introduce a consistent approach at DVO level for late registrations and consider transferring costs of dealing with late registrations to keepers or the industry generally.

**Recommendation Number 5**

Continue efforts to reduce levels of errors by farmers and others by inter alia promotion of the online facilities available at Agfood.ie including herd profiles and in particular undertake efforts to increase levels of electronic notification (by dairy herds in particular).

**Recommendation Number 6**

Strictly apply provisions of the Discrepancy circular No. ER 08 of 2008 and continue to keep these and Departmental resources devoted to this under review.

**Recommendation Number 7**

Following adoption or otherwise of the foregoing, consider whether charges should be introduced to cover the remaining cost of the system (with higher charges for those continuing to use paper arrangements).

**Recommendation Number 8**

The Department should continue to keep the overall arrangements (including staffing) under ongoing review with a view to achieving reductions by adopting the proactive approaches to encouraging recourse to electronic communications, deployment of staff and passing greater responsibilities to industry (e.g. in relation to resolving discrepancies).

**Recommendation Number 9**

Ensure that the Department is positioned in terms of technology, skills, business processes and cost base to underpin required change in providing a higher quality of service in a more technically demanding environment on a continuing basis.

## Chapter 5

### The Effectiveness and Impact of the Bovine Identification and Traceability System

#### 5.1 Introduction

The effectiveness of a system is measured against the achievement of the objectives of that system. Effectiveness is concerned with the extent to which the objectives of the system have been achieved by identifying the gap between intended outcomes and actual outcomes. Effectiveness is concerned with the consequences of the programme and therefore is more outcomes focused. Richard Boyle of the Institute of Public Administration describes effectiveness as *“the degree of success of the activities or services in meeting their objectives”*. The focus of this analysis is on establishing the success of the bovine animal identification system in achieving its objectives.

#### 5.2 Objectives of the bovine animal identification system

The traceability system was established primarily to meet the objectives set down in Regulation (EC) No 1760/2000, which is concerned with establishing a system of identification and registration of bovine animals and regarding the labelling of beef and beef products.

The purpose of the system is to ensure that all animals born or imported into the state are identified and registered in the manner provided for in Regulation (EC) No 1760/2000<sup>21</sup> and Commission Regulation (EC) No 911/2004<sup>22</sup> and that subsequent movements and disposal details are recorded on a central database.

Apart from the foregoing legal requirements, the traceability system

- supports the delivery of programmes and activities that protect animal and human health;
- provides requisite assurances to customers as to the origin/traceability of cattle and thereby securing and maintaining markets; and
- assists with delivery of a range of EU and national programmes.

##### 5.2.1 Meeting Legal Requirements

Earlier chapters have described the various procedures, controls and validation processes that have been put in place to meet the legal requirements of the EU mandated system. In summary these ensure that

- calves cannot be registered unless they satisfy various validation criteria,
- cattle being moved from farms to another farm must be cleared in advance of movement,

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<sup>21</sup> Recital 7 of Regulation EC No. 1760/2000 states “consumer confidence should increase, a higher level of protection of public health should be preserved and lasting stability in the beef sector should be achieved”

<sup>22</sup> Commission Regulation (EC) No 911/2004 of 29 April 2004 implementing Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards eartags, passports and holding registers.

- cattle being moved to a mart, meat plant or being exported are validated against the Department's database, and
- cattle that die on farms must be reported to the database operator.

A minimum of 5% of herds are checked annually for compliance with identification and registration requirements while the disease testing regime, where the traceability (CMMS/AIM) and the disease testing (AHCS) systems interact, represents an annual census of the entire cattle herd. Where discrepancies arise, these are actively followed up with a view to their resolution. Taken together, all of these measures ensure that only eligible animals are registered, that movements are controlled and that only eligible animals enter the food chain or export markets. The system also identifies "discrepant animals" that need to be followed up.

The system has been enhanced on an ongoing basis and the recently rolled out upgraded AIM system at livestock marts closed off one of the potential gaps in the traceability system. This system validates the identity and location of the animals presented for sale and their testing status for sale and for export and checks that the buyer is free to purchase animals and record the movement. The new system also allows marts to improve the service delivered to farmers by providing assurances that animals purchased in marts are compliant with the Department's database.

The effectiveness of the identification system was greatly enhanced with the introduction of AHCS. The herd profile generated from CMMS/AIM is used by PVPs who record the TB/Brucellosis testing details for each animal and transmit this back to AHCS. This approach confirms the presence or otherwise of the animals in the herd and any discrepancies highlighted can be addressed. This system has proved to be an effective method of verifying the data on CMMS/AIM and triggers a procedure to address any anomalies arising.

In summary, the traceability system here is sufficiently robust so as to guarantee the origin and traceability of Irish cattle and beef. Keepers are required to ensure that all bovines are registered and identified correctly and that movements are notified and recorded promptly. The operation of the AIM system at various points improves the overall traceability system for cattle by the application of checks on the origin and authenticity of the animals and their disease test status. The AHCS complements AIM and operates as an effective method of verifying the data on CMMS/AIM and triggers a procedure to address any anomalies arising. A comprehensive inspection regime monitors compliance with the requirements set down in Regulation (EC) No 1760/2000 and a sanctions system for non-compliance.

The Irish system has been reviewed by various FVO missions and found to be generally satisfactory. In addition this system has been judged to provide the requisite assurances by veterinary authorities from a number of countries.

### **5.2.2 Protecting animal and human health**

The mission statement of the Department is to lead the sustainable development of a competitive consumer-focused agri-food sector and to contribute to a vibrant rural economy and society. Accordingly DAFF places a strong emphasis on reassuring consumers about the safety of food. The second goal of DAFF outlined in the Statement of Strategy is to ensure the highest standards of food safety and consumer protection, animal health and welfare and plant health. DAFF fulfils the requirement set down in the mission by operating effective control and eradication measures for diseases of major economic importance, which are supported by a robust identification and traceability system for bovines.

The identification and traceability system in place for bovines plays a fundamental role in the management of the control and eradication measures for diseases including Brucellosis, Tuberculosis, BSE and played a key role in containing Foot and Mouth in 2001. The success of the eradication programmes is evidenced by the Minister's intention to apply to the EU to secure officially Brucellosis free status early in 2009 and the EU approval received to increase the age for testing of cattle for BSE to 48 months from 2009. The identification system made a positive contribution to the programme for monitoring and eradication of TB leading to a reduced number of reactors in the last decade. It is envisaged that this system will be used in the context of controls and vaccination if bluetongue is confirmed here.

### **5.2.3 Providing assurances to consumers on the origin and traceability of beef and securing and maintaining markets for cattle and beef**

One of the primary objectives of the traceability system is to provide assurances to consumers that a bovine animal can be traced from birth to slaughter or birth to live export. This is important in our case given that Ireland is 820 per cent <sup>23</sup> self sufficient in beef production with beef exports of €1.57 billion in 2007 while live exports in 2007 amounted to over 220,000 animals and that Irish exporters have to operate in a very competitive international marketplace.

The consumption rate of beef is an important consideration for Ireland due to the dependence on the export market as an outlet for beef. Beef consumption is subject to variations over time. The data in Table 5.1 show that in the 2003 – 2006 period consumption of beef declined in Ireland and France but increased by over 7 per cent in the UK.

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<sup>23</sup> Fact Sheet on Irish Agriculture, DAFF, February 2008.

**Table 5.1: Per capita beef consumption (kg/head) in selected countries over the period 2003 – 2006<sup>24</sup>**

Countries	2003	2004	2005	2006	% Change 03 - 06
Ireland	21.1	21.3	20.8	20.3	- 3.8%
France	27	26.7	26.8	26.4	- 2.2%
UK	19.8	20.7	20.9	21.3	+ 7.6%

Source: Bord Bia

Over the medium term EU beef production is estimated to decline by approximately 1% per annum. With consumption expected to remain stable the supply deficit within the EU is expected to widen, on current estimates, to some 800,000 tonnes by 2013, and continuing to provide significant opportunities for Irish exports.

Production of quality livestock underpinned by a grass based production system is important in ensuring that a quality product is made available to consumers. The Beef Quality Assurance Scheme, which is administered by Bord Bia, plays a crucial part in providing assurance to the consumer that Irish beef is a safe and quality product, fully traceable across the production system from “farm to fork”. Bord Bia’s marketing strategy for Irish beef for 2008 to 2013 highlights the principles of Premiumisation and Differentiation, which are to be applied to the livestock and meat sector. This strategy centres on the key characteristics of Full Traceability and Quality Assurance. The overriding aim is to seek out the highest priced markets in the EU for Irish produce. Gaining access to and growing these markets is dependent on supplying a superior product with excellent packaging, presentation and customer service on a year round basis.

Access to high quality markets is an important consideration for Ireland, which has a very heavy reliance on beef and live cattle exports. The value of the live trade market has increased by 134% over the period 2003 – 2006 as illustrated in Table 5.2 below.

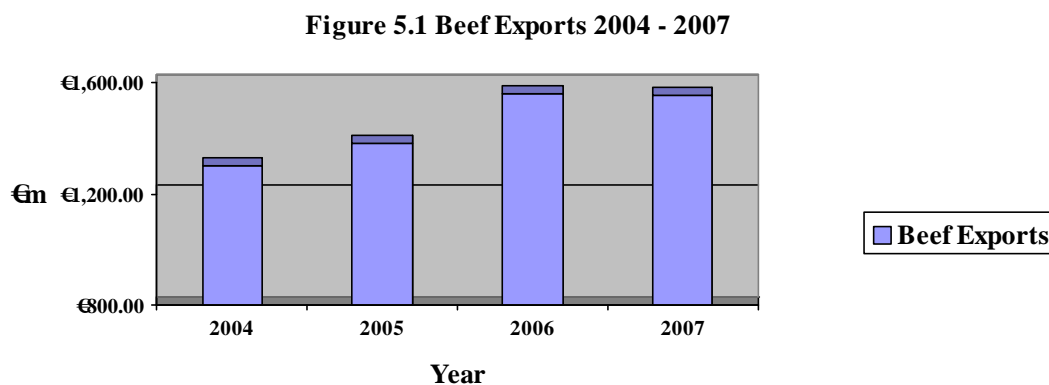
**Table 5.2: Exports of Live Cattle, 2004 – 2007**

Year	Number	Value (€m)
2004	134,866	€41.0m
2005	186,062	€59.2m
2006	251,703	€80.4m
2007	219,757	€96.1m
% change 2004 – 2007	+63%	+ 134%

Source: CSO Trade Data and CMMS statistics report

<sup>24</sup> Source: Bord Bia

Figure 5.1 outlines that beef exports increased by approximately 20% from €1.3 billion to €1.56 billion over the 2004 – 2007 period. In addition Ireland exported beef to some 55 countries in 2007 including 21 EU Member States.



Ireland's identification and traceability system has been audited by FVO and has been demonstrated to a range of veterinary authorities worldwide. These examinations have been instrumental in keeping markets open to Irish products particularly in the context of BSE crises since the mid 1990s. While a number of Third Countries banned imports of beef and cattle from the EU during that time, none of them imposed a specific ban on Ireland. In seeking to re-open markets, Ireland has highlighted its traceability system and this has been well received by veterinary authorities.

In that context Dr. Margaret Chan, Director – General of the WHO on 23<sup>rd</sup> April 2007 stated, *“that Ireland had the best tracking system for cattle that she had seen”*. Without an effective and functioning bovine identification and traceability system, the Food and Veterinary Office could prevent a country from exporting beef. In January 2008, the EU placed a temporary ban on Brazilian Beef due to failures relating to animal identification, holding registration and movement controls.

Thus the implementation of an effective and reputable identification system plays a key role in underpinning the beef exports in a competitive marketplace. The continued availability of a fully traceable meat is an important feature in providing assurance to the consumer and access to in high value markets. The beef industry is worth €2 billion annually to the Irish economy. Ireland is the 4<sup>th</sup> largest beef exporter in the world with some 90 per cent of the output of the Irish beef industry exported. The key characteristics of Full Traceability and Quality Assurance underpin Bord Bia's marketing strategy for Irish beef. The traceability system plays an important role in guaranteeing the sources of live cattle for the live export trade.

Full identification and traceability are equally important for the dairy sector. About 10 per cent of Irish milk output is consumed domestically in liquid form. The balance is used in the manufacture of dairy products, of which over 80 per cent is exported. Nearly €2.4 billion worth of dairy products and ingredients was exported in 2007, accounting for 25 per cent of total agri-food exports

A consultation process was undertaken with stakeholders (see Appendix 14). In general respondents were satisfied with the operation and effectiveness of the traceability system, while expressing concern about the administrative burden of making notifications and maintaining the herd register. The views of stakeholders are addressed in more detail in relation to an assessment of External Performance Indicators at paragraph 7.5.

### **5.3 Assisting with delivery of other programmes**

The traceability system provides an effective mechanism for validations and checks required to be undertaken on cattle under a range of programmes and it plays a key role in facilitating compliance with EU and national requirements and in the management of a range of DAFF programmes other than those relating to animal health and food safety (see Chapter also).

The database provided the mechanism to validate premia payments under coupled EU schemes prior to the introduction of the Single Payment Scheme in 2005 and is now used in connection with the latter. The database is used to prove minimum stocking density requirements have been met for the Compensatory Allowances Scheme. The traceability database is used as part of a mechanism to ensure that all keepers participating in the Rural Environment Protection Scheme (REPS) stay within the prescribed limits for organic nitrogen. The use of the database for REPS offers the EU Commission reasonable assurance that Ireland is controlling the limits set for organic nitrogen from livestock manure per hectare and adhering to all relevant regulations.

The traceability system is essential to DAFF in its monitoring and enforcement of the European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006. The Nitrates Directive sets a limit of 170 kg of organic nitrogen per hectare and a limit of 250 kg of nitrogen from livestock manure per hectare in the case of an approved derogation. DAFF issues each keeper with an annual Nitrogen and Phosphorus Statement to assist keepers comply with this requirement. The stock numbers that exist on the CMMS database are used when calculating a keeper's nitrogen and phosphorus statement.

Facilities were put in place using paper and electronic formats for the recording of animal events under the Animal Welfare Recording and Breeding Scheme for Suckler Herds introduced in 2008 as a comprehensive measure to encourage the adoption of high levels of animal welfare and to improve the quality of breeding cattle. The database was analysed to

identify eligible animals based on breed type and to verify calving data, breed of cow and calf and the time the calf remains in the herd of origin.

The CMMS Statistics Report is produced on an annual basis and is made available to a wide range of stakeholders including abattoirs, Agri-Aware, Bord Bia, Breed Societies, CSO, Farm Organisations, FSAI, IBEC, livestock marts, meat factories, Teagasc, Veterinary Ireland and Veterinary Officers Association. Data are furnished on a regular basis to Bord Bia to underpin its marketing efforts and data are provided to the CSO.

## **5.4 Economic Analysis**

The Value for Money and Policy Review Initiative Guidance Manual published by the Department of Finance recommends that VFM reviews should consider the areas of deadweight and displacement. The Guidance Manual defines both terms referencing various sources as:

- deadweight is that portion of increased output that would have happened anyway irrespective of the programme; and
- displacement occurs when the creation of a positive programme output in one area leads to a loss of output in another (Mulreanny, 2002).

### **5.4.1 Deadweight**

Prior to the implementation of the CMMS/AIM system, Ireland operated a basic identification and traceability system, which was developed in the context of the TB eradication programme. The Department had identified the deficiencies in that system in the late 1980's and commenced work on the development of a comprehensive identification and movement control system, which was deemed to be essential for disease control purposes. This was to a large extent overtaken by developments at EU level in the mid 1990s when recurring BSE crises gave renewed momentum to the adoption of a harmonised system across the EU and Ireland's system is based on that.

EU legislation places specific obligations on member states and the systems in place across the EU are driven by State authorities, with varying degrees of public support. It is difficult to envisage how comprehensive and reliable identification and traceability systems would be implemented otherwise in view of the wide range of parties that have to be involved in operating a system – in particular keepers, dealers, transporters, marts, assembly centres, meat plants, exporters, importers, tags suppliers, etc. Reliable systems have not been adopted in countries outside of the EU and even after the imposition of a ban on its exports to the EU, Brazil has arrangements in place for just 400 farms after 12 months and exports are confined to these farms.

Apart altogether from this EU legal obligation, the reality is that the system contributes so much under a variety of headings (as detailed in Chapter 2) that it is now an invaluable instrument and would be retained in any event. However, the issue that does arise is the level of public support that should be devoted to operating this system now that it is well established. This aspect has been addressed in Chapter 6.

#### **5.4.2 Displacement**

Displacement happens when the creation of a positive output leads to a loss of output elsewhere (Mulreany, 2002). Regulation (EC) No 1760/2000 required all Member States to implement specified identification and tracing systems and in Ireland's case the system contributed very positively under a range of headings. The success of this system was due in no small part to the public funding and staffing resources assigned to its development and maintenance and the assignment of these resources did not jeopardise delivery of other measures in any way. While the system also imposed significant disciplines and some costs on all the various operators in the cattle and beef sector, that sector benefited most from its adoption. It is considered that overall there were no losses of outputs elsewhere arising from the operation of the system.

#### **5.5 Conclusion on the Evaluation Criteria of Effectiveness**

All of the foregoing demonstrates that the system has been successful in fulfilling its objectives to provide assurances to customers and consumers about the origin and traceability of beef, protect animal and human health and secure and maintain markets for Irish cattle and beef. The system has also contributed to the delivery of a range of programmes not directly related to disease control or traceability.

The identification and traceability system for bovines plays a crucial part in management of diseases of major economic importance and Ireland is now in a position to apply to the EU to secure officially Brucellosis free status and extend the testing age of cattle for BSE to 48 months. The reputable identification system plays a key role in underpinning the live cattle exports and beef exports in a competitive marketplace for a beef industry worth €2 billion annually to a country that is the 4<sup>th</sup> largest beef exporter in the world with some 90 per cent of the output of the Irish beef industry exported.

The export market for beef is underpinned by an effective traceability system. The use of the system is a fundamental component of a number of key measures including high health status of animals and maintaining public health in ensuring that the export markets for beef and live cattle are maintained and grow in value and volume. Accordingly the system plays a significant role in underpinning the international competitiveness of the cattle sector.

The traceability system assists in the management of a range of DAFF programmes including the Rural Environment Protection Scheme and the Animal Welfare Recording and Breeding

Scheme for Suckler Herds and plays a role in meeting the obligations in the Nitrates Regulations. Statistics are provided to facilitate the work of Bord Bia and CSO while the Annual Statistics Report is published and circulated to a wide range of stakeholders.

## Chapter 6

### Case for Allocation of Public Funding

#### 6.1 Introduction

This Chapter will examine the allocation of public funding to the identification and traceability system and examine the scope for alternative policy or organisational approaches in achieving the objectives on a more efficient and/or effective basis.

#### 6.2 Relevance to Agricultural and National Policy

The rationale for an animal identification and traceability system and the compatibility of the system with DAFF and government policy was discussed in Chapter 3. Earlier Chapters – in particular Chapters 3 and 5 showed that the system is compatible with Government and departmental policy and that the contribution of an effective animal identification and traceability system meets the objectives of providing assurance to consumers, protecting animal and human health and securing markets for cattle and beef while also contributing to effective and efficient delivery of a range of DAFF programmes.

#### 6.3 Justification for Allocation of Public Funds

The outcomes of the identification and traceability system are listed below.

- 1) Consumers are assured about the safety of Irish beef because of DAFF's enforcement of monitoring and traceability;
- 2) Measures to protect human and animal health are facilitated;
- 3) Markets for Irish beef are maintained and secured in compliance with EU and third country trading requirements;
- 4) The importance of agriculture within the economy in terms of GDP and exports is maintained;
- 5) Farm income is enhanced indirectly as high value markets are exploited;
- 6) EU legislation and requirements have been met;
- 7) An effective system has avoided any disallowances which might otherwise have to be paid by the exchequer; and
- 8) Delivery of a range of DAFF schemes and programmes has been facilitated with consequential staff savings arising.

It is apparent from the foregoing that a clear justification exists for the some public funding to be provided towards the system on the basis that it delivers a public good where all citizens derive a benefit from its operation.

However, the question arises as to the appropriate level of Exchequer funding and in particular what level of support should be provided in the future. In that regard, it is reasonable that industry including keepers of cattle should contribute to the costs of the

traceability system because it confers significant benefits on them. On the introduction of the system, the Exchequer assumed its entire cost so as encourage keepers to comply with the legislation and thereby enable Ireland to demonstrate to consumers and customers that it had an effective system in place. Subsequently operators in the industry – in particular meat plants and marts – took on aspects of the system and in 2001 the costs of tags were passed to keepers. It is considered that the successful launch and the further development of the system justified the provision of public funding particularly as it did in fact encourage keepers to register animals and to notify cattle movements promptly to assist with maintaining an up to date and accurate database. However, as the system is bedded down, it is appropriate at this juncture to give consideration to altering the ratio of the contribution of the state and the industry and keepers.

As indicated in Chapter 4, the annual Exchequer cost of the system under all headings is estimated at €26.271 million. In addition farmers pay for tags at an estimated cost of €6.46 million a year and marts and meat plants also contribute to some operational aspects of the system. Chapter 4 showed that the costs of free post to farmers and of resources assigned to resolving errors and discrepancies are significant and also identified a number of possible alternatives for reducing costs. Implementation of the various recommendations in that Chapter would reduce Exchequer costs and also improve accuracy and reliability of the database.

#### **6.4 Alternative Approaches to Outsourcing**

In addition to the contributions by meat plants and marts to implementing aspects of the system, both the “bovine registration” and “farm to farm movement” have been outsourced to a contractor since 1999 and IT expertise has been retained to assist with the development of the system. Decisions on outsourcing are made on the grounds of efficiency and effectiveness and best utilisation of resources. On the IT side, the Department has to strike a proper balance between services delivered internally and by outsourcing as there is a requirement to retain core skills and related capacity in the Department and more generally the Department has to have regard to resource availability and capacity to deal with seasonality of work. The use of outsourcing can provide a quality, volume and timely service in a cost effective manner.

The use of external contractors is considered to be the most economic and effective means of acquiring essential knowledge, skills and business process capacity to deliver services at the appropriate standard. However, it is important to ensure that the Department does not become over dependent on a system that is in effect a single supplier or operator but rather that it develops a focus to retain an appropriate balance between internal and external services and also retains competition between potential suppliers of services.

Chapter 4 demonstrates that this element of the system has been delivered efficiently up to this point. In particular, contractors have been engaged under the public tender procurement procedure and those operating the registration and movement elements have done so more efficiently than DAFF could have done due to seasonality, economies of scale and the way that DAFF is charged. There is no reason to disagree with the view in the Management Services Division Final Report on the Review of DVO Administrative Operations Division in March 2006 to the effect that the Department should concentrate its efforts on incentivising keepers to notify movements and deaths on-line rather than transfer the work currently being carried out by the contractor to DAFF. At the same time, it is important to complete the further development of AIM planned for 2009 which when completed will facilitate greater competition amongst potential operators for both farm to farm movements and birth registrations. It is not considered that there are any grounds for changing the arrangements in place at marts and meat plants as their inputs reduce Exchequer costs.

### **6.5 Simplification of CMMS and Integration with the SPS**

The second Terms of Reference invited the Steering Group *“to consider whether this system can be simplified and/or this system’s potential to contribute further to simplification in the SPS context”*. In paragraph 2.8 the review considered the wider effectiveness of the CMMS in the context of the operation of EU Direct Payment Schemes. Integrated Controls Division (ICD) conducts the inspections under the Single Payment Scheme where 4 Statutory Management Measures (SMRs) - SMR 6, 7, 8 and 8a - relate to identification and registration of bovines. The inclusion of these SMRs is useful in promoting a compliance culture among keepers and thereby assists with promoting the accuracy of the information held on the AIM database.

Technical staff in ICD spend a considerable amount of time checking bovine passports against the Cross Compliance Report (CCR), which contains a detailed herd profile from AIM. Hand held scanner technology is being tested to introduce efficiencies to the operation. A saving will be made in 2009 when the ICD will carry out all the IDR inspections under a single set of guidelines and financial sanctions.

As the quality and timeliness of the data on the AIM and AHCS databases improves due to enhancements in database functionality there should be reduced negative findings at SPS inspections. If the recommendations in this report, in particular those relating to passports and herd registers (subject to EU approval), are implemented over time this would also reduce the administrative burden on keepers.

### **6.6 International Comparisons**

It is prudent to examine the approach taken by some other EU states in satisfying the requirements of Regulation (EC) No 1760/2000. The principles of systems developed in the

EU to implement Regulation (EC) No 1760/2000 are the same but the operational details may differ in Member States. As part of the review, the Steering Group examined the system in a number of other countries using a desk review and questionnaires forwarded by email (see Appendix 15) with a view to learning lessons from the approaches taken in other jurisdictions.

The systems in operation in the UK and NL were examined in more detail with on site visits. A detailed questionnaire was submitted in advance of the visit to the UK and NL authorities in order to brief them on areas of particular interest to the Group. The questionnaires gave the UK and NL authorities the opportunity to structure their presentations and gave a valuable insight into the adoption of approaches to conducting activities in a different manner to the approach used in Ireland.

The relationships between the database service and Ministries differ between jurisdictions varying from autonomous bodies to an integral part of the Ministries with relationships clearly defined. In the UK the British Cattle Movement Service (BCMS) operates the mandatory cattle identification and registration scheme. BCMS was merged with the Rural Payments Agency in April 2003 and operates as an agency of the Department of Environment, Food Rural Affairs (DEFRA). The Cattle Tracing System (CTS) is similar to the CMMS and is a computer-based system used to register cattle and to record the identification details, movements and deaths of cattle in Great Britain.

In 2003 a review by the Comptroller and Auditor General<sup>25</sup> in the UK stated that the “initial objectives of the CTS has been met but more could be done”. The report indicated that the identification of 25 million cattle, sheep and pigs in England and associated movements cost government and the livestock industry approximately £55 million per annum. The report concluded that the CTS played its part in protecting the public by reducing Bovine Spongiform Encephalopathy in the UK from 37,000 cases in 1992 to 1,000 cases in 2002.

A quarter of all postal applications contain an error whereas an error rate of 1% was associated with online applications. The report cited the submission of information to the system in a number of ways i.e. post, email or online using CTS online by herd owners. Movement data for 1 in 8 animals was incomplete and the location of 2% of animals was uncertain. The error rate reduced the effectiveness of the livestock tracing system and increased the cost of the service as 66% of staff time in the BCMS was consumed in the correction of errors. The cost of correcting errors caused to a large degree by paper based systems was approximately £15 million. An action plan to reduce errors and anomalies held on the CTS was recommended to maintain its integrity and reduce the operational costs of

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<sup>25</sup> Report by the Comptroller and Auditor General HC 1144 Session 2002 – 2003: 12 November 2003. Identifying and Tracking Livestock in England, National Audit Office.

the BCMS. A report by the Food Standards Agency<sup>26</sup> in the UK identified that traceability was dependent on the ability to trace an animal from slaughter back to birth.

The arrangements for funding the animal identification and traceability system vary in Member States from keepers paying for components of the system, the farming industry and individual keepers contributing on a proportionate basis to their usage of the database to full cost recovery. Animal registration and monitoring of movements is maintained within the public sector in Spain, the Netherlands, and the UK while a private company maintains the database in both Finland and Denmark.

**Table 6.1: Overview of EU Animal Identification and Traceability Systems<sup>27</sup>**

Country	Is database maintained by public or private sector	Do keepers contribute to the upkeep of the database	Are Passports Mandatory
Ireland	Public Sector	No	Yes
UK	Public Sector	No	Yes
Denmark	Private Sector	Yes	Yes
Finland	Private Sector	Yes	No
Netherlands	Public Sector	Yes	No
Spain	Public Sector	No	Yes

In Ireland a keeper pays for ear tags but does not pay for passports or towards the upkeep of the database. In the Netherlands the keeper pays approximately €0.30 per animal per annum towards the upkeep of the database. In the United Kingdom the keeper pays for replacement passports.

The Steering Group considered following an analysis of the systems in operation elsewhere that some modifications could be made to the Irish system. In particular components of the NL model could be considered for adaptation to the Irish system as set down below.

- Passports are generated via internet in *pdf* format only for animals destined for export.
- A tender system is not used to select tag suppliers and instead all tag suppliers are approved if they can demonstrate delivery of a service in compliance with Commission Regulation (EC) No 911/2004. The market decides the demand for each tag supplier.

<sup>26</sup> Food Standards Agency – Traceability in the Food Chain, A Preliminary Study by the Food Chain Strategy Division, Food Standards Agency (2001).

<sup>27</sup> Naturally countries differ in terms of bovine population; predominant types of farming systems etc.

- A manual herd register is not required where a keeper has access to the database via the internet and printing facilities. This approach is apparently acceptable to the FVO and is in use in Germany.

The group also identified that mobile telephone technology is widely used in other Member States and may provide an effective solution for some services that do not require high data loads and provide a degree of flexibility to clients and staff. Touch tone telephones are widely used in the calf registration process in the Netherlands and the Department might consider a focus on utilising telephone technology in addition to other forms of electronic communications for achieving greater efficiencies.

## **6.7 Conclusions**

A clear justification exists for the allocation of some public funding towards the cost of operating the traceability system. The completion of the further development of AIM planned for 2009 will facilitate greater competition amongst potential operators for both farm to farm movements and birth registrations. A saving will be made in 2009 when the ICD will carry out all the IDR inspections under a single set of guidelines and financial sanctions. There should be reduced negative findings at SPS inspections associated with improvements in the data on the AIM and AHCS databases arising from enhancements in database functionality. An analysis of the systems in operation in other Member States indicated that some modifications could be made to the Irish system based on the NL model regarding passports, selection of tag suppliers and the herd register. It is appropriate at this stage to consider altering the ratio of the contribution of the state and the industry and keepers and introduce changes to reduce the administrative burden on keepers.

## **6.8 Recommendations**

### **Recommendation Number 10**

The Department should retain the current outsourcing approach to conducting certain components of the operations but should proceed with developing systems to facilitate increased competition amongst potential providers of services.

### **Recommendation Number 11**

Review the selection process for tag suppliers having regard to the practice used in a number of Member States.

### **Recommendation Number 12**

Examine the possibility of dispensing with the requirement for a manual herd register when a keeper notifies births and movements using the online facility.

## Chapter 7

### Development of New Performance Indicators

#### 7.1 Introduction

The availability of meaningful performance indicators is considered a fundamental part of the development of the Management Information Framework and a central component of the Value for Money Review process. The purpose of this section is to analyse the current performance indicators in place for the Identification System and propose new indicators where required to assist in the more effective measurement of the extent to which the programme is providing value for money for the exchequer.

#### 7.2 Performance Indicators

Performance indicators are quantifiable measurements that enable the success of an organisation, unit, individual, or a scheme, to be judged. Organisations use Performance Indicators as a management tool to inform both internal and external stakeholders on a range of critical management parameters including delivery of value for money. The Department of Finance defined Performance Indicators in a report<sup>28</sup> published to assist individual Departments develop meaningful indicators as tools to generate information on performance for inclusion in management reports and so to provide a basis for better decision making, more effective use of resources and greater accountability.

*Management Information Framework - Performance Indicators: A Users' Guide*<sup>29</sup> sets out the characteristics of good performance indicators as outlined below.

- 1) Appropriateness – the user should be able to relate the information to the activity, output or outcome being reported.
- 2) Accuracy – data must be as error-free as possible.
- 3) Comprehensiveness – all aspects of performance should be captured by data.
- 4) Consistency – there should be internal consistency in that, where indicators are grouped, they should not deliver mixed messages on performance.
- 5) Manageability – this comprises cost-effective collection of data within reporting structures, with results delivered in an understandable format.
- 6) Relevance – indicators must provide information which the user actually wants.
- 7) Timely – the most recent data available should be used.
- 8) Verifiable – they need to be accurate and objective and should stand up to independent examination.
- 9) Validity – indicators should cover actual performance.

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<sup>28</sup> Department of Finance, (2004). "Management Information Framework – Report on Performance Indicators" Available at: <http://www.bettergov.ie/index.asp? locID=173&docID=316>.

<sup>29</sup> Department of Finance (2001). "Management Information Framework - Performance Indicators: A Users' Guide"- Technical Issues Subgroup. Available at [www.ir.gov.ie/finance](http://www.ir.gov.ie/finance).

### **7.3. Performance Indicators for the Identification System**

The mission and goals of the Department are specified in the Statement of Strategy. Each goal in the Statement of Strategy is accompanied by Strategic Actions, which indicate how each goal is to be achieved. Each Strategic Action is in turn accompanied by Performance Indicators, which give guidance for the measurement of the achievements.

A comprehensive range of Performance Indicators was developed to aid the management of the operation since the introduction of CMMS. Main measurement criteria are based on cost and service delivery including reliability and timeliness of delivery. Internal Performance Indicators for the system are in place within NBAS Division while external Performance Indicators are in place for the outsourced bovine registration and farm-to-farm movement contracts.

### **7.4 Internal Performance Indicators**

The review identified the Performance Indicators in place for the identification system. The Business Plan for NBAS Division specifies that one of its key targets is to achieve the highest level of accuracy and integrity of the CMMS/AIM database. The performance indicator in place to verify progress on meeting this target is to enhance the accuracy of the traceability database. The CMMS Regional Teams, which are based in the SIU, investigate irregularities and/or illegal activity regarding the registration, identification and movement of animals. The Performance Indicators in place for this action is the number of investigations completed, files prepared, prosecutions initiated and irregularities addressed.

#### **7.4.1 Internal Performance Indicators – NBAS Division**

The Performance Indicator for the Division relating to the accuracy of the database does not easily lend itself to measurement because it can only be as accurate as the notifications made to it. The use of AIM/CMMS databases in association with AHCS will facilitate improved accuracy, which will be evidenced by a reduction in discrepancy and amendment trends. More emphasis could be placed on incorporation of measurable targets associated with Performance Indicators to aid introduction of desirable changes in a timely fashion to the management focus on key components of the system. In that context it is proposed that more specific Performance Indicators be adopted to measure trends and to anticipate and meet additional business needs as set down below.

1. Date of implementation of each recommendation in the VFM Review
2. Level and trend in on-line interaction with the AIM database and in particular level and trend in electronic calf birth registrations
3. Level and trend in the error rate associated with promptness of notifications of events and increased use of on-line services
4. Level and trend in late registrations and elimination of late registrations by end 2012

5. Level and trend in the number of AIM/AHCS discrepancies evident from a monitoring programme.

### **7.5 External Performance Indicators**

The Department requires the delivery of a guaranteed service within specified timeframes by the agencies to whom work is contracted to maintain credibility with keepers. In that context farm organisations were invited to offer comments on the level of satisfaction with the service (see Appendix 14). The responses were evaluated in relation to accuracy, flexibility, guaranteed service and timeliness. The analysis of the service provided by the outsourced contracts found that ease of application and approach to providing information and answers to queries indicated the delivery of a high quality service. The stakeholders who responded (verbally and in writing) indicated their satisfaction with the operation of the traceability system. One of the stakeholders emphasized that it was important that the costs of tags and registration “are kept to a minimum to maintain farmer commitment to the CMMS regime”. Stakeholders can see the value of having a fully integrated and traceable herd for disease management (particularly during the FMD outbreak and the reduction in the incidence of brucellosis) and European marketing purposes.

External Performance Indicators are in place to enhance the management performance of the outsourced contracts. Two principal Performance Indicators for the bovine registration contract are:

- the Passport must be issued by post to the keeper or DVO within three working days of receipt of a valid registration form; and
- a Replacement Passport shall be issued within 3 working days of receipt of a request.

The Performance Indicators for movement notifications include the lead-time between receipt of applications and issue of CMMS Compliance Certificates should be no more than 24 hours and the lead-time between receipt of movement notifications and the recording and transmission of the data to the Department should be no more than 24 hours.

Two principal Performance Indicators for the tags contract are:

- Tags are to be issued within 15 working days of a valid order received by the contractor from the keeper; and
- Replacement tags shall be issued to the keeper, within three working days of receipt of a valid order by the contractor from the keeper.

These Performance Indicators in place for outsourced contracts are considered to be sufficiently specific and to allow DAFF to monitor and manage both outsourced contracts in an effective manner.

## **7.6 Conclusion**

From the analysis of the data that exists on internal and external Performance Indicators in place to measure the performance of the system, the adoption of more specific internal Performance Indicators is proposed to allow for improved measurement of levels of compliance and to enable procedures to be improved and targeted as required. The external Performance Indicators are considered to be appropriate. However the Performance Indicators should be reviewed continually and updated as the operation of the programme changes and evolves.

## **7.7 Recommendation**

### **Recommendation Number 13**

Adopt more specific performance indicators for the NBAS Division so as to allow for improved measurement of performance and to facilitate appropriate targeting.

## Chapter 8

### Conclusions and Recommendations

#### 8.1 Introduction

This chapter outlines the key findings of the review and sets out a number of recommendations, which would improve the efficiency and effectiveness of the traceability system and ensure that it continues to deliver value for money to the Exchequer.

##### 8.1.1 Objectives

The validity of the objectives and compatibility of the traceability system with current national policies was assessed by reference to the Programme for Government (A Blueprint for Ireland's Future 2007 – 2012) and a range of documents published by DAFF including key documents such as the Statement of Strategy 2005 – 2007, the Information Communication and Technology (ICT) Strategy 2004, Agri-vision 2015 Action Plan and The Towards 2016 Framework. Based on this, it was concluded that in addition to fulfilling the mandatory requirements for a traceability system set down by the EU in Regulation (EC) No 1760/2000, the public good dimension provided clear grounds for the existence of the traceability system. The analysis of the policy documents concluded that the objectives of the traceability system were valid and compatible with DAFF and national policies. The traceability system has been delivered in an effective manner which ensures that all bovine animals born in, and imported into the State are identified in the manner provided for in Regulation (EC) No 1760/2000 and that subsequent movements and disposal details are recorded onto a central database.

##### 8.1.2 Contribution to Simplification of Single Payment System (SPS)

Data from CMMS/AIM in the traceability system can contribute further to simplification in the SPS context when the Integrated Controls Unit will carry out all the identification inspections in 2009. Successful tests on hand held scanner technology are expected to lead to the introduction of efficiencies in checking bovine passports against the Cross Compliance Report (CCR). Improvements in the quality and timeliness of the data on the AIM and AHCS databases and implementation of recommendations relating to passports and herd registers should lead to a reduced administrative burden on keepers and reduced negative findings at SPS inspections.

##### 8.1.3 Outputs

The system delivers major outputs including issue of tags, registrations, passports, compliance certificates herd profiles and records and validations at factories, abattoirs, livestock marts, exports points and of cattle deaths and in general these were delivered in a comprehensive and timely manner under the circumstances and approach applying heretofore and in compliance with national and EU legislation.

#### **8.1.4 Costs**

The cost of the DAFF staff engaged in administering and implementing the programme are estimated at almost €19 million, or about 72% of the overall cost of the traceability system calculated at over €26 million. Over 80% of the administration costs of managing the traceability system occurs in DVOs while NBAS Division accounts for 11% of the administration costs. The outsourced contracts for dealing with bovine registrations and farm-to-farm movements were delivered in an efficient manner as detailed in Chapter 6. Costs of these contracts were €4,128m a year for the 2004–2007 period. Postage costs were €1.9 million per annum and on average €1.382 million was spent per annum on capital costs and maintenance of CMMS IT systems. The ICT infrastructure and corporate knowledge provide a solid foundation to drive a modernisation process aimed at improving internal processes and operational efficiencies to deliver a higher quality service on an ongoing basis grounded on reducing the reliance on traditional paper based arrangements.

#### **8.1.5 Allocation of Public Funding**

A significant level of public money has been invested in the cattle traceability system where the capital costs, maintenance costs and other costs in delivering the system have been borne by the Exchequer with the exception of the costs of tags which are incurred by keepers and some other costs incurred by marts and meat plants. A clear justification has been shown to exist for the provision of some level of public funding for the system on the basis that it delivers a public good where all citizens derive a benefit from its operation. The full public funding for the system was determined initially to encourage compliance with the legislation so that it would be possible to demonstrate the existence of an effective system in Ireland at a time when the cattle and beef sector was facing major challenges. Earlier Chapters have demonstrated how the system has also been used to facilitate the delivery of schemes and programmes with consequently benefits under a range of headings (including staff savings).

The completion of the further development of AIM planned for 2009 will facilitate greater competition amongst potential operators for delivery of both farm-to-farm movements and birth registrations aspects of the system. It is proposed that the Department should transfer postage costs to industry at the next suitable opportunity and also concentrate efforts on encouraging keepers to notify registrations, movements and deaths on-line. In addition aspects of the current system (e.g. the issue of passports in all cases after registration) would be adapted, components of the NL model could be considered for adaptation to the Irish system including generation of passports via internet in *pdf* format, selection of tag suppliers and dispensing with the requirement for a herd register where a keeper has access to the database via the internet and printing facilities. Efficiencies could be enhanced by optimising the use of technology in the administration of the system and by assigning greater responsibility and costs to the industry. All of the foregoing will reduce costs of implementing the system and will facilitate a reallocation of costs between the public and private sectors.

### **8.1.6 New Performance Indicators**

Although Performance Indicators are included in Work Programmes and Role Profiles, more specific internal Performance Indicators are proposed to allow for improved measurement of levels of compliance and to enable procedures to be improved and targeted as required. While the external indicators are considered to be appropriate, it is considered appropriate that these should be reviewed continually and updated as the operation of the programme changes and evolves.

### **8.1.7 Key Findings**

The principal findings of the review are summarised below.

- There is a clear rationale for the existence of the traceability system based on the regulatory framework set down in EU legislation.
- The development of the traceability system facilitated a wide range of uses of the system. The traceability system provides a high degree of assurance on animal identification and the traceability of the animals and facilitates compliance with EU and national requirements.
- The database is used routinely as a management tool for disease control purposes to highlight and follow up anomalies in animal origin and location. CMMS/AIM works in tandem with AHCS in facilitating the maintenance of an high health status of the animals. The databases facilitate compliance with EU and national requirements and provide data to facilitate identification and segregation of bovines for disease testing, tracing of cohorts and progeny, compensation payments and cross compliance inspections.
- The system is used in the pre-clearance process for live exports and to assist in the testing and certification requirements for specific export markets and is an integral part of the ante-mortem process at factories and identify animals that must be sampled for BSE testing. It provides general assurances to consumers on the origin and identification of Irish beef. It is employed as a marketing tool for Ireland's beef export industry and is highly regarded by visiting trade delegations from OMS (Other Member States) and third countries as providing the requisite assurances in regard to animal health and food safety.
- In addition to fulfilling the mandatory requirements for the existence of a traceability system set down by the EU in Regulation 1760/200, the public good dimension provides clear grounds for the existence of the traceability system.
- The analysis of the policy documents concluded that the objectives of the traceability system are valid and compatible with DAFF and national policies.

- There is a strong business case for maintaining the outsourcing arrangements for delivery of the bovine registration and farm to farm movement contract.
- DAFF should focus its efforts on increasing the usage and number of keepers who electronically notify registrations and movements to DAFF.
- The ICT infrastructure and corporate knowledge provide a solid foundation to drive a modernisation process aimed at improving internal processes and operational efficiencies to deliver a higher quality service on an ongoing basis grounded on reducing the reliance on traditional paper based arrangements.
- The traceability system is sufficiently robust so as to guarantee the origin and traceability of Irish cattle and beef. The system has been judged to provide the requisite assurances by FVO and veterinary authorities from a number of countries.
- The traceability system provides an effective mechanism for validations and checks required to be undertaken on cattle under a range of programmes and it plays a key role in facilitating compliance with EU and national requirements and in the management of a range of DAFF programmes other than those relating to animal health and food safety.
- The database plays a key role in the delivery of a number of services including the Single Payment Scheme, the Compensatory Allowances Scheme, the Rural Environment Protection Scheme (REPS), the Animal Welfare Recording and Breeding Scheme for Suckler Herds in addition to administering the Nitrates Regulations.
- The system has been successful in fulfilling its objectives to provide assurances to customers and consumers about the origin and traceability of beef, protect animal and human health and secure and maintain markets for Irish cattle and beef. The system has also contributed to the delivery of a range of programmes not directly related to the foregoing.
- A significant level of public money is invested in the cattle traceability system where the capital costs, maintenance costs and other costs in delivering the system are borne by the Exchequer with the exception of the costs of tags which are incurred by keepers. A clear justification exists for the provision of some level of public funding for the system on the basis that it delivers a public good where all citizens derive a benefit from its operation.
- The completion of the further development of AIM planned for 2009 will facilitate greater competition amongst potential operators for both farm to farm movements and birth registrations. Efficiencies could be enhanced by optimising the use of technology in the administration of the system and by assigning greater responsibility and costs to the industry to meet a higher proportion of the costs.

- The implementation of recommendations relating to passports and herd registers in addition to improvements in the quality and timeliness of the data on the AIM and AHCS databases associated with enhancements in database functionality should lead to reduced negative findings at SPS inspections and a reduced administrative burden on keepers.
- The external Performance Indicators are considered to be appropriate. More specific internal Performance Indicators are proposed to allow for improved measurement of levels of compliance and to enable procedures to be improved and targeted as required. Whilst the external indicators are considered to be appropriate, the Performance Indicators should be reviewed continually and updated as the operation of the programme changes and evolves.

### 8.1.8 Conclusion

The review of the Bovine Animal Identification and Traceability system found that the system provides value for money in terms of cost, efficiency of delivery and achievement of objectives, and it merits public funding. A clear justification exists for the provision of some level of public funding for the system but it is appropriate to review the levels of Government support and to examine possibilities for reducing costs and the apportionment of costs between public and private sectors. Opportunities for further efficiencies are set out in the recommendations.

### 8.2 Recommendations

The recommendations of the review of the Bovine Animal Identification and Traceability System together with a timeframe for implementation of each recommendation are set down below.

No	Recommendation	Target Implementation Date
1	Consider transferring the cost of postage for the registration, farm to farm movement and other procedures to the industry (in practice to farmers) in the next tender procedure(s).	Q1 2010
2	Consider dispensing with recording of testing and movement details on passports thereby facilitating (a) restricting the issue of passports to occasions when animals are being moved/exported and (b) changing the documentation required to be used.	Q1 2010
3	Proceed with development of departmental capacity to validate applications for registrations and to facilitate greater competition for providers of Compliance Certificates.	Q3 2009

4	Introduce a consistent approach at DVO level for late registrations and consider transferring costs of dealing with late registrations to keepers or the industry generally.	Ongoing
5	Continue efforts to reduce levels of errors by farmers and others by inter alia promotion of the online facilities available at Agfood.ie including herd profiles and in particular undertake efforts to increase levels of electronic notification (by dairy herds in particular).	Q1 2009
6	Strictly apply provisions of the Discrepancy circular No. ER 08 of 2008 and continue to keep these and Departmental resources devoted to this under review.	Q3 2009
7	Following adoption or otherwise of the foregoing, consider whether charges should be introduced to cover the remaining cost of the system (with higher charges for those continuing to use paper arrangements).	Q1 2010
8	The Department should continue to keep the overall arrangements (including staffing) under ongoing review with a view to achieving reductions by adopting the proactive approaches to encouraging recourse to electronic communications, deployment of staff and passing greater responsibilities to industry (e.g. in relation to resolving discrepancies).	Ongoing
9	Ensure that the Department is positioned in terms of technology, skills, business processes and cost base to underpin required change in providing a higher quality of service in a more technically demanding environment on a continuing basis.	Ongoing
10	The Department should retain the current outsourcing approach to conducting certain components of the operations while also developing systems to increase competition amongst potential providers of services.	Q1 2010
11	Review the selection process for tag suppliers having regard to the practice used in a number of Member States.	Q4 2009
12	Examine the possibility of dispensing with the requirement for a manual herd register when a keeper notifies births and movements using the online facility.	Ongoing
13	Adopt more specific performance indicators for the NBAS Division so as to allow for improved measurement of performance and to facilitate appropriate targeting.	Q3 2009

### **8.3 Next Steps**

NBAS Division will, in association with relevant Divisions in the Department, begin work on implementation of the recommendations in early 2009 with the objective of implementation of each recommendation in the timeframe set out in paragraph 8.2.

## **Appendices**

**Appendix 1  
Primary Data**

**Breakdown of the Registration and Farm-to-Farm Movement Contract, 2004 - 2007**

GL Code	Description	Expenditure (€m)			
		2007	2006	2005	2004
111801	Phone bills, promotion, training & ancillary costs of CMMS	36,907	47,781	18,254	16,836
111806	Maintenance of CMMS IT system	1,336,392	1,030,001	933,877	1,271,953
111807	Capital Costs of CMMS	44,985	32,482	39,779	330,280
111701*	CMMS	4,816,886	5,127,246	5,117,246	4,905,928
	<b>Sub Total</b>	<b>6,235,440</b>	<b>6,237,510</b>	<b>6,109,156</b>	<b>6,524,997</b>
111802	Farm to Farm Movement Contract	1,635,040	1,323,882	1,213,686	1,123,612
	<b>Total</b>	<b>7,870,480</b>	<b>7,561,392</b>	<b>7,322,717</b>	<b>7,648,609</b>

**\*Further breakdown on GL Code 111701**

Description	Expenditure (€m)			
	2007	2006	2005	2004
Miscellaneous	20,787	111,939	164,926	49,233
Disposals	26,331	52,020	50,086	34,481
An Post (Freepost from herd to Contractor)	401,276	388,860	444,536	391,213
Postage paid to Contractor (Contractor to herd)	1,032,685	1,042,149	1,052,133	1,074,112
Contractor for CMMS	2,877,899	2,913,906	2,899,071	2,976,448
Contractor for Herd Profiles	47,361	143,742	97,180	46,752
Postage to Contractor for Herd Profiles	62,526	167,778	113,158	46,366
Contractor for Replacement passports	194,058	171,102	165,068	160,756
Postage paid to Contractor for Replacement Passports	153,963	135,750	130,963	126,567
<b>Total GL Code 111701</b>	<b>4,816,886</b>	<b>5,127,246</b>	<b>5,117,121</b>	<b>4,905,928</b>

## Appendix 2 Literature Review

- Statement of Strategy 2005 – 2007
- The Statement of Strategy 2008-2010
- The Department's Strategic Information Systems Plan (SISP), published in January 2000
- CSO livestock survey
- Report by DAFFs Management Services Unit – *“Staffing Requirements for the Implementation of the New Agenda 2000 Livestock Schemes and the operation of the Cattle Movement Monitoring System”*, December 2000.
- Report by DAFFs Internal Audit Unit *“Report on the CMMS IT System”* - March 2004.
- Report by DAFFs Management Service Division's *“Local Office Project Report”*, June 2003.
- Report by DAFFs Management Services Division's *“Review of the DVO Administrative Operations Division”*, March 2006.
- CMMS Annual Statistics Reports from 2003 – 2007.
- Customer Service Action Plan 2005 - 2007
- Information Communication and Technology (ICT) Strategy 2004
- Agri-vision 2015 Action Plan
- The Towards 2016 Framework
- The National Development Plan 2007 – 2013
- The Rural Development Plan 2007 – 2013
- Programme for Government – A Blueprint for Ireland's Future 2007 – 2012
- Food Safety Action – The Safe Food Chain
- Value for Money and Policy Review - Bovine Tuberculosis Eradication Programme (1996 – 2006).

### Appendix 3

#### Schedule of Legislation giving effect to the Irish Bovine Animal Identification and Tracing System

- S.I. No. 308 of 1989 (Bovine Tuberculosis (Attestation of the State and General Provisions) Order, 1989) specifies requirements for ear-tags and cattle identity cards in the context of the Bovine Tuberculosis disease control programme. It is the Principal Order on which pre and post 1996 ear tag legislation is based.
- S.I. No. 114 of 1991 (Brucellosis in Cattle (General Provisions) Order, 1991) specifies requirements for ear-tags and cattle identity cards in the context of the Brucellosis disease control programme. It is the Principal Order on which certain pre 1996 cattle identity card requirements are based.
- S.I. No. 103 of 1996 (Bovine Tuberculosis (Attestation of State and General Provisions) Order, 1996) provides for the double tagging of bovine animals and introduces a National Bovine Administrative Document and Cattle Identity Card.
- S.I. No. 104 of 1996 (European Communities (Registration of Bovine Animals) Regulations, 1996) implements Council Directive 92/102 and Council Regulation 3508/92 insofar as they relate to the registration and recording of bovine animals.
- S.I. No. 258/99 of 6 August 1999 supplements the provisions of Council Regulation 820/97 by obliging keepers of animals to supply the competent authority, upon request, with all information on the origin, identification and destination of bovine animals. The regulation was adopted in order to create an obligation on keepers to notify movements, births and deaths of animals in advance of the entry into force of Art 7.1 of Regulation 820/97 when the database became fully operational.
- S.I. No. 276/99 of 1 September 1999 gives further effect to Regulation 820/97 and related Commission Regulations in so far as it specifies the detailed arrangements relating to applications for, issue and completion of passports and the maintenance of registers. It also provides for detention and disposal of cattle in certain circumstances and for related matters.
- S.I. No. 277/99 of 1 September 1999 provides for revised arrangements for the identification of bovine animals by requiring the attachment of specified eartags to the animal within 30 days of birth up to 31 December 1999 and within 20 days of birth after 1 January 2000 and in any event before it is moved from the holding of birth. It also provides for arrangements for replacement eartags and for associated measures relating to cattle identification.
- S.I. No. 327/99 of 20 October 1999 amends the procedures in regard to ante-mortem and post-mortem veterinary examinations of animals in order to incorporate Cattle Movement Monitoring System (CMMS) clearance checks into the examination process.

- S.I. No.328/99 of 20 October 1999 updates the definitions of eartag and identity card and provides that all animals accepted for slaughter must have an eartag and identity card.
- S.I. No 5/00 of 13 January 2000 provides for the verification of the current status, identification and origin of bovine animals intended for export in order to incorporate CMMS checks into the export clearance process.
- S.I. No. 46 of 11 February 2000 provides for amendments to the design of animal passports in respect of animals registered from 1 January 2000 and also extends the list of breed codes eligible to be registered in the animal registration database.
- The National Beef Assurance Scheme Act, 2000 (No.2 of 2000) provides for the establishment of a National Beef Assurance Scheme and, inter alia, creates obligations relative to CMMS in primary legislation.
- S.I. No. 130/00 of 11 May 2000 commences Part V of the National Beef Assurance Scheme Act (penalty provisions) with effect from 29 May 2000.
- S.I. No. 414/00 of 14 December 2000 commences Sections 20 to 22 (CMMS and bovine census provisions) of the National Beef Assurance Scheme Act, 2000 with effect from 22 December 2000.
- S.I. No. 415/00 of 14 December 2000 provides a legal basis for the Herd Reconciliation Project.
- S.I. No. 435/00 of 15 December 2000 implements the beef labelling requirements of European Parliament and Council Regulation (EC) No. 1760/2000 as expanded by Commission Regulation No. 1825/2000. It provides that operators or organisations involved in the production or marketing of beef or veal must label their product with certain compulsory indications of traceability. The Regulations also provide for approval of additional labelling claims.
- S.I. No. 383 of 3 August 2001 provides for the retention of a permitting system for cattle moving from farm to farm. (Permitting was introduced originally as an animal movement control measure for FMD purposes under S.I. No. 308 of 2001).
- S.I. No. 394 of 9 August 2001 commences all remaining sections of the National Beef Assurance Scheme Act, 2000 with effect from 13 August 2001.
- S.I. No 83 of 12 March 2002 provides for the registration of calf birth registrations in an electronic format and using an Animal Events Sheet.
- SI No. 32 of 01 March 2003 provides for the modernisation of tagging arrangements in respect of cattle identified with an individual tag and prohibits (from 1 March 2003) movement and sale, except for slaughter, of cattle identified with a “brass tag”.
- S.I. No.655 of 2003 provides for the notification of animal movements and animal deaths to the CMMS. The Regulation also provides for the issue of a certificate of CMMS compliance prior to certain movements.
- S.I. No. 687 of 27 October 2004 These Regulations amend the procedures for the completion of calf birth registrations in electronic format.

- S.I. No. 18 of 2006 of 26 January 2006 provides amendments to the design of animal passports in respect of animals registered from 23 January 2006 and also extends the list of breed codes eligible to be registered in the animal registration database.
- S.I. No. 63 of 6<sup>th</sup> February 2006 provides for the amendment to the design of cattle identity cards of older animals and allows for the possible introduction of electronic identification in the future.
- S.I. 400 of 2008 – NBAS Act 2000 (Animal Movement) Regulations 2008 provides for the notification of animal movements and the death of an animal. The Regulation also provides for the issue of a certificate of CMMS compliance or the verification of the current status, origin and identification of an animal for certain movements.

## Appendix 4

### EU LEGISLATION FOR BOVINE IDENTIFICATION.

1. COUNCIL DIRECTIVE 92/102/EEC of 27 November 1992 on the identification and registration of animals.
2. COUNCIL DIRECTIVE 97/12/EC of 17 March 1997 amending and updating Directive 64/432/EEC on health problems affecting intra-Community trade in bovine animals and swine (Directive 64/432/EEC (amendment and updating of the Articles and the Annexes)).
3. COUNCIL REGULATION (EC) No 820/97 of 21 April 1997 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products (Repealed by Regulation 1760/2000. See No. 8).
4. COMMISSION REGULATION (EC) No 2628/97 of 29 December 1997 laying down detailed rules for the implementation of Council Regulation (EC) No 820//97 as regards transitional provisions for the start-up period of the system for the identification and registration of bovine animals.
5. COMMISSION REGULATION (EC) No 2629/97 of 29 December 1997 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards eartags, holding registers and passports in the framework of the system for the identification and registration of bovine animals (Repealed by 911/2004. See No. 13).
6. COMMISSION REGULATION (EC) No 2630/97 of 29 December 1997 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the minimum level of controls to be carried out in the framework of the system for the identification and registration of bovine animals (Repealed by Regulation 1082/2003. See No. 11).
7. COMMISSION REGULATION (EC) No 494/98 of 27 February 1998 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the application of minimum administrative sanctions in the framework of the system for the identification and registration of bovine animals.

8. REGULATION (EC) No 1760/2000 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef.
9. COMMISSION REGULATION (EC) No 1898/2000 of 7 September 2000 amending Regulation (EC) No 2630/97 as regards the model for reporting the annual controls foreseen by Article 5(1) of that Regulation.
10. DIRECTIVE 2000/15/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 10 April 2000 amending Council Directive 64/432/EEC on health problems affecting intra-Community trade in bovine animals and swine.
11. COMMISSION REGULATION (EC) No 1082/2003 of 23 June 2003 laying down detailed rules for the implementation of Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards the minimum level of controls to be carried out in the framework of the system for the identification and registration of bovine animals.
12. COMMISSION REGULATION (EC) No 499/2004 of 17 March 2004 amending Regulation (EC) No 1082/2003 as regards the time limit and the model for reporting in the bovine sector (See No 11).
13. COMMISSION REGULATION (EC) No 911/2004 of 29 April 2004 implementing Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards eartags, passports and holding registers.

**Appendix 5  
Circular ER 23/2005**

**Instruction to staff concerning herd selection for 1760/2000 ('820/97') inspections**

**A. Purpose**

The purpose of this circular is to remind staff of 1760/2000 inspections and identify different herds to be targeted for 1760/2000 (820/97) inspections.

**B. Policy.**

It is Department policy that on-farm inspections be made under European Directive 1760/2000 to confirm compliance with said directive. District Veterinary Office Staff must target their inspections on specific groups of keepers. This inspection process is regulated by EC1082/2003 and EC499/2004.

**C. Procedures.**

The selection of herds by DVO staff for the annual round of identification inspection is done on a "**disease**" basis firstly under the risk based criteria for selection (see below) and then under the "**random**" selection criteria the main thrust of DVO inspections should again, for 2005, be from the list of non-premia applicant herds supplied in excel spreadsheet on the G: drive. [\\SDBAHDATA0\DepartmentShare\820\\_97\\_InspectionForms\Non\\_Premia\\_Applicants.xls](\\SDBAHDATA0\DepartmentShare\820_97_InspectionForms\Non_Premia_Applicants.xls)

In addition a list of herds showing CMMS anomalies is also provided on the G: drive. [\\SDBAHDATA0\DepartmentShare\820\\_97\\_InspectionForms\Anomalies\\_2004.xls](\\SDBAHDATA0\DepartmentShare\820_97_InspectionForms\Anomalies_2004.xls)

This excel file has details on (i) herds that have a high proportion of late registrations, (ii) herds that have a particularly high proportion of males or females registered or (iii) where a large number of calf births sent for registration are bunched on the same day, see 4(f) below. Herds appearing on this list that are also non-premia applicants should be targeted for inspection by the DVO and the 'reason' for inspection should be '**BTR irregularities**'.

Any herd that has an ER76 type investigation (see 4 (b) below) should also be considered for an identification inspection and this should be carried out even if the keeper has applied for premia. A check should be carried out with the District Livestock Office Inspectorate to ensure that the particular keeper hasn't already been inspected as part of their yearly inspections. The 'reason' for the DVO inspection will obviously be '**disease**'.

Herds inspected on previous years and identified with irregularities by the DVO inspectorate should also be targeted for inspection and again the 'reason' for inspection should be entered as '**previous inspection problems**'. (See 4 (e) below)

The remaining herds necessary to achieve the quota of inspections should be selected at random however herds with small numbers of animals should be avoided where possible given the stipulation at 4 (a) below. Again the 'reason' for inspection for this category should be '**Random**'

**Extract from COMMISSION REGULATION (EC) No 1082/2003, Article 2 section 4 states:**

**4. The risk analysis for each holding shall take into account in particular the following:**

(a) the number of animals on the holding, including details of all the animals present and

animals identified on the holding;

**(b) public and animal health considerations, and in particular the existence of previous outbreaks of disease;**

**(c) the amount of annual bovine premium claimed and/or paid to the holding, compared with the amount paid the previous year;**

**(d) significant changes in comparison with situations in previous years;**

(e) results of checks conducted in earlier years, in particular:

(i) ***the proper keeping of the holding register, as provided for by Commission Regulation (EC)No 2629/97***

(ii) ***(ii) the proper keeping of passports of the animals present in the holding, as provided for by Regulation (EC)No 2629/97;***

**(f) proper communication of the data to the competent authority;**

**(g) other criteria to be defined by the Member States.**

There was an obligation in Regulation 1082/2003 to report any infringements on the cattle identification side to the "authorities responsible for the implementation of Regulation 2419/2001" and this requirement has been taken forward in the new cross-compliance arrangements under the single farm payment.

**D. Prepared By** Peter Maher SVI

**E. Authorised by** ERAD Management Committee.

**F. Signed by:**

---

Margaret Good SSVI

**G: Issue and Effective date** 26<sup>th</sup>/05/2005

**Appendix 6**  
**Programme Logic Model**

## **Appendix 7**

### **Costing of Civil Service Staff Time**

Efficient and economical use of resources, including staff time, is a vital aspect of Civil Service management. However, it is difficult to determine whether efficiency and economy have been achieved unless the cost of resources used is clearly identified. This note has been prepared in order to assist resource managers to understand the fully the costs involved in using staff; to predict the effects that employing more, or less, staff may have on a department's budget; and to provide a basis for working out the appropriate level of charges to be applied in situations where costs are to be recovered.

The table presents estimates of the average staff costs involved in employing civil servants in general service grades and in some grades common to two or more departments.

#### **Direct Salary Cost**

Direct salary cost is defined as the gross wage or salary paid to an individual at the relevant grade plus the associated employers' PRSI payment. The figures shown are based on the most recent data available from the Staff Information System; and on the provisions of Circular 12/96 (Revision of pay of civil servants). Each figure shown is the average salary for the grade plus the appropriate PRSI charge.

#### **Total Salary Cost**

Total salary cost is defined as direct salary cost plus an imputed pension contribution. Employing civil/public servants normally results in the creation of entitlements to pensions which are payable in the future. Therefore, in estimating the total cost of employing a civil servant, allowance must be made for this deferred cost. This is calculated at 16 2/3% of the officer's gross salary. The pension contribution is based on gross salary, and not direct salary cost because employers' PRSI is not reckonable for pension purposes.

#### **Total Staff Cost**

Total staff cost is defined as total salary cost plus an allowance for overheads. Each officer requires office space, materials, use of telephones, fax, postage service, etc. In addition, security services have to be provided, recruitment and training expenses are incurred, personnel services are provided, and so on. It is usually easiest to include provision for these by applying a proportionate increase in salary costs. It is estimated that an addition of 47% to total salary cost is required to recover overheads.

#### **Application of Staff Costs**

It is important to note that the costing presented are average costs and are applicable only on a general basis. Where more specific information is available, it should be used. However, care should be taken that appropriate allowances are made for cost elements like pension rights and direct and indirect overheads.

#### **Travel and Subsistence**

Where the duties of the post being costed involve traveling, the estimated costs of travel and subsistence should be added.

#### **Support Staff**

The work of some staff does not generally involve the use of a significant quantity of postage, telephones, computers, etc. The salaries of such staff (service officers, paperkeepers, service attendants, etc.) are included as overheads. Thus, the cost of a saved service officers post is more accurately given by the total salary cost for a service officer.

#### **Daily and Hourly Rates**

Daily and hourly staff costs in respect of any grade conditioned to a 41-hour week (gross) can be calculated by using the following general formulae:

**Daily rate for a grade**

$$\frac{\text{Annual cost for grade}}{(249 - \text{annual leave entitlement})}$$

**Hourly rate for a grade**

$$\frac{\text{Annual cost for grade}}{(249 - \text{annual leave entitlement}) \times 6.95}$$

For instance, the daily and hourly total staff cost rates for a Higher Executive Officer is:

**Daily rate for a HEO**

$$\frac{\pounds 39418}{(249-26)} = \pounds 177 \text{ per day}$$

**Hourly rate for a HEO**

$$\frac{\pounds 39418}{(249 - 26) \times 6.95} = \pounds 25 \text{ per hour}$$

## Appendix 8

### A Sample Copy of an ER41 for Used for Calculating Technical Staff Costs

	For all areas	Ballybay	Castlebar	Cavan	Dublin	Drogheda	Galway
	No Days	No Days	No Days	No Days	No Days	No Days	No Days
Annual/sick leave	5172						
Assisting others (herd tests etc.)	733						
Badger control	5970						
Blood sampling	315						
BSE duties (herds)	163						
BSE - knackeries/stores/processing	942						
Butchers & slaughterhouse	361						
Class A diseases	138						
CMMS 820/97 - herd inspections	774						
CMMS, ID, Registration, Tag rectification, investigations	3215						
Contiguous herds	882						
Dealers	560						
Disinfections	719						
Dispersal /private sales	24						
Exports bovine	1721						
Exports non-bovine	332						
Herd No. investigations	2053						
Hormone control	19						
Imports - bovine	4						
Imports - non-bovine	28						
Investigations enquiries etc	1619						
Marts (cattle)	3251						
Marts (Sheep)	192						
Office duties	10479						
Reactor /restricted herds	2644						
Reactor collection	1188						
Shows	144						
Swill control	21						
Temporary transfer	168						
Training Courses	399						
Warble Fly	35						
Other	735						
<b>Total</b>	<b>44998</b>						

## Appendix 9

### DVO Administrative Staff Survey

	HEO	HEO	EO	EO	SO	SO	CO	CO	Overall	Overall
		%		%		%		%	Total	Total %
<b>General Admin</b>	9.9	46%	6.9	13%	9.5	16%	25	8%	51.3	11%
<b>TB</b>	6.5	30%	23.7	44%	20.4	34%	120	36%	170.5	37%
<b>CMMS</b>	1.1	5%	9.9	18%	16.4	27%	127	39%	154.5	33%
<b>BR</b>	0.9	4%	2.9	5%	2.8	5%	13	4%	19.7	4%
<b>Other Vet</b>	3.19	15%	10.7	20%	11.5	19%	44	13%	69.4	15%
<b>Total</b>	<b>22</b>	<b>100%</b>	<b>54.1</b>	<b>100%</b>	<b>60.7</b>	<b>100%</b>	<b>329</b>	<b>100%</b>	<b>465.3</b>	<b>100%</b>

### Indicative List of CMMS/AIM tasks undertaken by Administrative Staff within DVOS

1. Amend registration details of live animals.
2. Order replacement cards.
3. Add retrospective farm to farm and on farm death movements.
4. Report E800 (missing/stolen) animals - with relevant data - Processing NBAS 24 forms when informed of missing / stolen animals or contacting NBAS Division to remove E800 status.
5. Resolve queries relating to herd profiles and discrepancy reports.
6. Check AIM when herds are made dormant.
7. ER 96 correlating temporary tag with permanent identity. Checking that correlation is correct and that replacement tags have been ordered by herdowner.
8. Liase with NBAS on duplicate tag cases.
9. Check and Process tags for abattoir slaughtering – clear work files.
10. Queries on exported and slaughtered animals.
11. Process Late registrations and ER94(C) s.  
Check each one that the dam is a valid tag number, the dam was live and in herd at date of calving, dam is registered and no other calving 300 days previous. Letter to issue informing herdowner that any further late registration will result in DNA testing. 2<sup>nd</sup> offence VI nominates dam and calf for DNA testing on issuing letter.
12. Deal with queries issued by Clonakilty regarding registration of calves ie dam not in herd, calved less than 300 days before, dam will be less than 16 months etc.
13. Compliance Certificates regarding restricted herds sent to DVO have to be checked to see if Compliance Cert can issue or not.
14. Deal with queries issued to herdowners regarding Compliance Certs i.e. animal not located in sellers herd, date of movement outside dates of validity of Compliance Cert etc.
15. Process Twin Calves – Record in book and forward to Clonakilty when cleared by VI.
16. Organise registration of imported animals. Issue letters to h/o if animals from NI follow up on them if difference in tag numbers. Checking and forwarding 94(E) form to Clonakilty. Checking and forwarding ER94 (F) form to Clonakilty in the case of old imported animals not registered yet.
17. Liase with other DVOs in respect of Alpha Numeric animals not properly registered or not registered at all in order to get them registered.
18. Assist herdowners in registering old unregistered animals – printing herd profiles, checking dams etc.
19. Processing dealers registrations on CCS and AHCS also renewing registration of dealers whose licences have expired.
20. Completing NBAS 26 form in order to get Unconfirmed Dead status removed from animal
21. Contacting NBAS Division to change registration details on dead animals.
22. Contacting NBAS Division to delete a movement entered incorrectly.
23. Assisting herdowners in completing NBAS 17 forms or advising them to contact Mart / Knackery or Factories with regard to incorrect movements on CMMS.
24. Deal with queries issued to herdowners from Mullinahone regarding non-issue of replacement tags.
25. Check unauthorised movements into and out of TB/BR restricted herds – Marts and Private Sales.
26. TASS – 31D problems with recorded tags.
27. Deleting registrations where herdowner registered animal that does not exist – he/she is required to produce the tags and passport.
28. CMMS/AIM supervisory duties for supervisory and managerial grades.

## Appendix 10

### Self Completed Questionnaire issued to Veterinary Staff

The Department of Agriculture, Fisheries and Food (DAFF) is committed to carrying out a Value for Money (VFM) and Policy review of the CMMS/AIM programme which is due to be completed by April 2008. VFM reviews are public documents, and are published on Departmental websites and laid before the relevant Select Committee of the Oireachtas.

The terms of reference have been agreed by the relevant Assistant Secretary and by the Secretary General and require that the Steering Group examine the rationale, efficiency, effectiveness, impact and continued relevance of the CMMS/AIM. Examining efficiency requires an estimation of the staff costs attributable to the CMMS/AIM. The data provided by you in completing this questionnaire will allow an estimation of the staff time and consequently the staff cost in administering the CMMS/AIM programme. The Steering Group charged with carrying out the VFM Review is chaired by Martin Farrell, Principal Officer in the NBAS division and includes representatives from SPS division, IT division, ERAD, Economics and Planning Division and the Department of Finance.

The Steering Group developed the questionnaire in conjunction with Ann McManus, Josephine Broderick and Juliette Ryan. The contents will remain confidential, however the overall results will form a component of the final VFM report. A similar exercise is being conducted for the technical and administrative grades within each of the DVOs. Please complete and return the questionnaire by email to Peter Maher SVI before Friday the 8<sup>th</sup> February.

If you have queries regarding the questionnaire you should contact Peter Maher SVI at 01 5053461 or 086 8044247

Regards,

---

**Bridget Hickey**

NBAS Division

#### **Guidance Note;**

The purpose of this questionnaire is to estimate the proportion of time spent by Veterinary staff at the CMMS/AIM. An list of some CMMS/AIM tasks is included at the back of this questionnaire for your convenience. **Please refer to this list when completing the questionnaire to ensure standardisation across all DVOs.**

**Please state the total number of VI POSTS the DVO in 2007 and express the percentage of time yearly**

**OR**

**the number of days that each post spent on CMMS/AIM work in 2007. It is important that you enter data in one column only and not in both.**

**Respondent Details:**

DVO	
Name and Grade of Respondent (s)	
Contact Phone Number	

Include all administrative grades for which you are responsible, including yourself.

<b>Staff Time 2007</b>		<b>Enter Data in 1 Column Only</b>	
<b>Grade</b>	<b>Number of posts at this Grade</b>	<b>Aggregate Percentage of Time Yearly</b>	<b>Aggregate Number of days Per Annum</b>
<b>SVI</b>			
<b>VI</b>			

### Indicative List of CMMS/AIM tasks undertaken by Veterinary Staff within DVOs

1. Identify/Resolve queries relating to herd profiles and discrepancy reports.
2. Cohort and Progeny tracing issues with regard to BSE, TB and Brucellosis outbreaks.
3. Correlation/Certification issues with regard to TB and Brucellosis certification.
4. Liase with Admin on duplicate tag cases.
5. Queries on exported and slaughtered animals.
6. Investigate recidivist herdkeepers for late registrations and ER94(C) s. [*Letter to issue informing herdowner that any further late registration will result in DNA testing. 2<sup>nd</sup> offence VI nominates dam and calf for DNA testing on issuing letter.*]
7. Investigate Twin Calves registrations
8. Organise registration of imported animals.
9. Assist herdowners in registering old unregistered animals – printing herd profiles, checking dams etc.
10. Check unauthorised movements into and out of TB/BR restricted herds – Marts and Private Sales.
11. TASS – 31D problems with recorded tags.
12. CMMS/AIM supervisory duties.
13. Report E800 (missing/stolen) animals - with relevant data – Examining NBAS 24 forms when informed of missing/stolen animals.
14. Assist Herd Keepers with ‘paperwork’ during Animal Welfare cases or Social cases.

## Appendix 11

### Self Completed Questionnaire issued to staff within the SIU

All staff within the CMMS regional teams, which report under the SIU spend 100% of their time on CMMS/AIM work and therefore their entire salary is apportioned to the programme.

Grade	Number in 2007
DS	2
SAO	12

#### The CMMS Regional Teams within the Special Investigation Unit Division.

In 2002 four CMMS regional teams consisting of 12 SAOs and 2 DSs were established with a view to conducting pro-active and targeted enquiries in regard to cattle identification and tracing matters. The positioning of the teams follows the current regional structure of the Department's animal health service with a team each based in Cavan, Sligo, Tipperary and Kilkenny.

The teams were intended to handle specific targeted and systematic enquirers focusing in particular on repeat offenders and on cases that involve more than 1 DVO. It was never the intention that the work would concentrate solely on prosecution but also on educating the industry on the maintenance of an accurate database, preventing ongoing breaches of the regulations and identifying procedures that lead to inaccuracies in the current system. The CMMS regional teams operate under the European Communities Regulation 276/99 and 277/99, which is made pursuant to the Diseases of Animals Act.

It was originally intended that the activities of the regional teams would be coordinated centrally through NBAS division and the SIU. However in reality the 14 staff has reported to an AS in the SIU division with the work largely coordinated through the SIU division. The Steering Group received data from the SIU division on the number of inspections and investigations undertaken by the CMMS regional teams and this data is outlined in table 13 below.

Since the commencement of the CMMS regional teams in 2002, a total of 601 files have been investigated with 3 prosecutions arising as a result of these investigations as outlined in the table below. Therefore on average over the period 2003 – 2007, the CMMS teams have investigated 120 files per annum.

#### Outputs of the CMMS Regional Teams 2003 – 2006

Year	A*	B**	Total
2003	19	141	160
2004	22	103	125
2005	17	67	84
2006	10	126	136
2007	10	86	96
% change 03 - 07	- 47%	- 39%	601

\* A is inspections/investigations generated by the local office and issued from SIU.\*\* B is inspections/investigations assigned by NBAS Division.

**Appendix 12**

**Self Completed Questionnaire issued to NBAS Division**

**Number of NBAS FTE's assigned to the BAITS programme, 2003 – 2006**

<b>Grade</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Average 2003 - 2006</b>
AP	1.50	2	2	2	2
HEO	2	3	3	3	3
EO	6	5.8	5.8	5.8	5.8
SO	2	0	0	0	0
CO	15	14.8	14.6	14.6	10.5
<b>Total</b>	<b>26.5</b>	<b>25.6</b>	<b>25.4</b>	<b>25.4</b>	<b>21.3</b>

**Appendix 13**

**Self Completed Questionnaire issued to IT Group Animal Health and Market Support  
Division**

**Number of IT FTE's assigned to BAITS, 2003 - 2006.**

<b>Grade</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Average 2003 - 2006</b>
AP	0.65	0.50	0.50	0.40	0.5125
HEO	1.75	1	1	1	1.1875
EO/SO	3.5	2	2	2	2.375
CO	0.5	1	1	1	0.875
<b>Total</b>	<b>6.4</b>	<b>4.5</b>	<b>4.5</b>	<b>4.4</b>	<b>4.95</b>

**Appendix 14**  
**Stakeholder Submissions**

Submissions from stakeholders including ICMSA, ICOS, IFA and Macra Na Feirme were requested by letter (copy below).

Dear xxxx,

The Department of Agriculture, Fisheries and Food is committed to carrying out a Value for Money review of the Bovine Animal Identification and Traceability System (CMMS). This review forms part of a wider Government initiative aimed at achieving better value for money in public expenditure. VFM reviews are public documents and are published on Department websites and laid before the relevant Select Committee of the Oireachtas.

The review will consider the rationale for the Cattle Movement and Monitoring System (CMMS), the efficiency and effectiveness of the CMMS, the impact of the CMMS and the continued relevance of the CMMS. As part of the examination of programme efficiency it is desirable that the views of stakeholders are considered. Farming stakeholders are being invited to make written submissions to the Value for Money Steering Committee to help inform the review process. Any written material you provide will be subject to the provisions of the Freedom of Information Act. I would request that submissions are made to the undersigned by Friday the 7<sup>th</sup> December 2007.

Yours sincerely,

Bridget Hickey,  
National Beef Assurance Division,  
Maynooth Business Campus,  
Maynooth,  
Co. Kildare.

Phone: 01 5053418

Email: [bridget.hickey@agriculture.gov.ie](mailto:bridget.hickey@agriculture.gov.ie)

## Replies from Stakeholders

### ICMSA

1. FMD Controls

With the outbreak of FMD in 2001, the CMMS played a crucial role in tracking animal movements and thus ensured the containment of the disease in a small area of the country. It allowed for the identification of the location of high-risk animals and their immediate removal.

2. TB/Brucellosis Controls

Like FMD, the CMMS has helped the tracking of animal movements and thus helped in the control of TB/Brucellosis. The dramatic reduction in Brucellosis can, in part, be attributed to CMMS along with the considerable extra regulations and costs placed on keepers over the last ten years. The reduction in the number of reactors has led to savings for DAFF in relation to compensation for reactors.

3. Access to Markets

A complete animal traceability system has played a crucial role in re-opening these lost markets and will continue to play a crucial role in maintaining market access going forward. The CMMS contributes to food safety and consumer confidence by guaranteeing birth to slaughter traceability.

4. Improved Breeding Information

The CMMS has allowed for more accurate data to be available for breeding purposes and this will assist in improving breeding within the bovine herd.

5. Costs

The costs on keepers are both direct and indirect. The direct cost includes the cost of tags, the cost of postage for birth registrations and farm-to-farm movements. The indirect costs include the time spent in completing the Herd Register, calf birth registration forms and the farm-to-farm notification form. It is essential that these costs are kept to the absolute minimum to maintain keeper commitment to the CMMS regime.

6. Administrative Burden

In order to fully meet the requirement of CMMS, there is a very considerable record-keeping element for keepers including registration requirements for all animal births and movements to the maintenance of the Herd Register. Measures must continue to be taken to reduce the administrative burden on keepers.

7. Cross Compliance

CMMS related issues have been the main source of penalties under the Single Farm Payment Cross Compliance regime. This is due in particular to historic issues with the CMMS as well as the mechanism in place for farm-to-farm movements. A change to farm-to-farm movement notification is required to reduce this problem as well as an improved system of tolerances.

**ICOS and Loughrea Co-op Mart**

ICOS and Loughrea Co-op Mart sent in submissions outlining problems with the operation of the system in livestock marts but emphasised the benefits to the industry and country of having a full traceability system in terms of European marketing.

## Appendix 15

### Questionnaire to other Member States on a comparison of Bovine Identification Systems

The Irish authorities are currently examining the efficiency of its bovine identification database which was set up to fulfil the requirements of Regulation (EC) No 1760/2000. In that context we would like to compare the operation of bovine databases in other Member States with the Irish operation and would ask you to assist us by replying to the following questions:

1. Which aspects of the bovine database are operated within the Ministry/Competent Authority? Some? All? None? *(Please indicate an option by circling one)*
2. How much has the CA spent on direct computer equipment for the Central Database or for computers to feed data into the Central Database? € \_\_\_\_\_
3. Is the collection of data from keepers/keepers carried out directly by A) the Ministry/Competent Authority or B) an outside Agency or C) a private company?
  - a. Calf birth registration ---A or B or C ? *Please circle*
  - b. Cattle tagging-----A or B or C ? *Please circle*
  - c. Notification of different types of cattle movements: -
    - i. To markets --- A or B or C.? *(Please circle)*
    - ii. Directly to other farms ---- A or B or C.? *(Please circle)*
    - iii. To factories/abattoirs ---- A or B or C.? *(Please circle)*
    - iv. Exported live ---- A or B or C.? *(Please circle)*
4. Does the keeper/Keeper pay for cattle ear tags? (i) All (ii) Some or (iii) None? *(Please circle)*
  - a. How much (in EUR) is charged for a set of cattle ear tags? € \_\_\_\_\_ b.  
How much for single replacement tag? € \_\_\_\_\_
  - c. How much is charged for a double set of replacement tags? € \_\_\_\_\_
5. Are Passports issued for Bovines? Yes/No *(Please circle)*
  - a) If Yes, who issues them? CA? Agency? Other? *(Please circle)*
  - b) What is the cost per passport? € \_\_\_\_\_

Is Herd Register Format in electronic or manual format?

**Appendix 16**  
**Calculations of Staff Costs for Relevant Grades in 2007**

Grades	Salary and Allowances	Pension Element *	Salary + allowances + pension	Overhead cost (+47%)**	Salary, pension + overhead	Overtime	Unsocial Hours	Travel and Sub	Employer's PRSI	Totals	Staff No***	Total Individual Staff Cost
TAO - pre 1995	18,312,978.88	1.3	23,806,872.54	1.47	34,996,102.64	241,606.97	760,115.98	4,492,688.41	428,068.20	40,918,582.20	462	
TAO - post 1995	6,881,220.83	1.25	8,601,526.04	1.47	12,644,243.28	845,361.60	142,767.37	1,321,704.60	807,488.15	15,761,565.00	265	
										<b>56,680,147.19</b>	<b>727</b>	<b>77,964</b>
SAO -pre 1995	13,498,200.45	1.3	17,547,660.59	1.47	25,795,061.06	976,132.05	262,446.30	1,911,163.34	288,900.62	29,233,703.37	293	
SAO - post 1995	197,727.06	1.25	247,158.83	1.47	363,323.47	4,674.54	1,605.81	36,637.12	20,541.82	426,782.76	17	
										<b>29,660,486.13</b>	<b>310</b>	<b>95,679</b>
DS pre - 1995	7,273,732.65	1.3	9,455,852.45	1.47	13,900,103.09	6,949.86	201,229.64	1,026,621.14	146,420.71	15,281,324.44	138	
DS post 1995	0.00	1.25	0	1.47	-	0.00	0.00	0.00	0.00	-	0	
										<b>15,281,324.44</b>	<b>138</b>	<b>110,734</b>
CO pre - 1995	19,904,231.52	1.3	25,875,500.98	1.47	38,036,986.43	1,239,160.75	1,461.76	320,141.79	441,551	40,039,301.78	742	
CO post - 1995	15,093,823.49	1.25	18,867,279.36	1.47	27,734,900.66	1,246,492.67	0.00	179,227.84	1,651,764.68	30,812,385.85	626	
										<b>70,851,687.64</b>	<b>1,368</b>	<b>51,792</b>
SO - pre 1995	4,402,331.70	1.3	5,723,031.21	1.47	8,412,855.88	327,509.15	365.44	7,074.71	98,626.48	8,846,431.66	144	
SO - post 1995	482,412.37	1.25	603,015.46	1.47	886,432.73	56,490.83	0	119,916.87	54,726.25	1,117,566.68	22	
										<b>9,963,998.34</b>	<b>166</b>	<b>60,024</b>

<b>EO - pre 1995</b>	15,180,459.46	1.3	19,734,597.30	1.47	29,009,858.03	812,605.16	0	103,643.05	337,803.13	30,263,909.37	450	
<b>EO - post 1995</b>	4,490,516.95	1.25	5,613,146.19	1.47	8,251,324.90	184,092.45	0	150,902.94	471,963.20	9,058,283.49	161	
										<b>39,322,192.85</b>	<b>611</b>	<b>64,357</b>
<b>HEO - pre 1995</b>	13,324,830.24	1.3	17,322,279.31	1.47	25,463,750.59	610,271.48	0	182,141.15	287,240.12	26,543,403.34	320	
<b>HEO - post 1995</b>	1,612,839.49	1.25	2,016,049.36	1.47	2,963,592.56	65,593.00	0	428,406.16	169,066.53	3,626,658.25	47	
										<b>30,170,061.59</b>	<b>367</b>	<b>82,207</b>
<b>AP - pre 1995</b>	8,875,802.91	1.3	11,538,543.78	1.47	16,961,659.36	0	0	351,674.98	173,461.40	17,486,795.74	152	
<b>AP - post 1995</b>	339,082.25	1.25	423,852.81	1.47	623,063.63	0	0	63,889.78	34,214.32	721,167.73	9	
										<b>18,207,963.48</b>	<b>161</b>	<b>113,093</b>
<b>VI - pre 1995</b>	8,844,157.39	1.3	11,497,404.61	1.47	16,901,184.77	0	939,384.34	848,041.95	183,008.89	18,871,619.95	101	
<b>VI - post 1995</b>	12,570,671.86	1.25	15,713,339.83	1.47	23,098,609.54	0	948,907.10	1,203,544.13	1,327,161.64	26,578,222.41	149	
										<b>45,449,842.37</b>	<b>250</b>	<b>181,799</b>
<b>SVI - pre 1995</b>	4,548,174.09	1.3	5,912,626.32	1.47	8,691,560.69	0	101,763.94	407,822.35	87,049.96	9,288,196.94	49	
<b>SVI - post 1995</b>	403,775.59	1.25	504,719.49	1.47	741,937.65	0	5,816.66	33,914.70	34,863.75	816,532.76	4	
										<b>10,104,729.69</b>	<b>53</b>	<b>190,655</b>

- \*Add on 25% of basic pay for staff recruited after 6 April 1995 and 30% of basic pay for staff recruited before 6 April 1995 when calculating pension component as specified by the Department of Finance.
- \*\* Overheads are costed at 47% of Salaries, Allowances and Pension as specified by the Department of Finance.
- \*\*\* Staff Numbers for all Grades is Based on Numbers paid by Accounts Division in Cavan and Excludes Temporary Staff.

**Appendix 17**

**Number of Registrations per Month, 2000 – 2007**

<b>Month</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Jan</b>	108,454	99,002	116,106	105,502	98,868	105,399	109,573
<b>Feb</b>	240,043	251,332	266,381	271,865	263,787	272,633	287,367
<b>Mar</b>	354,157	388,377	420,031	464,714	442,574	447,145	411,590
<b>Apr</b>	379,906	505,169	439,012	448,987	435,490	385,148	415,412
<b>May</b>	403,919	363,633	317,628	318,400	323,981	348,368	323,913
<b>June</b>	229,276	168,326	179,150	200,493	180,692	173,310	173,323
<b>July</b>	124,008	118,612	128,326	85,731	102,537	103,217	116,143
<b>Aug</b>	78,100	73,792	66,037	66,267	78,927	81,529	67,400
<b>Sept</b>	64,705	65,912	70,008	66,966	71,622	69,077	59,420
<b>Oct</b>	76,655	79,844	74,561	66,178	68,805	67,571	72,524
<b>Nov</b>	70,129	66,167	63,216	68,111	66,315	68,362	65,820
<b>Dec</b>	48,914	53,598	59,805	58,409	49,377	48,961	41,810
<b>Total</b>	<b>2,178,266</b>	<b>2,233,764</b>	<b>2,200,261</b>	<b>2,221,623</b>	<b>2,182,975</b>	<b>2,170,720</b>	<b>2,144,295</b>

## Appendix 18

### Report of the VFM Review Study Tour to the Netherlands

**Date:** 16th July 2008.

**Attendance:** Martin Farrell, Peter Maher, Mick Farrell and Bridget Hickey, Department of Agriculture, Fisheries and Food.

Ms Ir. P (Puck) Bonnier Department of Food Quality and Animal Health, The Hague.

#### **General Information:**

Ms Bonnier is the Senior Staff Officer in the Department of Food Quality and Animal Health responsible for the identification and registration of animals (all species). The Ministry retains political responsibility for animal traceability and an agency of the ministry implements the system and maintains the database. A separate general inspectorate service conducts the statutory inspections. This inspectorate was described as "police" with agricultural expertise with separate powers to refer cases to Courts. Approximately 2,500 identification and registration inspections are carried out annually and approximately 200 cases are referred to court or pay fines handed down by courts.

The Netherlands has a total cattle population of 3.9 million animals on 40,580 holdings. There are around 1.4 million births per annum and 12.9 million movements. There is a high level of imports of animals - mainly veal calves - into the Netherlands. Cattle markets operate for animals destined for slaughter only and act as assembly centres. Markets (Livestock Marts) were closed during the outbreak of FMD in 2001 and never re-opened. Live animals are sold to traders (dealers). Keepers pay for all database notifications and transactions (including movements on and off holdings) in the Netherlands. The fees are set by the Ministry and advertised. The Department had sent a questionnaire to the Ministry in advance of the meeting and the detailed response is set out at Appendix 1.

#### **The Database**

Prior to 2006 the database was directed by the Ministry but fully operated by INTRADIS (a breeding organisation). The Netherlands developed the current database in 2006 and the database is now controlled and operated by the Ministry. Most keepers register through INTRADIS (and include extra information e.g. for breeding purposes). The information which is necessary for the official database, is immediately forwarded to the Ministry and in the same call (if it is through voice response) the keeper is informed if the notification is not fully correct. The system of INTRADIS supports this. Most contact with the database is by means of touch tone telephone, management packages or by the internet. There are no paper based notifications to the database.

## **Charges**

The cost of the system to the Ministry is €5.2 million annually. These costs include the operation of the database, hardware provision, salaries and maintenance of hardware and software. Keepers pay for birth registrations and movements onto the holding but no charges are levied for movements off the holding or for death notifications. Details of charges are included in the questionnaire - attached. In the birth registration system it costs €0.99 to register a calf within 3 days of birth. No charge is levied for an amendment to the birth registration notified within a further 3 days while amendments notified outside this timeframe cost €0.99. However a charge of €4.75 applies to an amendment notified in a paper format. However, larger charges may arise depending on the administrative work involved in making the amendment, with the highest charges applying to paper amendments. After 80 days a DNA test is required to register a birth. Farmers do not pay for inspections.

## **Tags**

The system does not rely on a tender process to select a company to supply tags. Companies wishing to supply eartags register with the Competent Authority. The company must demonstrate to the satisfaction of the Competent Authority that it is able to produce and distribute the tags at an acceptable standard. The Ministry examines the tags to check compliance with Commission Regulation (EC) No 911/2004 as regards eartags, passports and holding registers. Staff in the Ministry examine the tags physically and subject the tags to a range of tests. If the Ministry is satisfied that that the company can deliver the service at an acceptable standard, the company is placed on a list of accredited suppliers. The tag loss rate is at 10%.

## **Holding Register**

Keepers in the Netherlands do not have to retain a manual herd register if they have an internet connection and can print down a herd profile from the Ministry's computer system. A similar system is used in Germany. The FVO is happy with the system and has not raised any issues regarding this system for holding registers.

## **Passports**

In general animals are not issued with passports. Requests for passports are handled over the internet and are e-mailed to the farmer in *pdf* format when animals are to be exported.

## **Miscellaneous**

A consignment of 12 calves imported from the UK in May was found to have been infected with TB. The Dutch Ministry and farming sector are very seriously concerned about this issue.

### Summary of main findings

- No outsourcing is used. An Agency linked to the Ministry implements the database system. The Ministry deals with EU institutions - Commission and FVO.
- The system relies heavily on electronic communications -touch tone telephone, internet and management packages - for transactions with very little use made of paper transactions.
- Calves are registered within 3 days of births. This is underpinned by national legislation. There is a requirement for DNA sampling after 80 days.
- A calf of an “unregistered” dam can be registered on the database.
- Charges apply for all transactions with the database with scale of fees weighted in favour of early notification and electronic interaction with the database. Higher fees apply to paper transactions.
- A manual herd register is not required where a keeper has access to the internet and printing facilities. This approach is acceptable to the FVO and is in use in Germany.
- Passports are generated via internet in *pdf* format only for animals destined for export.
- A high levels of imports support the veal business. The details on passports are checked at the point of importation. Some verification checks are carried out with exporting competent authorities on a percentage of imports.
- A tender system is not used to select tag suppliers. All tag suppliers are approved on demonstration of delivery of a service in compliance with Commission Regulation 911/2004. The market decides the demand for each tag supplier. An inspectorate service separate from the Agency and Ministry- not linked to the veterinary agency conducts the statutory inspections.
- All keepers have a PIN number to communicate with the database. Agents may be authorised to act on behalf of clients. In many instances family members use the farmer’s PIN number to access the database.

3 September 2008

## Questions

### The Value for Money Review of the Bovine Animal Identification and Traceability System

What the Department of Agriculture, Fisheries and Food's VFM Review of the BAITS cover?

**The VFM review will focus on 5 main areas; the rationale for the BAITS; the effectiveness of the BAITS; the efficiency of the BAITS; the overall impact of the BAITS and the continued relevance of the BAITS.**

What are the Main Area's that the VFM Review Team is interested in Comparing and Analysing with the BCMS?

General Questions;

1. What is the number of bovine registrations per annum?  
**Total number of notifications per year: 12,940,783 (2007)**  
**Number of birth notification per year: 1,404,213**
2. What is the number of farm movements per annum?  
**Number of on-movements: 4,060,394**
3. What is the bovine population in the Netherlands; average herd size etc?  
**Number of bovines on 1-1-2008: 3,866,539**
4. What is the total number of farmers and their age profile?  
**Bovine UBN's (=Unique Herd Number) on 1-1-2008: 40,580**
5. Changes in movements, registrations and bovine population over the past five years?  
**Number of keepers and bovines is slightly decreasing**
6. Expected changes in movements, registrations and bovine population in the medium to long term?  
**If dairy quota is gone, the number of animals will be restricted by the fertilizer (manure) rules**
7. Was outsourcing of identification and registration work to a private sector operator ever considered?  
**It started as a private sector operated system. When a central database became obligatory, this private sector operated system became the national database, still operated by the private sector, but with the responsibility for the CA. In 2001 parliament urged for separation of governmental registration tasks and voluntary management tasks. A private sector party can operate the database, but only if this party has no own need for the information in the database. The Ministry also decided to go for a direct operation of the database. FMD showed there was a need for a better quality of the information in the database and the Ministry was responsible for this. In 2002 the Ministry started preparing to build a new database, which was implemented in 2006.**

Cost Questions;

8. Total cost of registering a bovine and issuing a passport;  
**Total yearly costs for the whole database €5.2 million**
9. What charges does the Competent Authority (CA) levy on farmers for identification and traceability work?

**Levy's:**

Each UBN	€32.26
Each birth notification	€ 2.11
Each on-movement	€ 0.092
Each import	€ 1.02
Each import for direct slaughter	€ 0.092

10. Are farmers charged for eartags?

**They purchase directly from the suppliers**

11. Is postage a large cost to the CA on an annually basis?  
**The first year after implementing the newly build database, the costs for printed matter (which is more than just post) doubled in comparison with what was calculated (from €300,000 to 650,000). Adjustments in the execution has reduced the costs to the level calculated again**
12. Is a farmer charged for a bovine passport?  
**No, passports can only be ordered for intra-community trade, are delivered electronically and valid only for 3 days. Keeper has to print the passport himself.**
13. Is a farmer charged for passports where they are lost/stolen etc?  
**Not applicable.**
14. Is there a difference in registration costs between births, which are registered by paper or electronic means?  
**Notifications on paper are not applicable, only through voice response, internet, management systems**
15. How is the NL's identification and traceability system funded – is it 100% public funded or do farmers make private contributions on a pay per use service.  
**100% on levy's. There are agreements with the private sector on maximum contributions.**

Electronic versus Paper Registration;

16. How does a farmer register a birth – electronic, paper etc?  
**See 15.**
17. How does a farmer register a farm movement i.e. How many different ways can it be done?  
**See 15**
18. What percentages of births are registered electronically?  
**In 2006 50% was voice response. Now we don't know (Intradis)**
19. Can a farmer nominate an agent i.e. agricultural advisor to register births and movements on their behalf?  
**Yes, who ever he likes. Authorisations for doing notifications and/or watching and using your registration. Authorisations are registered in the database.**
20. Are electronic facilities for registering births provided by the public or private sector or both;  
**??**
21. What is the turnaround time for sending in an electronic registration and a paper registration?  
**The official notification period in the Netherlands is 3 working days after the event.**  
**% of notification on the day of the event: 49%**  
**% of notification on 1<sup>st</sup> working day after the event: 76%**  
**% of notification on 2<sup>nd</sup> working day after the event: 93%**  
**% of notification on 3<sup>rd</sup> working day after the event: 98%**
22. Has the CA initiated campaigns to increase the % of electronic registrations?  
**There is an autonomous increase of the use of management systems.**  
**Products extracted from the database are for free if electronically down loaded.**  
**Requested information on paper has to be paid for.**
23. Do farmers receive a financial incentive to register births and or movements electronically?  
**Not applicable**
24. Are the characteristics of farmers who register births electronically different than those who register via paper i.e. different age profile; larger farms; larger herd size etc?  
**Early 2006 a research was performed on the use of management systems by dairy farmers. 41% of the dairy farmers used farm management packages and 34% of the notifications were sent through farm management packages. Reason for these two percentages not being equal:**  
**- Dairy farmers do some of there notifications through voice response, even if they have a management package**  
**- A large extend of larger dairy farmers did not make use of a management package**

25. Does the CA have performance indicators in place for turnaround times; for increasing electronic transactions etc?  
**We monitor turnaround times**
26. Does the CA have a call centre for farmer queries etc?  
**Yes, there is one call centre for all questions that deal with the Ministry for Agriculture, Nature and Food Quality with no levies. From the perspective of identification and registration we want to change that into a non-levy-free call centre.**

Error Rates;

27. What is the error rate on registrations?  
**In 2007 115,476 out of 12,940,783 notifications (=0.9%) were repaired or cancelled. The majority is repaired or cancelled within the notification period (3 working days). After that, keepers receive a letter. In the 1<sup>st</sup> quarter of 2008 1,187 keepers received a letter, two weeks after the 1<sup>st</sup> quarter (mid April) 214 notifications were still inconsistent.**
28. What is categorised as an error?  
**See benchmark EC**
29. Is there a difference in error rates between electronic and paper registrations?  
**Not applicable**
30. Are late registrations a problem and if so how do you deal with them?  
**The notification period is 3 working days. After that period the keeper can notify through the regular means (voice response, internet, management system) until 80 working days for a levy of €0,99 per late notification. After these 80 working days, the keeper can only notify on paper, which costs him €4,75 registration fee.**
31. Does a farmer receive a bovine passport every time he registers a birth?  
**No**
32. How many replacement passports are issued on an annual basis?  
**not applicable**
33. What is the cost to the CA because of errors at registration time?  
**The €0,99 per notification is based on extra costs we had to invest on automatic checks and we have on work related to errors.**
34. Are any additional costs because of errors passed back to farmers?  
**A repair of an inconsistent notification within 3 working days is costless. A repair after 3 working days costs €0,99. A repair of a consistent notification can only be done on paper and costs €4,75. A repair executed by the registration office costs € 25.67 or €15.48, depending on the workload.**
35. If additional costs arise because of errors, where in the business chain do they arise?  
**??**

Bovine Inspections;

36. What is the number of inspections per annum?  
**5% of the UBN's**
37. What is the cost per inspection?  
**€962.- per UBN**

Future Developments;

38. Likely future developments which will affect Netherlands in medium to long term;  
**We have a new system recently and hope it will last long**
39. Likely changes in identification and registration in coming years i.e. electronic boluses; use of RFID tags; electronic readers etc;  
**Electronic eartags are accepted with a transponder with a factory code, which is different from the ID-code of the bovine.**
40. Any other useful information.  
**We are interested to know which other Member States you visited and are interested in the report coming out from you review**

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## Appendix 19

### Report of the VFM Review Study Tour to the British Cattle Movement Service (BCMS)

**Date:** 9 – 10<sup>th</sup> July 2008.

**Attendance:** David Buckley, Martin Farrell, Bridget Hickey and Mick Farrell.

#### **General Information:**

The UK (Scotland, England and Wales) has a total cattle population of 9 million. There are around 2.8 million births per annum and 7.5 million movements. A large percentage of these movements are through cattle marts. There are around 100,000 – 125,000 movements per week. BCMS covers England and Wales. The cattle population of England is around 6.8 million animals.

#### **Ear Tags.**

Farmer buys his own eartags from an approved supplier of which there are approximately 20. The tags are tested against the British Institute Standards (Pass 44: 2002). Manufacturers deliver ear tags directly to farmers but unlike in Ireland, farmers are not required to sign for them.

#### **Passports.**

All animals have a passport through their life. Farmers are charged £20 for replacement passports with around 300,000 replacement passports issued on a yearly basis. Test data is not entered on the cards, therefore unlike in Ireland; passports do not have to be replaced because they are “full up”.

#### **Stakeholder Forum's.**

Senior management within BCMS chair a stakeholder forum. This forum is often used a sounding board before the roll out or implementation of new policies. Common issues highlighted by the farmer groups include cost of tags, ease with which tags are lost from an animal's ear etc. A farmer is given 28 days to replace an ear tag if an animal is found to have lost a tag upon inspection. These forums are held ever 6 months.

#### **Method of Registration.**

Around 2.8 million births are registered per annum. Up to 70% of all births and movements are registered electronically with approximately 48% of all births registered electronically (See figures from Mick Farrell). In 2005 the rate of electronic registrations was around 16%. BCMS management feel they are approaching saturation point with farmers in terms of uptake of electronic registrations. BCMS pay the cost of postage where farmers notify movements to BCMS by post, however where farmers register births by post they do not pay the postage on the basis that with registrations, farmers want and need the passport more than BCMS does but the contrary is true for movements i.e. BCMS requires the movement data more than farmers do and therefore farmers are incentivised to provide that data by not having to pay the postage. The reopening of the live calf trade has also driven up electronic registrations because farmers get the passport quicker.

To increase electronic registrations, BCMS initiated targeted marketing campaigns. They firstly focused on the users who had the highest volume of paper-based paper transactions. Mails shots were sent to all 90,000 herd owners outlining their registration details and passwords. BCMS also operates a call centre during office hours and on Saturdays. They liase with these staff in advance of and directly after a mail shot would be issued. BCMS also attend agricultural shows and field days where they would outline the advantages of electronic registrations in terms of cost, faster processing time and fewer errors.

#### **Use of Agents.**

BCMS allows farmers to nominate agents who can register births on their behalf. This is a major difference between Ireland and the UK. Ireland interprets the legislation differently and only allows the keeper to register their births.

#### **Error Rate.**

The rate of errors on paper-based registrations is around 10 – 12%, which is quite similar to Ireland. The rate of errors on electronic registrations is very small, as the farmer must validate the registration data as they enter it. Dam validations are a major error.

#### **Late Registration.**

The level of late registrations stands at approximately 0.2 – 0.4%. Late registrations were running at around 5% up until 2003 when BCMS management took the decision to enforce the relevant legislation more strongly. Adopting this stricter line has also indirectly increased the uptake of electronic registration as it gives the farmer more time to register their birth. Animals that are late registered will not receive a passport but the data will be inserted on the system. These animals could be used for breeding/milking but could not be traded off the farm. The farmer has the right to appeal a late registration by doing a DNA test at the farmer's expense. Since April 2007, BCMS issued 1,400 DNA test and only 9 were returned. A DNA test can cost anything up to £300 for both animals.

Reducing the volume of late registrations was one of the biggest successes over the last number of years. BCMS deals continuously with farmers in taking feedback and in improving the design and operation of its website and CTS online (Cattle Tracing System). The new CTS online service is due to be launched in April – May 2009.

#### **Herd Profiles.**

Cattle statements or herd profiles are issued on two occasions per year, end of June and early December. This coincides with the end of the two peaks of calving, one of which is in spring and one in autumn. BCMS encourages all herd owners to check their statements thoroughly and openly accepts any new information on deaths and movements even where this information is late. It is of the view that it is better to receive such information late, than not at all. In theory a movement should be notified within 7 days.

#### **Return of Passports.**

Up to 60,000 passports are returned to BCMS per week or around 3 million per annum. Around 92% of these come from slaughterhouses where the animal has reached the end of its life. These must be processed within 5 days and the passport stored for 18 months. These animals are then taken off the system. BCMS is investigating the scanning of these passports but there may be issues over whether an electronic copy carries the same weight as a paper copy in a legal situation

## **Appendix 20 Glossary of Terms**

AIM	Animal Identification and Movement
BAITS	Bovine Animal Identification and Traceability System
BAITS/CMMS	BAITS and CMMS may be used interchangeably as the CMMS is the computerised database within the Bovine Animal Identification and Traceability System.
BSE	Bovine Spongiform Encephalopathy is a disease of the nervous system in cattle and is one of a group of diseases known as transmissible spongiform encephalopathies (TSE). Other forms of TSE include scrapie in sheep and Creutzfeldt-Jakob disease (CJD) in humans.
CMMS	Cattle Movement Monitoring System
DAFF	Department of Agriculture, Fisheries and Food
DVOs	District Veterinary Offices
EU	European Union
E-reg	Electronic Registrations
ERI	Expenditure Review Initiative
FTE	Full Time Equivalent
ICT	Information Communications and Technology
KEEPER	Means any natural or legal person responsible for animals, whether on a permanent or on a temporary basis, including during transportation or at a market.
MNV	Movement Notification Agency
NBAS	National Beef Assurance Division
RFT	Request for Tender
SI	Statutory Instrument
SPS	Single Payment Scheme
SIU	Special Investigation's Unit
TAO	Technical Agricultural Officer
TSE	Transmissible Spongiform Encephalopathy (see BSE above)
VI	Veterinary Inspector
VFM	Value For Money