



AGRI-FOOD
& BIOSCIENCES
INSTITUTE

Annual Report
& Accounts
2018 - 2019

Laid before the Northern Ireland Assembly
under the Agriculture (Northern Ireland) Order 2004
by the Department of Agriculture, Environment and Rural Affairs
on
23 December 2019

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1. Foreword from the Chair

Foreword from the Chair

On behalf of the Board, I am delighted to present the Annual Report and Accounts for the Agri-Food and Biosciences Institute (AFBI) for 2018-19.

AFBI science plays a crucial role in providing the underpinning statutory and analytical testing, research and development work, emergency response and expert scientific advice required to support the work of the Department of Agriculture Environment and Rural Affairs (DAERA) and the agri-food industry.

During 2018-19, AFBI have continued to deliver excellent scientific services, research and advice to DAERA and our wide range of external funders and customers. It is a recognition of the excellence of the science undertaken that we continue to attract new customers and partners in our scientific programmes. It is also a testament to the hard work and commitment shown by our staff that our external non Grant-In-Aid income exceeded £20m during 2018-19. The greatest asset in AFBI are the people who work for AFBI and it is a privilege to witness their commitment and skill.

This Annual Report reflects on some of our many achievements, as well as acknowledging some of the challenges we face. During the year we progressed delivery of AFBI's Corporate Plan which sets the strategic direction of AFBI over the period 2018 to 2022 and focuses on the delivery of 3 strategic outcomes in relation to:

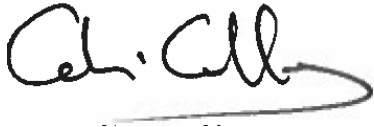
- *How our science will deliver for society, economy and the environment;*
- *How we will enhance our status as a trusted partner and provider of choice; and*
- *How we plan to invest in our people and infrastructure.*

A key part of our corporate strategy is the development of collaborative links with other research organisations and universities, and I am very pleased that in May 2018 we announced a strategic alliance with Queen's University Belfast (QUB) and have also made good progress on developing a closer working relationship with DAERA's College of Food and Rural Enterprise (CAFRE).

I was delighted to take up the position of Chair in April 2019 and I look forward to leading the Board and supporting AFBI's Executive Management Team in a period of sustained and significant change within the organisation. I am incredibly proud to be part of AFBI and I acknowledge and recognise the magnificent work that all staff do. Along with my fellow Board Members, we take the public responsibilities

entrusted to us seriously and will continue to oversee AFBI and to uphold the core values of the organisation.

I would also like to take this opportunity to thank the outgoing Chair, Mr Colm McKenna, for his significant contribution, dedication and support to AFBI and the Board during his time in office. I would also like to thank my non-executive colleagues on the Board as well as the Executive Team for their hard work and support.

A handwritten signature in black ink, appearing to read 'Colin Coffey', with a long horizontal flourish extending to the right.

**Mr Colin Coffey CDir FIOD
Chair**

2. Chief Executive's Review

Chief Executive's Review

As Chief Executive, I am pleased to present the Annual Report and Accounts for AFBI for the 2018-19 financial year.

Overall, the Institute has had another successful year as we seek to deliver AFBI's overall vision of 'Advancing the local and global agri-food sectors through scientific excellence'. We continue to build on our excellent working relationships as a trusted partner with our sponsoring Department, DAERA, and with our many stakeholders and partners. The science that AFBI delivers plays a crucial role as part of the evidence base for DAERA policy development and in meeting the Department's broad range of statutory-driven analytical requirements and emergency response needs. Furthermore AFBI's science plays a key role in improving agricultural production, helping protect the natural and marine environments, and ensuring high standards of animal health, plant health and food safety.

Delivering Outcomes

During 2018-19 AFBI began delivery of its Corporate Plan for 2018 to 2022 which outlines AFBI's ambitions for the period. This Plan sets out the 3 strategic outcomes AFBI aims to deliver for society, the economy and the environment as well as industry and our customers in an ever more efficient and effective manner. The Plan demonstrates the unique multi-disciplinary strength of AFBI and how AFBI will work with partners from science, government, industry and farming to deliver a positive impact. These achievements will be underpinned by attracting and developing excellent staff, coupled with significant investment in physical infrastructure. Implementation of the strategy will ensure that AFBI continues to lead in the delivery of scientific innovation and evidence to improve the economic and environmental performance and sustainability of the agri-food and marine sectors.

Progress towards Outcomes in 2018-19

Strategic Outcome 1 – Society, Economy & Environment

AFBI will lead in the delivery of scientific innovation and evidence to improve the economic and environmental performance and sustainability of the agri-food and marine sectors

Science with Impact - (KPI 1 & 5)

AFBI recognises that the science it delivers must be impactful. AFBI's science is mainly applied at a high level of 'Technology Readiness' and as such has high potential to be transformative at the industry level. In 2018-19 an internal review of how AFBI assesses the impact of its research was undertaken. This concluded with a strategy of embedding research impact assessment within AFBI processes. The recommendation from this internal review will be taken forward as part of the recently established Research Support Office. In addition AFBI's impact will continue to be documented through its Science Impact booklet.

Strategic Alliances - (KPI 3 & 4) - CAFRE and QUB

The growth in the diversity and complexity of scientific knowledge and technologies means that strategic partnerships with other research organisations and universities are becoming increasingly important.

The strategic alliance with QUB, launched in May 2018, represents an important partnership for AFBI. During 2018-19 work to review possible governance structures was undertaken with recommendations made. Furthermore activity between researchers across AFBI and QUB increased in year. One of the key successes already realised through the alliance includes the instigation of the Food Futures Project, an Agri-Food Quest Competence Centre (AFQCC) funded flag ship project with a key aim to design SMART sustainable farming in Northern Ireland. The launch of the Horizon 2020 funded MASTER project where AFBI and QUB will focus on the role of the rumen microbiome to drive production efficiency is also a key success. A further success was winning funding from the Natural Environment Research Council (NERC) to deliver over ten PhD students over the coming five years between AFBI and QUB in the area of the environment and aquatic ecosystems. These foundations will be taken forward in 2019-20 to develop more collaborations and deliver research with impact spanning fundamental science through to its application.

CAFRE, having a key responsibility for knowledge exchange and education as outlined in DAERA's Knowledge Framework, is also a key partner for AFBI in fully realising impact and industry transformation across the agri-food sector. Therefore during 2018-19 AFBI worked closely with CAFRE to bring forward plans aimed specifically to foster deeper and more strategic working between AFBI and CAFRE so that the knowledge generated by AFBI is disseminated widely and

effective through CAFRE's knowledge transfer function, and in turn feedback from industry via CAFRE will inform future research needs. A key example of how this deeper and more strategic working will be realised is through the development of shared beef facilities across AFBI and CAFRE. In addition to the planned infrastructural investment, the project also represents a new way of working in that the beef facilities across both AFBI and CAFRE will be used for all three functions that are research, knowledge transfer and education. As such the teams across AFBI and CAFRE will jointly design a programme using these three main tools to drive the beef industry forward in a profitable and sustainable manner.

It is the aspiration of AFBI and CAFRE to embed this model across the dairy, pig and sheep enterprises in the first instance, with further work areas being assessed going forward. Work within 2018-19 to design this concept will now be taken forward in 2019-20 and beyond to realise these aspirations.

In the longer term AFBI envisage its efforts through both the QUB and CAFRE developments to be complementary and enhance our already significant impact on the NI agri-food industry, environment and wider society.

Strategic Outcome 2 - Customer & Partners

AFBI will further enhance its status as a trusted partner and provider of choice in relation to science supporting the agri food and marine sectors

Analytical & Diagnostic Work- (KPI 8, 9 & 10)

Delivering to DAERA and all of our customers is a key priority for AFBI. During 2018-19 AFBI delivered almost 830k analytical and diagnostic tests to DAERA and other customers with 99.4% of these being delivered within agreed timescales and quality standards. The main areas of this included animal health, plant health, environmental protection and aquatics.

The analytical work undertaken by AFBI also supports NI agri-food trade by ensuring that our animals are free from specified diseases and food products from these are wholesome to eat. The work underpins a significant amount of trade outside the NI boundaries, amounting to several billion pounds per annum. Much of the analytical work undertaken by AFBI is accredited to the ISO17025 laboratory quality management standard, as is required by the EU food and feed controls legislation as well as customer and/or contractual requirements. During

2018-19, AFBI successfully transitioned to the latest accreditation standard, ISO17025:2017.

Units within AFBI are designated as National Reference Laboratories, including analytical work on banned veterinary medicines, marine biotoxins, salmonella, and brucellosis. Notable impacts this year in terms of animal disease analytical work include detection and prevention of incursion of important diseases including Maedi visna and bluetongue virus. Our Bovine Spongiform Encephalopathy (BSE) testing was audited as part of a UK wide trade visit by representatives from China. As a region, Northern Ireland currently benefits from BSE negligible risk status which is underpinned by the robust testing programme delivered by AFBI. The visit by Chinese officials directly contributed to the decision to open markets for NI beef which are valuable to NI industry.

Ongoing passive disease surveillance by Veterinary Science Division (VSD) Stormont and Omagh provides a monitoring system for common endemic disease threats as well as frontline detection of important epizootic diseases and emerging diseases. The work undertaken includes post-mortem examinations of food producing species and an extensive range of clinical pathology tests. VSD produce a number of reports throughout the year, aimed at informing the farming community of common disease threats, as well as quarterly summary reports of surveillance in the veterinary press and a yearly All-Island Animal Disease Surveillance Report, in conjunction with colleagues from Department of Agriculture, Food & the Marine (DAFM) laboratories.

In terms of food safety, AFBI's chemical residue screening programmes continue to protect our food and the integrity of the food chain. One example of importance of the work in this area was the detection of lipophilic marine biotoxins in oyster and mussel samples during summer 2018. These toxins are produced by phytoplankton, typically during the summer months when sea temperatures are elevated. The elevated levels were reported quickly to the Food Standards Agency (FSA), who in turn required the temporary closure of the shellfish beds affected, thereby ensuring product did not enter the foodchain. Following ongoing monitoring by AFBI the closures were lifted later in the summer once levels of the biotoxins had fallen below action levels.

AFBI's entomologists also played an important role in understanding the risk of bluetongue infection and its potential spread, as well as ongoing work on tree health especially ash dieback.

AFBI's inland fisheries team also assisted DAERA's analysis and migration effort to protect rivers during the dry period in 2018. These efforts minimised the impact of the dry period and sustained aquatic life in our local rivers and streams under challenging circumstances.

Research & Development - (KPI 7, 12 & 13)

AFBI's key measure of impact and research & development delivery are reflected in the number of peer reviewed papers produced, especially in high impact journals, the number of technical reports, press releases, events and the volume of industries it engages with and the number of new collaborative contracts secured.

2018-19 was another successful year. AFBI produced 118 peer reviewed papers with 60 of them being published in high impact journals which represents an increase from previous years. During the year AFBI also realised 74 new collaborative contracts with national and international organisations. These contracts came right across the breadth of work that AFBI carries out. A small selection of these are highlighted below.

As a follow up to the highly successful EAA Soil Sampling and Analysis Scheme undertaken in 2017-18, AFBI's Environmental Team conducted wide scale analysis of the Colebrook and Strule catchment. This represented the first major initiative of its kind in the west of Northern Ireland and further enhanced AFBI's understanding and ability to provide robust scientific evidence for future policy decisions.

AFBI have hosted visits from a number of key collaborators including delegations from Shanghai Academy of Agricultural Sciences, the New Zealand Ministry for Primary Industries and Agri-Tech, Department of International Trade. During the year AFBI's Veterinary Science Division (VSD) was a nominated finalist in the Irish Laboratory of the Year awards for Veterinary Laboratory of the Year and Food Laboratory of the Year.

Other notable projects which commenced in 2018-19 included Super G and FibNut. The overall objective of the Super G project is to co-develop sustainable permanent grassland systems and policies with farmers and policy makers that will be effective in optimising productivity, whilst supporting biodiversity and

delivering a number of other ecosystem services. AFBI's role will be to assist with the data gathering from farmers and policy makers, undertake research on new innovative technologies for the better management of permanent grasslands, and to lead the development of new decision support tools for managing permanent grasslands in the future.

FibNut is a collaborative project with Scotland's Rural College (SRUC), Centre for Innovation and Excellence in Livestock (CIEL) and funded by the Agriculture and Horticulture Development Board (ADHB) which will revisit and redesign the nutritional requirements and models of beef nutrition.

AFBI's Fisheries and Aquatic Ecosystems team had another highly successful year securing funding, as lead partner for a further Interreg project The Marine Protected Area Management and Monitoring (MarPAMM) project will design management plans for key area of conservation across Ireland and Scotland.

A number of important collaborations with Northern Ireland Water also developed during 2018-19. AFBI are working with NI Water on a number of Interreg funded projects. The flagship project of this collaboration is the 'Living with Water' project. The project focuses on modelling the impact of NI Water's activities on aquatic ecosystems as well as providing evidence and advice on future infrastructure plans. This project has huge societal impact and AFBI looks forward to 2019-20 to develop its relationship with NI Water further.

AFBI's Grassland and Plant Science Branch were commissioned by DAERA to continue their excellent work on plant health. Projects on identifying and controlling pest and disease resilience in ash trees, and on risk based sampling of plant commodities were both funded.

Finally, during 2018-19 a major programme of work on ammonia was commissioned by DAERA. This work involves scientists across Agri-Environment Branch and Agriculture Branch. Initial work has focussed on establishing increased monitors of ammonia levels in Northern Ireland and especially at farm scale to identify 'cause and effect' and also reviewing and updating activity data in NI to feed into the various models. On the livestock side the main areas of work have been establishing up to date data with regards to nitrogen excretion from dairy, beef, pigs and poultry as well as advancing work to determine emission

factors for key Northern Ireland practices, such as slatted floored housing systems.

Emergency Response (KPI 6) – purpose and impact

AFBI has an important role in providing an emergency response capability and capacity for government and industry, primarily in the areas of animal health (particularly epizootic diseases), plant health and food safety issues. Contingency plans are in place and regularly exercised. During 2018-19, AFBI took part in three significant joint exercises with DAERA and DEFRA. Exercise Blackthorn was a UK-wide exercise for a significant foot and mouth outbreak affecting both mainland GB and Northern Ireland. Staff from AFBI joined with DAERA, DEFRA, the Pirbright Institute and APHA colleagues to map out responses to a rapidly evolving disease scenario. Staff from AFBI attended an exercise on African swine fever at the Pirbright Institute, mapping out UK responses to a disease outbreak scenario. A further exercise Anser focussed on avian influenza and brought together AFBI, DAERA and the NI poultry industry in a desktop scenario involving H5N1 in wild birds which progressed to commercial poultry premises. This looked particularly at industry response to the outbreak and options for dealing with disease in the commercial houses, with AFBI staff providing scientific input and advice to the scenario.

During 2018-19, AFBI staff were involved with epizootic emergency responses to the detections of bluetongue virus in an imported cow and avian avulavirus-1 (AAvV-1) in pigeons. With the spread of African swine fever virus in Europe, there is heightened awareness of this devastating disease and the major impact it could have on the NI pig industry. AFBI provide DAERA with testing capability for African swine fever and during 2018-19 have begun testing of imported EU pigs on behalf of DAERA.

Strategic Outcome 3 - People & Infrastructure

AFBI will invest in and develop its people and infrastructure to provide innovative, efficient and effective service delivery

People (KPI 15,16 & 17)

The quality, dedication and expertise of staff has been pivotal to AFBI's success to date and underpin our future success. Promoting a culture of excellence, commitment, and responsibility within a supportive and stimulating environment is fundamental to delivering AFBI's objectives. AFBI's continued success is entirely dependent on attracting and retaining the best scientists and supporting staff in an increasingly competitive environment.

I am pleased to report that good progress was made during 2018-19 on developing our high level organisational structure to meet current challenges and the objectives set down in our Corporate Plan. This has included a reorganisation of the finance and research support functions, which will strengthen the support offering throughout AFBI going forward.

AFBI's commitment to equality of opportunity and to creating and sustaining a working environment where everyone is treated with respect and dignity, free from any form of inappropriate behaviour, and one in which all employees can give of their best, is embodied in the Dignity at Work policy.

In line with Section 75 equality legislation AFBI remains fully committed to ensuring that staff and customers are treated fairly and with dignity and respect in the delivery of policy and services as outlined in our commitments in our Equality Scheme. This year the Institute consulted on the development of a new Disability Action plan, which sets out the actions we propose to take for the next five years. During the year the Institute has carried out extensive training for line managers to increase knowledge and skills to effectively manage staff in this regard and ensured all staff members completed Equality and Diversity training.

AFBI was notably successful in achieving the objective of less than an average of 7.5 working days lost per staff member through sickness. This reflects favourably on the significant work led by Human Resources and delivered by line managers to address this issue. It is worth noting that AFBI have outperformed DAERA and the wider NICS against this measure.

Financial Performance (KPI 14, 21 & 22)

In 2018-19 AFBI again has delivered over £20m of non Grant-in-Aid income. Despite a reduction in royalty income and the transfer of income through machinery of government changes, AFBI's external income, excluding these

reductions, has remained consistent from that achieved in 2017-18. AFBI does however recognise that there will be significant challenges in sustaining these income levels going forward.

During 2018-19, AFBI secured over 74 new contracts from a diverse range of customers in public and commercial sectors.

Externally funded projects, such as these, are synergistic and complementary to our DAERA funded Evidence and Innovation projects and add substantially to the overall scientific capacity, capability and international quality of the scientific work that we undertake.

Development of the estate infrastructure (KPI 23)

Progress has been made during the year on the development of the AFBI estate. DAERA and AFBI are continuing to work together on development of an AFBI Estate Strategy taking into account the current state of the estate and maintenance issues, the AFBI scientific work programme, the recommendations of the AFBI Review and the DAERA Science Transformation Programme.

Work on the AFBI Stormont VSD Animal Health Sciences Building has continued to progress during 2018-19. The expected delivery date for the project is 2023 with the new build housing scientific laboratories to Containment Level 2 with associated administrative functions, along with the provision of new animal post-mortem and incineration facilities. This project continues to remain the highest priority project within the overall AFBI Estate Strategy.

The farmed estate represents a significant portion of the AFBI estate with the most significant agricultural platform being at the AFBI Hillsborough site. When considering the farmed estate, DAERA is taking a joint approach to the AFBI and CAFRE farmed facilities in order to ensure there is no duplication of investment in the Department's farming platforms. A proposed Masterplan for the AFBI-Hillsborough Farmed Estate has been developed by AFBI and the Construction and Procurement Division (CPD) for consideration by DAERA. Within this, the highest priority farmed estate project currently is the development of new beef cattle facilities for which the business case is due for submission by DAERA to the Department of Finance (DoF) in 2019-20.

Future plans for AFBI-Loughgall were further developed by AFBI during 2018-19 for consideration by DAERA as part of the overall Estate Strategy, the aim being to

rationalise the overall footprint occupied by AFBI in order to ensure the most efficient and effective use of the site. However, in order to facilitate future plans for the site, modern fit-for-purpose accommodation needs to be developed.

During 2018-19 capital projects included the upgrade of the IT infrastructure at AFBI-Hillsborough, replacement of chillers in the VSD Stormont Lamont Building and re-roofing of some of the farm buildings at AFBI Hillsborough. Such capital projects are necessary in order to maintain business across the estate.

A draft outline business case for replacement of the AFBI Research Vessel was approved by the (DoF). Expert procurement advice is being sought as this project moves into the procurement phase. This is a key platform to support AFBI's marine sciences into the future.

Development of key systems infrastructure (KPI 18 &19)

Finance & Business Systems

Progress was made during the year in moving forward with this key project which is designed to ensure that AFBI's business and staff are better supported by fit for purpose finance and business systems. During the year AFBI engaged Department of Finance's Business Consultancy Services (BCS) to define the business requirements for a new business information system. Following discussion with CPD, AFBI has used the report provided by BCS in an initial market engagement with potential suppliers. This has led to a period of interaction with potential suppliers, which took place during October and November 2018 and has clarified the options to be considered in the Business Case which is now in progress and was submitted to DAERA in June 2019.

Laboratory Information Management System (LIMS)

During 2018-19 DAERA decided that the LIMS project would be taken forward as part of the wider DAERA Science Transformation Programme with the aim of having a single LIMS across AFBI and relevant DAERA laboratory areas. DAERA is continuing to work on the business case and outline specification for a new DAERA-AFBI LIMS which will replace a number of outdated systems in NIEA-Water Management Unit and across AFBI. AFBI is represented on the Project Board.

Research Support

During 2018-19, AFBI made important changes to its research support and business development functions. The new structure will give greater focus to research support and business development activity, strengthen project governance and ensure that business processes are improved. This will involve the development of support systems to project leaders at all stages of the project cycle. A particular aspect will be identification of funding opportunities, especially those where AFBI is currently under represented, and provision of support to scientists to maximise these opportunities.

DAERA Science Transformation Programme and AFBI Review

All UK public bodies are subject to periodic review to ensure they remain efficient, effective and accountable. DAERA took forward a review of AFBI based on the Cabinet Office's Tailored Review approach. The review involved significant input from AFBI and its stakeholders, with the Review Team reporting in September 2018. The results of this confirmed the continuing need for the work undertaken by AFBI and high levels of satisfaction amongst stakeholders for the science provided by AFBI.

The DAERA Review of AFBI is one workstream within an overall DAERA Science Transformation Programme. The programme is an extensive review and change programme which it is anticipated will take a number of years to complete. Given AFBI's key role in science provision to the Department, we are working with the Department on all aspects of the transformation programme and AFBI staff will input into the process.

In conclusion, the Institute has delivered a very high standard of statutory and diagnostic testing and research and development programmes during 2018-19 whilst embarking on the first year of a change programme under our 2018-22 Corporate Plan. This success could not be achieved without the commitment of our workforce and I wish to take this opportunity to thank all our staff for their continued hard work, loyalty and commitment to AFBI during the year.



Dr S McDowell, BVM&S, MSc, DLSHTM, PhD, MRCVS
Chief Executive and Accounting Officer

Date: 17 December 2019

3. Performance Report

3.1 Introduction

The Agri-Food & Biosciences Institute (AFBI) presents its Annual Report and Accounts for the financial year ended 31 March 2019. The accounts have been prepared under the accounts direction given by DAERA with the approval of the Department of Finance (DoF) and in accordance with the Agriculture (Northern Ireland) Order 2004.

The following overview section provides insight into the work of AFBI, setting out the organisation's Vision, Mission and Strategic Outcomes. It then sets out the key risks facing the Institute and an analysis of AFBI's performance against the KPI's for 2018-19.

3.2 Overview

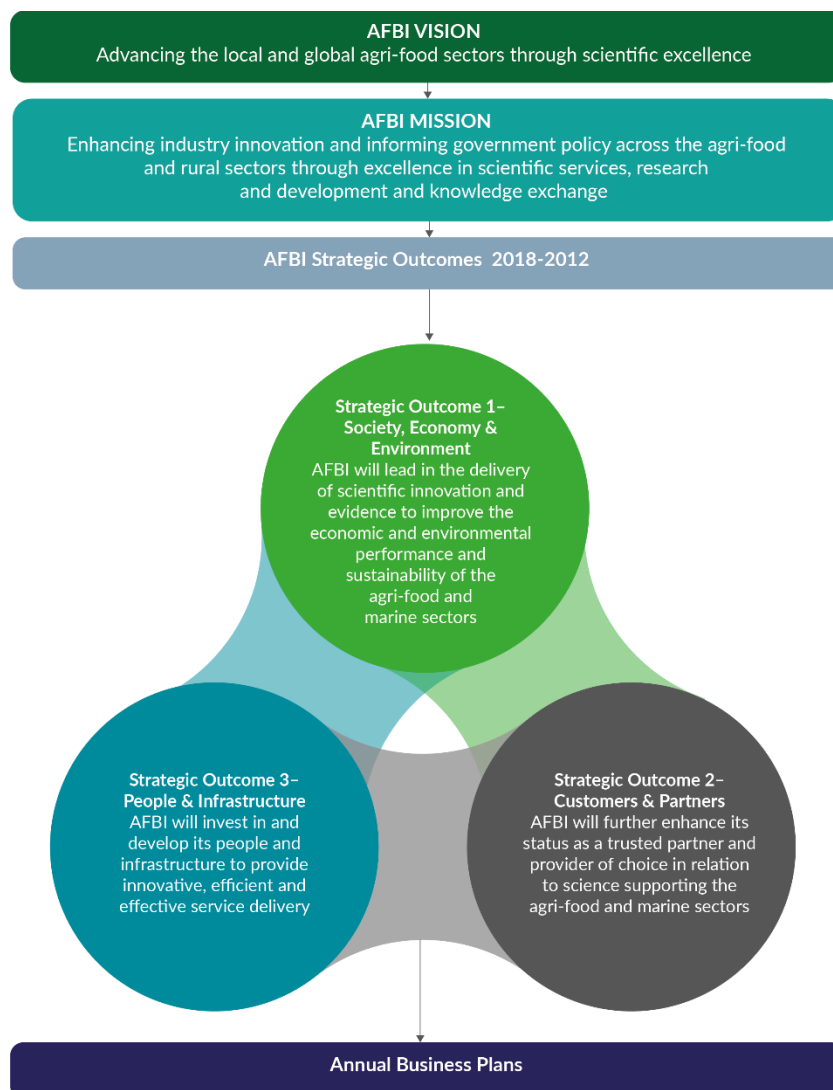
AFBI is Northern Ireland's largest provider of agri-food science. It provides vital and unrivalled support to an industry which is a key economic driver within Northern Ireland. As a Non-Departmental Public Body (NDPB) established under the Agriculture (Northern Ireland) Order 2004, AFBI contributes to the achievement of the Northern Ireland Executive's strategic goals by successfully delivering an assigned programme of statutory, diagnostic and surveillance testing, research and development and emergency response for DAERA.

AFBI science underpins DAERA policy by providing specialist advice across a wide range of agri-food and biosciences disciplines. Other government departments and agencies also depend on AFBI's scientific services to fulfil their responsibilities. Furthermore, AFBI also delivers a portfolio of scientific work to a wide range of local, national and international funders and customers. To ensure impact, AFBI collaborates closely with CAFRE and industry levy bodies in transferring the benefits of science and technology to the local agri-food industry.

In order to best serve Northern Ireland, AFBI is heavily engaged with the international research community in providing scientific solutions to common global challenges such as disease control, climate change and food security. AFBI is involved in many international networks of research and knowledge exchange. Indeed our success as a leading international agri-food science provider has been built on the globally and locally recognised expertise of AFBI staff leading on several key areas of excellent translational research and diagnostics for the

industry, and in providing a scientific evidence base for government policy development.

AFBI's strategic outcomes are aimed at ensuring the effective and efficient delivery of services to existing customers and continuing the implementation of the optimal organisational structures, systems and processes, to ensure that AFBI is ideally positioned to address the anticipated challenges over coming years. The provision of world class and locally relevant, science to all our customers will continue to depend on development of leading edge knowledge, expertise, skills and technologies and maintenance of AFBI's position as an influential, internationally relevant, centre for innovation in agri-food and biosciences. AFBI's Vision, Mission and Strategic Outcomes are set out below and are underpinned by AFBI's values and associated behaviours.



AFBI has an important role in assisting DAERA to achieve its Vision of *'A living, working, active landscape, valued by everyone.'*

Funding

In line with other NDPBs, AFBI's funding allocations in respect of resource, capital and depreciation from DAERA are determined through the Northern Ireland Executive's budget process and reviewed through the in-year monitoring process. AFBI supplements its departmental funding with receipts generated in the course of its operating activities and these receipts form part of the Institute's budget.

Relationship with DAERA

AFBI's main point of contact to DAERA is via AFBI Sponsor Branch (ASB). Regular meetings are held with Sponsor Branch where matters relating to corporate governance, performance measurement, budgets, financing and accountability matters are discussed. A wider delivery partner relationship, underpinned by a memorandum of understanding, also exists between AFBI's science delivery branches and the policy branches in DAERA who specify DAERA's required work programme.

AFBI's responses to DAERA quarterly monitoring rounds and comprehensive spending reviews are all routed through ASB.

Relationships with other government departments and agencies

During 2018-19 AFBI had a service level agreement (SLA) to provide services to the Food Standards Agency Northern Ireland (FSA NI). It also carried out a significant body of work for the Centre for Environment, Fisheries & Aquaculture Science (CEFAS), Ireland's Department of Agriculture, Food and the Marine (DAFM) and the UK Department for Environment, Food and Rural Affairs (DEFRA) and its agencies and NDPBs.

Performance in 2018-19

Non Grant-In-Aid Income

As an NDPB, AFBI has the opportunity to compete for external income to supplement Grant-In-Aid (GIA). Since its establishment, AFBI has vigorously pursued all relevant opportunities to grow external income.

In terms of the trend illustrated, AFBI has grown external income from £6.2m in 2006-07 to over £20m in 2018-19. This has been achieved through significant success in securing INTERREG, Horizon 2020 and other competitive funding projects. This is testament to the sterling efforts of AFBI staff.

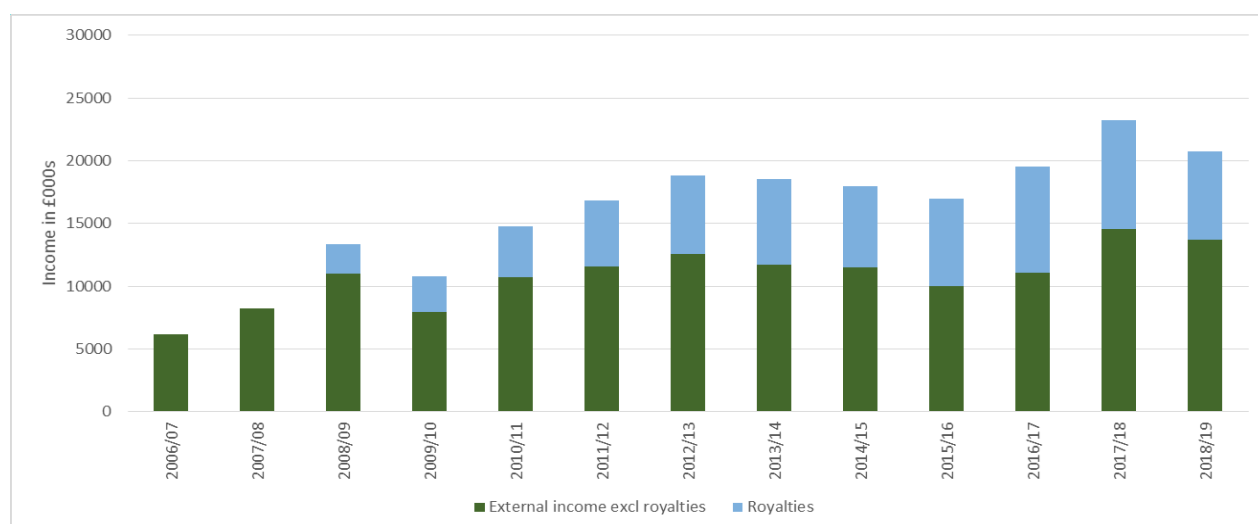


Figure 2 – Non Grant-In-Aid Revenue and Royalties

Research & Development (R&D) funding from the European Union (EU) through the Horizon 2020 (H2020) programme and other EU sources such as INTERREG is very important to AFBI's ongoing operations. In 2018-19, 1 INTERREG project commenced representing €6m of income and capital funding over 5 years and 3 Horizon 2020 applications were approved for funding totalling approximately €1.4m. The DAERA-funded Northern Ireland Contact Point for agri-food will continue to assist AFBI, and other local research providers and industry in developing Horizon 2020 applications. AFBI's EU-funded R&D will also support DAERA's commitments to the Northern Ireland Executive for drawdown of European funding.

The success of this work can be seen from the £3.029m income received from EU Grants in 2018-19 (2017-18: £4.418m) as shown in Note 4 to the Accounts.

While the UK government have provided guarantees on funding for existing EU funded projects, the exit of the UK from the European Union means that there is uncertainty on future access to these important funding streams.

Royalties

AFBI receives royalty income from the sale of vaccine products in various countries worldwide. In respect to these, QUB provide an advisory and facilitation role in relation to the protection of AFBI's Intellectual Property Rights (IPR). The income received from such rights over the last number of years averages approximately £7m per annum. The amount received depends on the volume of vaccines sold and is also impacted by exchange rate fluctuations. The products sold are protected by patents which have been registered in certain countries (the patented territories) but not registered in others where it is also sold (unpatented territories). Royalty income of £7 million and £2.7 million of associated costs have been recognised in the 2018/19 Accounts as AFBI believes the amounts included to be due and payable.

The royalty income AFBI receives in respect of unpatented territories is currently subject to a discussion regarding the interpretation of the licence agreement. No royalty payments have been received by AFBI since June 2018. For this reason the issue has been further outlined in the Governance Statement and also in the Contingent Liability Note 19 to the Accounts.

Key risks to the achievement of AFBI's business objectives

AFBI has a well embedded risk management and internal control framework with direct involvement of the Executive Management Team through the Risk Review Group. AFBI's Risk Management Strategy and Operational Procedures clearly set out AFBI's Risk Appetite and the roles, responsibilities and procedures for Risk Management within AFBI.

Risk Management is a standing agenda item for AFBI Board and Audit & Risk Assurance Committee (ARAC) meetings and AFBI's Risk Register is reviewed by both on a quarterly basis. AFBI's internal and external auditors attend ARAC meetings and therefore provide a further layer of external scrutiny and challenge.

During 2018-19, there was one new risk added to AFBI's Corporate Risk Register (CRR).

Risk added in year

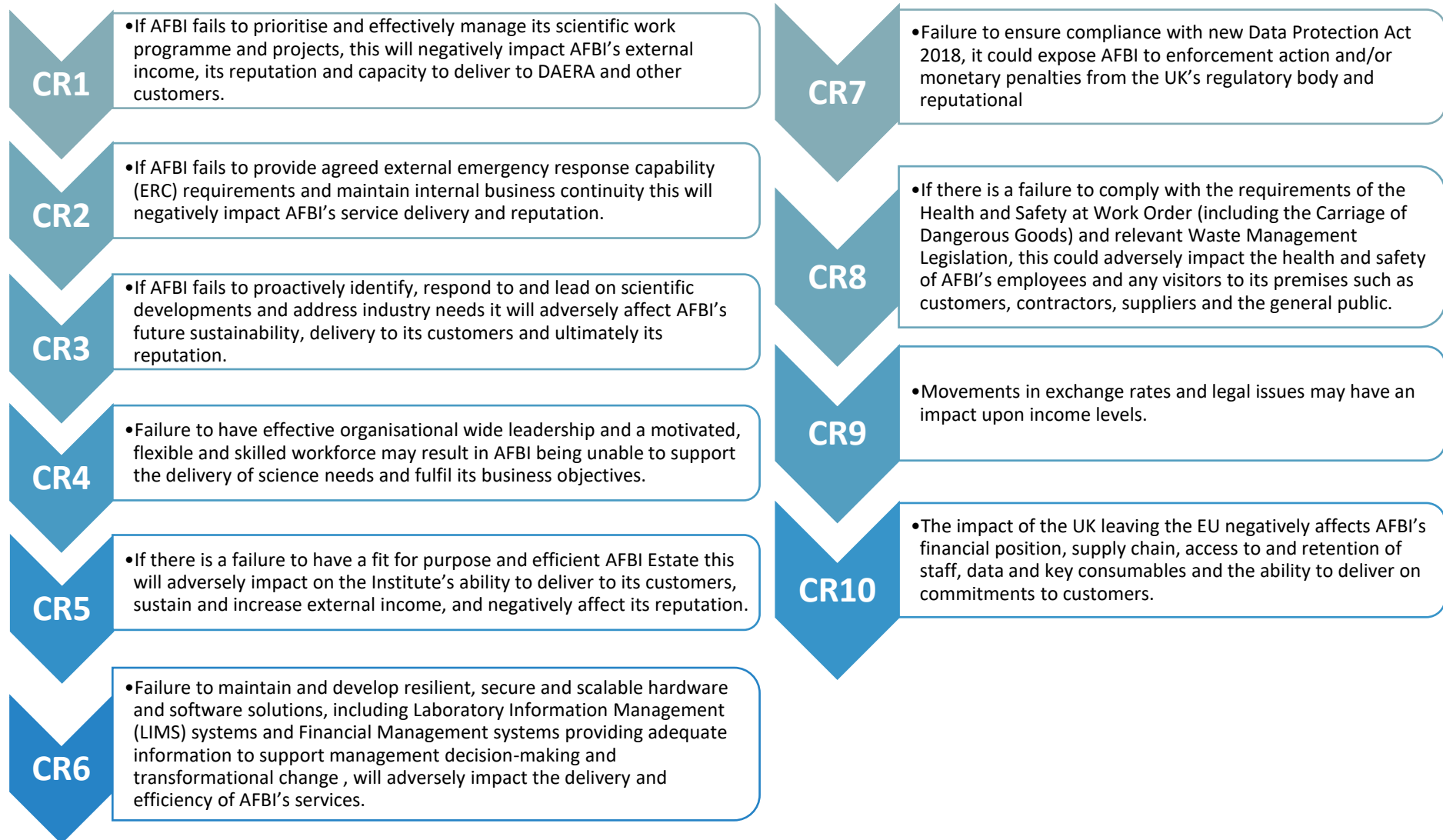
Given the significance of the change in data protection legislation, the risk surrounding the uncertainty from the UK Exit from the European Union was added in January 2019.

Integration between performance and risk management

Managing risks to the achievement of AFBI objectives is intrinsically linked to the business planning and performance management process. AFBI has therefore continued to work to ensure greater integration of AFBI's risk management processes and business planning to ensure that when managers and staff are setting objectives they are simultaneously identifying the key risks and the impact of uncertainty to the achievement of those objectives.

In terms of the key risks to the achievement of AFBI's objectives, 10 risks are currently identified on the Corporate Risk Register. These are summarised overleaf and in addition to the existing controls in place to manage these risks, a number of additional actions have been put in place by AFBI to manage the risks down to the specified target level and progress is subject to oversight by the ARAC and Board.

Figure 3 - AFBI CORPORATE RISKS



Efficiency

In response to a number of recommendations from the Public Accounts Committee (PAC) and Northern Ireland Audit Office (NIAO) reports, AFBI's focus on efficiency is being embedded as 'business as usual' within AFBI. AFBI have established ongoing arrangements to monitor and benchmark scientific testing and corporate costs including the provision of an annual Unit Costing and Benchmarking report to DAERA, membership of Chartered Institute of Public Finance Accountants (CIPFA) benchmarking groups and internal arrangements to benchmark costs longitudinally. These have been underpinned the development of an Efficiency Plan for AFBI in 2018-19.

Future Funding

The outcome of each Comprehensive Spending Review determines the amount of funding available to AFBI in the future. In view of the continuing severe pressures on public finances, further pressure on government funding is anticipated. AFBI continues to face price increases and is actively seeking to improve its overall efficiency to mitigate against these cost pressures and reduce its cost base.

AFBI is committed to widening its funding base and increasing the level of non GIA revenue generated year on year. Particular focus is being placed on increasing collaborations with the local agri-food sector and on winning funding through international collaborations, particularly in the EU, where the Horizon 2020 Programme will fund European research and innovation between 2014 and 2020.

However, the UK exit from the EU, following the outcome of the UK referendum may potentially have a direct impact on access to EU collaborations and funding going forward. This risk to sustainability is recognised within AFBI's Corporate Risk Register. The impact of this will only become clear when UK national government policy on potential continued access to the EU science programmes becomes apparent.

3.3 Performance Analysis

AFBI recognises that good business planning is at the heart of strong governance, effective management and financial viability and requires understanding and ownership of all staff across AFBI. In 2018-19, AFBI updated guidance on business planning to ensure that the AFBI goals are effectively cascaded down through the organisation and are translated into objectives at a divisional, branch and individual level.

This was also aimed at assisting in the development of a strong staff performance management culture within AFBI, where everyone understands where they fit in helping to achieve AFBI's objectives to ensure that there are clearer links from the Corporate Plan and Objectives through the divisional and branch plans to individual performance plans.

It is a structured and cyclical process and throughout takes cognisance of AFBI's Vision, Mission and Values as illustrated in Figure 4 below.



Figure 4 - AFBI Business Planning and Performance Management Process

AFBI recognises that good plans need in turn to be supported by effective monitoring and reporting of performance at each level of the organisation and feed into the Personal Performance Agreements (PPAs) for all AFBI Staff.



Figure 5 – AFBI Strategic Planning

Performance – 2018-19 Key Performance Indicators

To measure progress towards the achievement of the corporate outcomes, AFBI developed 23 KPIs for 2018-19. Outturn performance against these were monitored and reported to the Executive Management Team (EMT), the Board and DAERA on a quarterly basis. The table below summarises AFBI's outturn performance against its 2018-19 business plan KPIs. This outturn performance has been validated by AFBI's Internal Audit providers.

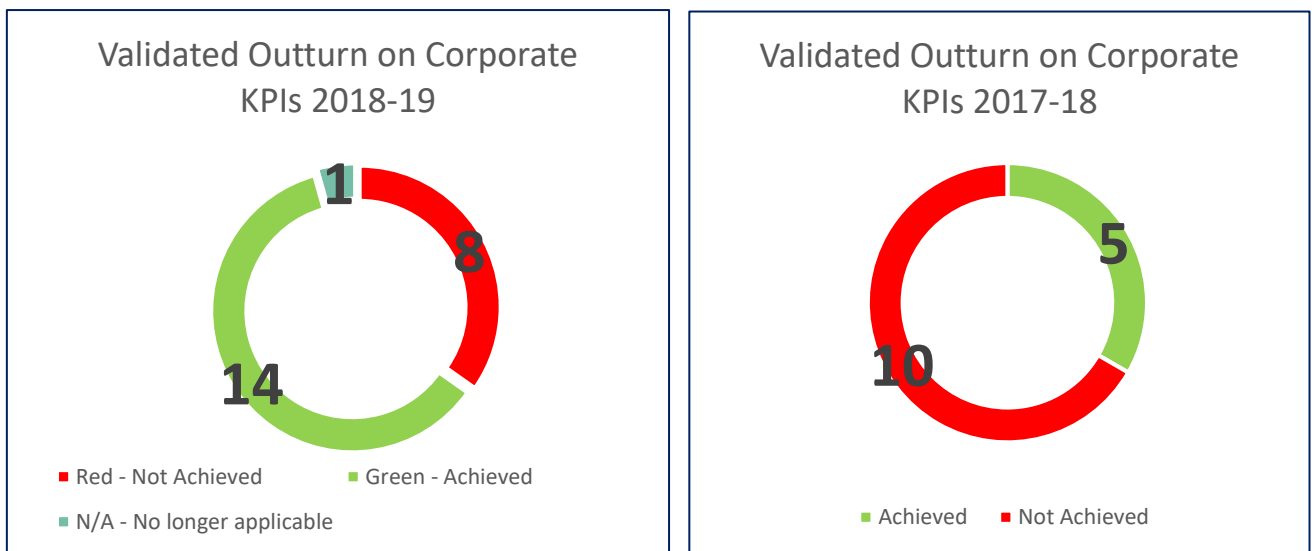
Table 1 – Summary Outturn Performance

Status	Definition	2018-19	%	2017-18	%
Red	KPI's where commitments are not achieved	8	35	10	67
Green	Achieved	14	61	5	33
N/A	No longer Applicable	1	4	-	-
Total		23		15	

While 8 of the Corporate KPI's were not achieved in 2018-19, this represents an improvement on outturn performance in comparison with the previous year. In terms of those achieved this includes the significant achievement of meeting the staff absence target. This reflects favourably on the significant work led by Human Resources and delivered by line managers to address this issue. It is worth noting that AFBI have outperformed DAERA and the wider NICS against this measure.

It should be further noted that a number of other KPIs which are deemed to have not been achieved, as they did not meet the defined deadline specified within the KPI, were achieved by the year end. For example KPI 21 Annual Unit Costing and Corporate benchmarking reports provided to DAERA by August 2018. While the report was not delivered by August this was delivered in year in December 2018.

Figure 6 – Comparison of KPI Outturn 2018-19 and 2017-18



The following pages set out a more detailed analysis of performance against each of the KPIs.

Analysis of Performance

Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
<p>KPI 1</p> <p>AFBI will publish a report on the impact of AFBI science and the benefits thereof, whether these be monetary or non-monetary.</p>	Red	<p>Commitment not Achieved</p> <p>This KPI anticipated that AFBI would commission an external provider to undertake an economic review of AFBI science and produce a report on the monetary and non-monetary benefits. Prior to commissioning, an internal review of research impact assessment approaches was undertaken (and presented to the Science Strategy Committee in Dec 2018). This review advised that a one off report was likely to be costly and instead advised a longer term strategy of embedding research impact assessment within AFBI processes. EMT agreed to this recommendation which will be taken forward as part of proposed research support office.</p>	<p>KPI 2</p> <p>Establish operational model and launch AFBI science programmes to include Industry Advisory Group by March 2019.</p>	Red	<p>Commitment not Achieved</p> <p>Following the change of CEO, programme operational models have been considered as part of a wider organisational design review, which was undertaken during the latter part of the year. A draft organisational design which aligns divisions and revised science programmes was presented to the AFBI Board in March 2019.</p> <p>With regard to advisory groups, a structure was agreed and during Jan/Feb 2019 individuals representing stakeholders were identified. These individuals will be invited to partake on the panels and, where applicable, the overarching steering group during 2019-20.</p>

Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
KPI 3 In seeking to establish a potential strategic alliance with QUB, the optimum governance arrangements and KPI's to underpin an alliance will be identified.	Green	Achieved A review of potential governance arrangements has been completed by an external provider and a number of KPIs to underpin the alliance identified.	KPI 4 Establish an AFBI/CAFRE Strategic overview group to ensure greater planned approach to organisational collaboration.	Green	Achieved An AFBI/CAFRE Strategic Overview Group comprising of Dr Elizabeth Magowan (AFBI), Mr Martin McKendry (CAFRE) and Dr Alistair Carson (DAERA) was established and met a number of times during the year to discuss opportunities to improve collaboration. A draft Terms of Reference has been produced and work is on-going to finalise.
KPI 5 Establish baseline measures to enable assessment of the adoption of innovation and technology by 31 March 2019.	Red	Commitment not Achieved This KPI is linked with KPI 2. As noted above the review of methods to measure science impact changed the approach to impact analysis and the new approach will be taken forward as part of revised research support arrangements. However, in order to partially achieve this, the baseline measures used by CAFRE to measure impact were sought. However, these were not attained in year.	KPI 6 At least 95% of tests delivered to all customers within agreed timescales and quality standards.	Green	Achieved AFBI delivered 99.4% of tests (824,576 tests out of a total of 829,165 tests) to all customers within agreed timescales and quality standards

<p>KPI 7</p> <p>At least 90% of research projects completed for all customers on time and within agreed budgets.</p>	<p>Red</p>	<p>Commitment not Achieved</p> <p>While 93% of projects were delivered on time, in total 28 out of 60 (47%) of Research Projects were completed on time and within agreed budget for all customers.</p>	<p>KPI 8</p> <p>Contribute to Emergency Response Capability (ERC) requirements specification from DAERA. Contingency plans reviewed, updated and tested in-year.</p>	<p>Green</p>	<p>Achieved</p> <p>Contingency plan for epizootics has been reviewed and revised. General communications, reporting, Foot and Mouth Disease Virus (FMDV) response element tested in Exercise Blackthorn (April 2018). Avian Influenza Virus (AIV) plan exercised along with DAERA and industry at Exercise ANSER (November 2018). AFBI Programme for Epizootics and Contingency Plan for Epizootic Disease (CPED) planned meetings reviewed emergency response requirements of DAERA for each of the major epizootic diseases. December 2018 meeting reviewed AIV procedures. Biotransport plans were reviewed by AFBI-DAERA CPED group. Plans for vet drug, chemical contaminants, marine biotoxins were reviewed and exercised (desktop) during the 4th Quarter. In addition, AFBI has contributed to DAERA's response to Freshwater and Marine fish kill plans by response to a drought order and a desktop exercise respectively. Both the Plant and Forest Health and the Bee Health plans were reviewed with DAERA and tested as required.</p>
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Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
KPI 9 Satisfactory outcomes from all international audits carried out in 2018-19 to facilitate new market opportunities.	Green	Achieved Chinese trade audit/inspection - Ministry of Agriculture (MOA) and General Administration for Quality Supervision, Inspection and Quarantine (AQSIQ). 15-26 th April 2018. Visit to VSD on Monday 23 rd April. EU Exit questionnaire completed in August 2018 for trade with Mexico. AFBI input into UK return for official laboratory for epizootic disease testing. (Paper exercise only).	KPI 10 Participate in AHWNI and AHI technical working and implementation groups on endemic diseases.	Green	Achieved Disease Surveillance and Investigation Branch (DSIB) staff are members of and attended meetings of 4 AHWNI and AHI Working and Technical Implementation Groups on the control of the following endemic cattle diseases: <ul style="list-style-type: none"> • Bovine Viral Diarrhoea (BVD), • Infectious Bovine Rhinotracheitis (IBR), and • Johnes disease.
KPI 11 Enhance the profile of AFBI by publishing and commencing implementation of a marketing and communications strategy by 31 January 2019.	Green	Achieved The 2019 plan was in place by 31 st January 2019. This includes press, social media, events and publications.	KPI 12 Maintain AFBI's international standing by publishing a minimum of 100 peer reviewed scientific papers.	Green	Achieved 118 peer review papers published.

Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
KPI 13 Increase the number of AFBI collaborative contracts with national and international organisations.	Green	Achieved AFBI realised 74 collaborative contracts with national and international organisations. (Total of 38 in 2017-18).	KPI 14 Increase the rolling average 4 year non-GIA income (excluding royalties).	Green	Achieved Based on the audited 2018-19 non GIA Income figures (excluding royalty income) there will be an increase in the rolling 4 year average from £11.7m to £12.1m.
KPI 15 Complete actions within the action plan resulting from staff survey and focus groups.	Red	Commitment not Achieved Two actions were agreed initially, to hold CEO site roadshows and review/implement an all staff team brief (or similar). First CEO Roadshows held in Loughgall on 20 March. And dates have been arranged for further site visits. The staff team brief is being reviewed in 2019-20.	KPI 16 Achieve combined industrial and non-industrial absenteeism of 7.5 working days or less per Whole Time Equivalent (WTE).	Green	Achieved As at 31 March 2019 we attained 7.4 days per FTE.

Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
KPI 17 Achieve 95% completion of performance appraisals by June 2018.	Red	Commitment not Achieved AFBI achieved 95% completion of performance appraisals by January 2019.	KPI 18 Business Case for new business management system submitted and specification developed by March 2019.	Red	Commitment not Achieved Business Consultancy Services completed an exercise to define the business requirements for a new business information system, with the report accepted by EMT in September 2018. Following discussion with CPD, AFBI used the report provided by BCS in an initial market engagement with potential suppliers. This has led to a period of interaction with potential suppliers, which took place during October and November 2018. This clarified the options to be considered in the Business Case which is in progress for submission for the requisite approvals.

Business Plan Target	Outcome	Analysis of Performance	Business Plan Target	Outcome	Analysis of Performance
<p>KPI 19</p> <p>Business Case for new LIMS submitted for approval and specification agreed by March 2019.</p>	N/A	<p>KPI - Being taken on by DAERA</p> <p>Subsequent to the Business Plan being agreed, DAERA decided that the LIMS project would be taken forward as part of the wider DAERA Science Transformation Programme with the aim of having a single LIMS across AFBI and relevant DAERA laboratory areas.</p> <p>Given this change in approach DAERA have indicated that they will now be responsible for taking this forward from this point with AFBI input.</p> <p>The DAERA Project Manager was appointed. Remit to include delivery of business case during 2018-19. DAERA Business Analyst has been appointed in March 2019.</p>	<p>KPI 20</p> <p>Produce 3 year plan by March 2019 to enable the further development of appropriate data storage and processing infrastructure.</p>	Green	<p>Achieved</p> <p>The three year plan has been developed subject to approval of EMT.</p>

Business Plan Target	Outcome	Analysis of Performance
<p>KPI 21</p> <p>Annual Unit Costing and Corporate benchmarking reports provided to DAERA by August 2018.</p>	<p>Red</p>	<p>Commitment not Achieved</p> <p>Interim report provided to DAERA in August 2018. The final report has now been completed and submitted to DAERA.</p>

Business Plan Target	Outcome	Analysis of Performance
<p>KPI 22</p> <p>Develop and implement an AFBI efficiency improvement plan by 31 March 2019.</p>	<p>Green</p>	<p>Achieved</p> <p>An Efficiency Plan has been developed informed by the Internal Audit Advisory Review. This is now being monitored by the Finance & Business Strategy Committee and EMT.</p>

Business Plan Target	Outcome	Analysis of Performance
<p>KPI 23</p> <p>In conjunction with DAERA we will:</p> <ul style="list-style-type: none"> • Progress the VSD main building project, in line with project plan milestones; • Produce Strategic Outline Case (SOC) for farm research accommodation at Hillsborough by 31 March 2019; • Produce SOC for AFBI Loughgall estate by 31 March 2019; • Submit Outline Business Case (OBC) for beef facilities for approval by 31 March 2019; and • Advance procurement process with CPD for replacement research vessel by 31 March 2019. 	<p>Green</p>	<p>Achieved</p> <p>VSD Main Building - The procurement process for the Integrated Consultant Team (ICT) for the Animal Health Sciences Building has been undertaken with a contract awarded in June 2019. During 2018-19, DAERA and AFBI have worked to clarify a number of strategic design issues including agreeing ways forward on high containment (CL3 /CL4), TSE, Post-mortem and Plant Health laboratory facilities.</p> <p>AFBI-Hillsborough Farmed Estate SOC: Final version of AFBI-Hillsborough Farmed Estate Masterplan Report received from CPD. Following this the the SOC has been drafted.</p> <p>AFBI-Loughgall SOC: An exercise was undertaken to complete a draft SOC in 2018-19.</p> <p>AFBI – CAFRE Beef Facilities Beef OBC: OBC updated and submitted to DAERA in July 2018. Subsequent meetings were held between AFBI, CAFRE and DAERA at which further amendments were requested. The OBC is now with DAERA for internal approval prior to submission to the Department of Finance for review.</p> <p>Replacement Research Vessel: Due to uncertainty on timelines due to approvals process, procurement timeline will be delayed as per original Business Case timelines.</p>

Figure 7 – Business Plan Target Outcomes 2018-19

Financial Performance for the year

AFBI's Statement of Comprehensive Net Expenditure shows a net expenditure for the year of £41,084k (2017-18: £35,715k).

Income at £20,310k in 2018-19 is down 12.5% against 2017-18. Royalty income decreased in 2018-19 by 18.5% and grants from the EU and other funders decreased by 21.6% to £4,472k in 2018-19 mainly due to the successful completion of EAA Soil Sampling and Analysis Scheme in 2017-18.

Costs were up overall by £2,666k in 2018-19 to £60,454k, an increase of 4.61%. Depreciation and amortisation costs increased by £1,236k as a result of the increase in the level of capital purchases in recent years and prior years relieving exercises. Staff costs increased by 3.1% to £27,178k in 2018-19. This was due an increase in staff numbers and pay increases.

Long-term expenditure trends

Although expenditure is expected to go up in coming years due to AFBI's lead partner role in a number of EU INTERREG funded projects, there are no expectations that the long term expenditure trend will be significantly different in the context of external income generated.

Events since the end of the financial year

There have been no significant events since the end of the financial year which would affect the results for the year or the assets and liabilities at the year end.

Corporate Social Responsibility

Social

While AFBI does not have a dedicated policy, the principles of corporate and social responsibility are embedded within its key activities for example through commitment to equality, sustainable development, environmental protection etc.

Human Rights

AFBI is committed to respecting human rights. We aim to ensure that the services we provide and the activities that we undertake have a positive impact on society. AFBI complies with Section 75 statutory equality obligations and all aspects of its equality agenda in the delivery of policy and delivery of services.

Anti Bribery and Corruption

AFBI's Counter Fraud Policy and Fraud Response Plan sets out how AFBI complies with the Bribery Act 2010 and DAO (DoF) 09/11 Bribery Act 2010 which clarifies how the Bribery Act 2010 applies to public servants in Northern Ireland. The Standards of Conduct of all staff are set out within the NICS HR Handbook Section 6.01 (Standards of Conduct), which indicates that all staff should conduct themselves with honesty and impartiality at all times. Hence it is not acceptable for any staff member to receive any benefit that may be perceived as having the potential to compromise personal judgement on work related issues.

Sustainability

Sustainability continued to be a cross cutting theme of the NI Executive's draft Programme for Government Outcomes Framework 2016-21. DAERA was the lead department within the NI Sustainable Development Implementation Plan for the strategic objective – Promote Sustainable Land Management. AFBI assisted DAERA in the achievement of this objective through conducting underpinning research and provision of specialist advice on production of biomass and renewable energy, nutrient management, bioremediation of farm and municipal effluents and greenhouse gas production by livestock and soils.

AFBI Estate

AFBI seeks to ensure it maintains its farmland in good agricultural and environmental condition.

As previously documented, the AFBI estate is largely energy inefficient due to the ageing nature of the buildings and infrastructure thereby presenting significant challenges in terms of reducing carbon emissions. The AFBI Newforge Lane and

Stormont (Stoney Road) sites present the greatest issue given the number and complexity of the buildings on each site which are a mixture of office and laboratory accommodation. Both these sites also accommodate the greatest number of AFBI staff.

It is recognised by DAERA, as the landlord, that modernisation and reorganisation of the AFBI Estate is necessary and critical in order to provide AFBI with an effective and efficient facilities platform to deliver its scientific work programme for DAERA and other customers. DAERA and AFBI therefore continue to work together to develop and take forward an Estate Strategy for the Institute. Sustainable technologies will be considered as part of any new estate developments in order to ensure energy efficient facilities are in place.

Energy Usage and Carbon Reduction

During 2018-19 AFBI has continued to ensure the Institute remains compliant with the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES). Energy usage across all six AFBI sites leased from DAERA is measured on an annual basis and reported as part of CRCEES.

Efforts have continued to reduce energy consumption in order to achieve efficiency savings and reduce the carbon footprint. Prior to new facilities being delivered where the replacement of infrastructure is required in relation to, for example, heating, steam production and lighting, more energy efficient systems are being installed. For example, a number of such projects have been during undertaken at AFBI Newforge whereby new energy efficient heating boilers have been installed where necessary, and outside lighting has been largely replaced with LED lighting. An upgrade of Building Energy Management Systems has been undertaken at AFBI Newforge and Stormont. Further projects are at the planning stage for 2019-20 for Newforge and Stormont.

Environment and Renewable Energy Centre (EREC), AFBI Hillsborough

In the agriculture, agri-food and waste water treatment sectors, the need to reduce greenhouse gas emissions, reduce dependence on fossil fuels and improve environmental discharge compliance are of growing importance. As such, activities at the AFBI Hillsborough Environment and Renewable Energy Centre (EREC) have been on-going with a strong focus on research, knowledge

transfer, proof of concept and new research project bidding. The EREC delivers heat and electricity to the Hillsborough site from biomass and solar sources with the main sources of biomass being a varied supply of locally produced and indigenous biomass supplies. Heat generated from a 320kW biomass boiler, a 120kW experimental biomass boiler, an anaerobic digestion combined heat and power (AD CHP) plant and a dedicated AD gas boiler is delivered around the site through a 1.4km district heating system.

The majority of the biomass is derived from plantations of short rotation coppice (SRC) willow grown at AFBI Hillsborough and other AFBI research sites. The SRC willow is fertilised by farmyard waste water. The irrigation protocol is environmentally controlled by a programmable logic controller taking account of ambient conditions (environmentally sound and sustainable solution for waste water recycling). This research has led to similar projects being instigated within the waste water treatment and agri-food sectors where drivers to invest in sustainable waste water management include the EU Waste Framework Directive (WFD) and customer pressure (low carbon footprint for marketable food products). These include projects to investigate the use of SRC willow to manage diffuse agricultural run-off, manage landfill leachates and improve water quality within catchments as a result of point source irrigation.

An on-site anaerobic digester, supplied with animal manures and silage, produces biogas which generates about 70kW of electricity and 110kW of heat through a combined heat and power (CHP) generator. About 12kW of electricity is also supplied by an array of photovoltaic cells.

Waste

Under current legislation AFBI must incinerate certain types of waste, i.e. transmissible spongiform encephalopathies (TSE) waste. This waste is transported to mainland GB by licensed contractors where incineration takes place. Other clinical waste which can be autoclaved is treated mainly on-site. Where autoclave facilities are at full capacity, AFBI uses a licensed off-site heat treatment facility.

Recycling measures are in place for paper, cardboard, plastics, glass, metal, wood, toner cartridges, batteries, waste engine oils and vehicles which are surplus to requirements.

Signed 

Dr S McDowell, BVM&S, MSc, DLSTH, PhD, MRCVS
Chief Executive and Accounting Officer

Date: 17 December 2019

4. Accountability Report

4.1 Introduction

The Accountability Report is set out in three main sections:

1. the Corporate Governance report;
2. the Remuneration and Staff report; and
3. the Assembly Accountability and Audit report.

4.2 Corporate Governance Report

4.2.1 The Directors' Report

AFBI Board

AFBI is managed by a non-executive Board which has responsibility for providing strategic leadership for the organisation. The main purpose of the Board is to ensure that AFBI is successful in delivering the policies and priorities of DAERA and the Minister by providing strategic leadership to AFBI and ensuring effective performance management of AFBI.

To this end and in pursuit of its wider corporate responsibilities, the responsibilities of the Board as set out in the AFBI Board Operating Framework are to:

- establish the overall strategic direction of AFBI within the policy and resources framework determined by the Minister and DAERA;
- constructively challenge AFBI's Executive Management Team in its planning, target setting and delivery of performance;
- ensure that the Board receives, reviews and acts upon regular financial information concerning the management of AFBI, is informed in a timely manner about any concerns relating to the activities of AFBI, and provides positive assurance to DAERA that appropriate action has been taken on such concerns;
- ensure that DAERA is kept informed of any changes which are likely to impact on the strategic direction of AFBI or on the attainability of its targets, and in conjunction with AFBI's Executive Management Team and DAERA, determine the steps needed to deal with such changes;
- ensure that all statutory or administrative requirements for the use of public funds are complied with, that the Board operates within the limits of its statutory authority and any delegated authority agreed with DAERA, and in accordance

with all other conditions relating to the use of public funds, and that, in reaching decisions, the Board takes into account all relevant guidance issued by DoF and DAERA;

- ensure high standards of corporate governance at all times, and use the Audit and Risk Assurance Committee (ARAC) to provide the Board with assurance in relation to the management of key financial and other risks facing the organisation; and
- appoint a Chief Executive to AFBI and, in consultation with DAERA, set performance objectives and remuneration terms linked to those objectives for the Chief Executive, which gives due weight to the proper management and use of public monies.

Role of the Chair of AFBI

The Chair is personally responsible and accountable to the Minister for the performance of AFBI and for the strategic leadership and control of the Board. The Chair is responsible for ensuring that AFBI's policies and actions support the Minister's and DAERA's wider strategic policies and that its affairs are conducted with probity.

The Chair shares with other AFBI Board members the corporate responsibilities set out in the Management Statement and Financial Memorandum (MSFM), and in particular for ensuring that AFBI fulfils the aims and objectives set by DAERA and approved by the Minister. The Chair also sets performance measures for the Board and individual Board members and appraises performance.

Board Members

Members are appointed in accordance with the Office of the Commissioner for Public Appointments (OCPA) NI Code of Practice. The terms of appointment of members and the Chair are normally for a three year period with a possibility of an extension. The Chair completed his Term of Office on 31 March 2019. The Chair receives an annual remuneration of £26,248 and is expected to commit approximately 40 days per annum to the post. The Deputy Chair receives £10,941 and has a commitment in the region of 20 days per annum.

Members are on a per diem rate of £389 which they receive for attendance at each Board and relevant Committee Meeting.

AFBI maintains a register of interest for Board Members on its website and this can be accessed via <https://www.afbini.gov.uk/content/membership-afbi-board#toc-0>

Board Sub- Committees

There are five sub-committees of the Board.

I Organisational Development and Human Resources Committee

The primary role of this Committee is the overview of Organisational Development and Human Resources within AFBI and to support the Board's programme of change management.

Organisational Development and Human Resources Committee (OD&HR)	
Non-Executive Chair	Ms Theresa Cullen
Non-Executive Director	Mrs Maureen McKeague
Non-Executive Director	Mrs Sharon Smyth
Non-Executive Director	Ms Joan Houston
Non-Executive Director	Mr Richard Solomon
Non-Executive Director	Mrs Roberta Brownlee

II Audit and Risk Assurance Committee

The Audit and Risk Assurance Committee advises the Board and Accounting Officer on issues of risk, internal control, governance and any material items affecting the accounts.

Audit and Risk Assurance Committee (ARAC)	
Non-Executive Chair	Ms Joan Houston
Non-Executive Director	Mrs Sharon Smyth
Non-Executive Director	Mr Ian Buchanan
Non-Executive Director	Mrs Fiona Hanna
Non-Executive Director	Mr Richard Solomon
Non-Executive Director	Ms Kate Burns

Other attendees include:

- Head of Internal Audit
- DAERA Internal Audit (as required)
- NIAO
- AFBI Sponsor Branch
- Chief Executive Officer
- Director of Finance and Corporate Affairs Division
- Head of Finance
- Head of Governance & Performance Branch.

III Science Strategy Committee

The role of the Science Strategy Committee is to assist the Executive in developing a Science Strategy for AFBI. In particular, to:

- Identify and prioritise areas of existing scientific work which are of strategic importance to AFBI; and
- Identify and prioritise areas of existing scientific work which are of lower strategic importance to AFBI and which could therefore be reduced or ceased in order to transfer resources to work of higher priority.

Science Strategy Committee	
Non-Executive Chair	Dr Michelle Costello-Smith
Non-Executive Director	Dr Richard Horton
Non-Executive Director	Ms Theresa Cullen
Non-Executive Director	Mr Ian Buchanan
Non-Executive Director	Mr Colin Coffey
Non-Executive Director	Ms Kate Burns

IV Finance and Business Strategy Committee

The role of the Finance and Business Strategy Committee is to support the Board in its responsibilities for the oversight of financial management including, in particular, the review of financial plans and budgets as well as financial monitoring.

Finance and Business Strategy Committee (FBSC)	
Non-Executive Chair	Mr Colin Coffey
Non-Executive Director	Mrs Fiona Hanna
Non-Executive Director	Mrs Maureen McKeague
Non-Executive Director	Dr Richard Horton
Non-Executive Director	Dr Michelle Costello-Smith
Non-Executive Director	Mrs Roberta Brownlee

V Oversight and Governance Committee

The role of the Oversight and Governance Committee is to support the Board in its responsibilities for the oversight of significant or complex projects in terms of governance, expenditure, claims, risk and contract management.

Oversight & Governance Committee (OGC)	
Non-Executive Chair	Mr Colin Coffey
Non-Executive Director	Mrs Roberta Brownlee
Non-Executive Director	Mr Richard Solomon

Executive Management Team

During 2018-19 the Executive Management Team (EMT) of the Institute was made up as follows:

- Chief Executive Officer - Dr Sinclair Mayne (retired 31 August 2018)
- Chief Executive Officer - Dr Stanley McDowell (from 3 September 2018)
- Director of Sustainable Agri-Food Science Division (SAFSD) - Dr Elizabeth Magowan
- Director of Veterinary Science Division (VSD) - Dr Stanley McDowell (to 2 September 2018)
- Acting Director of Veterinary Science Division - Dr Alastair Douglas (from 20 August 2018)
- Director of Finance and Corporate Affairs Division - Mrs Josephine Kelly

EMT generally meets formally twice monthly for EMT Finance and EMT General Meetings. These have standing agenda covering finance, resources, operational management, health and safety and business development. The minutes of these monthly meetings are available on AFBI's intranet. Additional EMT meetings are also held as required.

Details of significant interests held by EMT members

EMT Members do not hold any other directorships or any other significant interests which may conflict or be perceived to conflict with their management responsibilities.

Role of the Accounting Officer

AFBI's Chief Executive is designated Accounting Officer for the NDPB by the Departmental Accounting Officer and as such is accountable to the Northern Ireland Assembly for AFBI's use of resources as set out in the Management Statement and Financial Memorandum (MSFM).

In particular, the Accounting Officer shall ensure that:

- AFBI's Strategic Themes and Goals support DAERA's wider strategic aims and commitments within the Programme for Government;
- the financial and other management controls applied by DAERA to AFBI are appropriate and sufficient to safeguard public funds and for ensuring that AFBI's compliance with those controls is effectively monitored ('public funds' include not only any funds granted to AFBI by the Assembly but also any other funds falling within the stewardship of AFBI);
- the internal controls applied by AFBI conform to the requirements of regularity, propriety and good financial management; and
- any Grant-In-Aid paid to AFBI is within the ambit and the amount of the Request for Resources and that NI Assembly authority has been sought and given.

Personal Data Incidents

During 2018-19 there were 20 personal data incidents, all of which were assessed as being low impact (with two initially considered medium and reduced to low impact following mitigating actions). There have been no reported significant personal data losses in the course of the year.

One personal data breach was reported to the Information Commissioner's Office (ICO) due to an inability to fully assess the incident within the statutory 72 hour limit; the incident was ultimately assessed as low risk when full details emerged and the ICO took no action.

Most of the incidents reported were due to human error in relation to the use of incorrect email addresses for recipients. All incidents were handled under the AFBI Data Breach Management Plan and all assessed as low risk incidents. All were dealt with promptly with steps taken to prevent recurrence.

It is likely that the increase in the number of incidents reported (up from four in 2017-18) was due to the increased alertness to data protection issues following intensive training and awareness-raising activities carried out by AFBI in preparation for the General Data Protection Regulation (GDPR) which came into force on 25 May 2018.

Internal Audit

An independent firm of auditors continue to provide Internal Audit services to the AFBI Accounting Officer and provides senior management and the ARAC with assurances of the adequacy of AFBI's systems of internal control and risk management.

Compliance with DoF's Code of Good Practice on Corporate Governance

AFBI complies with all relevant requirements of the "Corporate Governance in Central Government Departments: Code of Good Practice NI" published by DoF in 2013. All members of the AFBI Board and its sub-committees are non-executives.

Supplier Payment Policy

AFBI is committed to the Better Payments Practice Code as set out in Annex 4.6 of Managing Public Money and is subject to the Late Payment of Commercial Debt Regulations 2002. AFBI comply with the British Standard for Achieving Good Payment Performance in Commercial Transactions (BS 7890).

Payment is regarded as late if it is made outside the agreed terms, or 30 days after the receipt of a valid invoice where no terms are agreed. In response to the 2008 economic position, the Department for Business Enterprise and Regulatory Reform (BERR) announced that Central Government was committed to paying businesses in 10 days.

In 2018-19 AFBI paid 72% (2017-18: 86%) of the invoices in accordance with the agreed terms or within 30 days.

AFBI is also committed to the 10-day prompt payment of supplier invoices. The performance outturn for the 10 day prompt payment was 46% for 2018-19. The performance for the 2017-18 year on this 10 day target was 58%.

Corporate Complaints

AFBI has a corporate complaints policy in place and this is available via the AFBI website. In addition guidance has been provided to ensure staff awareness of the process to follow to ensure that complaints are managed and responded to. Monitoring and reporting arrangements are also in place to ensure that any issues or trends are identified and where appropriate lessons learned are disseminated through the organisation. AFBI received six complaints during 2018-19. While each was handled to successful resolution, one was not responded to within the required timeframe. All staff have been reminded of the complaints handling policy and guidance to ensure that these are dealt with efficiently and effectively.

Health and Safety

AFBI endeavours to comply with all relevant health and safety legislation and where practicable with all health and safety best practice. AFBI has a dedicated Health and Safety Manager and Advisers (internal and external) and a system of health and safety committees with relevant policies, procedures and guidance in place. AFBI made significant progress during 2018-19 in relation to enhancing its current health and safety provision with the key proactive component of monitoring and

measurement of performance being tracking against the Health and Safety Management Profile (HASMAP) which was the basis for the 2017-18 AFBI Corporate Health and Safety Review.

Quality Assurance

AFBI's senior management is committed to providing scientific services that consistently meet customer and statutory and regulatory requirements, and to enhancing its customers' satisfaction. The organisation holds two internationally recognised quality assurance standards providing customers with a formal recognition of the technical competence, impartiality, and performance capability of the laboratory.

- **ISO 9001:2015** certification covers research and development and the provision of most of its scientific and diagnostic services.
- **ISO 17025:2017** accreditation is maintained for statutory testing and in accordance with regulatory and customer requirements in areas such as food safety, disease surveillance and diagnosis and feed analysis.

Compliance is monitored annually by independent assessment bodies. The ISO 9001 audit was carried out in December 2018 by SGS and certification was retained. The ISO 17025 laboratory areas were audited in September 2018 by the United Kingdom Accreditation Service (UKAS) and our accreditation status was confirmed.

Northern Ireland Audit Office

The financial statements are audited by the Comptroller and Auditor General (C&AG), in accordance with the Government Resources and Accounts Act (Northern Ireland) 2001. He is head of the Northern Ireland Audit Office (NIAO). He and his staff are totally independent of Government, and he reports his findings to the Northern Ireland Assembly.

The annual fee for the audit of financial statements for 2018-19 was £45,000 (2017-18: £38,000).

The external auditors have not been requested to undertake any non-audit work.

Disclosure to Auditor

So far as I am aware, as Accounting Officer, there is no relevant information of which the AFBI's auditors are unaware and, as Accounting Officer, I have taken all steps that I ought to have taken to make myself aware of any relevant audit information and establish that AFBI's auditors are aware of that information.

Signed  _____

Dr Stanley McDowell, BVM&S, MSc, DLSHTM, PhD, MRCVS
Chief Executive and Accounting Officer

Date: 17 December 2019

4.2.2 Statement of Accounting Officer's Responsibilities

Under the Agriculture (Northern Ireland) Order 2004, the Agri-Food and Biosciences Institute is required to prepare for each financial year, accounts in the form and on the basis set out in the Accounts Direction.

The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the Institute, and of its income and expenditure, Statement of Financial Position and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the Government Financial Reporting Manual and in particular to:

- a) observe the Accounts Direction issued by DoF, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- b) make judgments and estimates on a suitable basis;
- c) state whether applicable accounting standards, as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the accounts; and
- d) prepare the accounts on a going concern basis; and
- e) confirm that the Annual Report and Accounts as a whole is fair, balanced and understandable and take personal responsibility for the Annual Report and Accounts and the judgements required for determining that it is fair, balanced and understandable

DAERA has appointed the Chief Executive Officer of AFBI as Accounting Officer of the Institute, with responsibility for preparing the Institute's accounts and for transmitting them to the Comptroller and Auditor General.

The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which he is answerable, for

keeping proper records and for guarding the Institute's assets, are set out in Managing Public Money published by the HM Treasury.

As the Accounting Officer, I have taken all the steps that I ought to have been taken to make myself aware of any relevant audit information and to establish that AFBI's auditors are aware of that information. So far as I am aware, there is no relevant audit information of which the auditors are unaware.

4.2.3 Governance Statement

The Governance Statement for the year ended 31 March 2019 has been produced in line with guidance issued by the Department of Finance (DoF) in Dear Accounting Officer letter DAO 10/12 and Annex A.3.1 of Managing Public Money Northern Ireland (MPMNI).

Scope and Responsibility

As Accounting Officer I am responsible for managing and controlling the resources used in AFBI, in accordance with the responsibilities assigned to me in MPMNI. The Governance Statement sets out the governance, risk management and internal control arrangements in operation within AFBI during the financial year which have assisted me in discharging this stewardship role.

The governance structures and processes, risk management and internal controls during the year were effective. During the year, there was a continued focus on strengthening governance arrangements and internal controls through the implementation of recommendations resulting from internal and external audit recommendations and updating key governance policies in line with established best practice guidance.

Governance Arrangements

Governance Framework

AFBI's governance framework sets out the roles, responsibilities and procedures for the effective and efficient conduct of the organisation's business. AFBI is committed to ensuring governance arrangements are in line with established best practice and that AFBI is accountable and transparent for its decisions and activities. Annex A to the Governance Statement illustrates AFBI's Governance and Risk Assurance Framework.

Governance Structure

The Minister for Agriculture, Environment and Rural Affairs is responsible and answerable to the Northern Ireland Assembly (the Assembly) for the exercise of the powers on which the administration of the Department depends. The Minister has

a duty to the Assembly to account, and be held to account, for the policies, decisions and actions of the Department including AFBI as one of its NDPBs.

While in practice NDPBs operate with some independence and are not under day-to-day ministerial control, ministers are nevertheless ultimately accountable to the Assembly for NDPBs' activities and performance. This is because they are responsible for the founding legislation of NDPBs; have influence over the strategic direction of NDPBs; appoint the boards of NDPBs; and have the ultimate sanction of abolition or reform subject to the NI Executive's approval where this requires a change in statute.

DAERA's Permanent Secretary is appointed as DAERA's Departmental Accounting Officer by DoF. AFBI Sponsor Branch is responsible for managing the overall relationship between DAERA and AFBI. DAERA's AFBI Sponsor Branch holds monthly Finance and Governance meetings with AFBI and facilitates quarterly Accountability Meetings between the Senior Sponsor and me as part of its governance oversight. DAERA's Departmental Accounting Officer has designated me as the Accounting Officer for AFBI.

As Accounting Officer, I am personally responsible for safeguarding the public funds for which I have charge, for ensuring propriety and regularity in the handling of those public funds and for the day-to-day operations and management of AFBI.

In fulfilling my duties as AFBI's Accounting Officer I was supported by my Executive Management Team and a non-Executive Board. The Executive Management Team consists of the Directors of Sustainable Agri-Food Sciences, Veterinary Sciences and the Finance and Corporate Affairs Divisions.

The Board

AFBI's Board consists of 13 non-executive members appointed by the DAERA Minister. Appointments are made in line with the Code of Practice issued by the Office of the Commissioner for Public Appointments Northern Ireland. The main responsibilities of the Board are to ensure that AFBI fulfils the aims and objectives set by DAERA and approved by the Minister, monitoring AFBI's compliance with applicable law and policy and for promoting the efficient, economic and effective use of staff and other resources by AFBI. The Board fulfils its responsibilities by

establishing the overall strategic direction of AFBI and by challenging the Executive Management Team in business planning, target setting and delivery of performance against agreed targets.

The Board operates within AFBI's Board Operating Framework which sets out the broad governance structures for the Board. It also defines the key roles and responsibilities which underpin the relationship between AFBI and DAERA.

Board Sub-Committees

While all decision-making powers are reserved to the Board, five sub-committees operated in an advisory capacity in line with their Terms of Reference. Details of these are set out below:

- I. **The Audit and Risk Assurance Committee** (ARAC) advises the Board on issues of governance risk and control. ARAC reviews the draft and final accounts to provide the Board with the assurance that it can authorise me to sign the accounts on its behalf;
- II. **The Finance and Business Strategy Committee** (FBSC) supports the Board in discharging its responsibilities for oversight of financial management including the review of financial plans and budget monitoring. The FBSC also assists management in developing strategies to maximise income generation opportunities, including commercial exploitation of intellectual property and technology disclosures;
- III. **The Organisational Development & Human Resources Committee** (OD&HR) advises the Board on organisational development and human resources matters within AFBI, and supports the Board's programme of Change Management; and
- IV. **The Science Strategy Committee** assists the Executive Management Team in developing and overseeing the implementation of AFBI's Science Strategy. This includes the identification of a range of key scientific skills and technologies which AFBI should maintain and develop.
- V. **The Oversight and Governance Committee** assists the Executive Management Team in providing high level oversight for significant or complex

projects in terms of governance, expenditure, claims, risk and contract management. The scope of this Committee does not extend to the evaluation of the science programme which is considered by the Science Strategy Committee as required.

Board/Sub Committee Attendance

The attendance of members at Board and sub-committee meetings during the year is summarised as follows:

AFBI Board	Board Attendance	ARAC Attendance	FBSC Attendance	OD&HR Committee Attendance	Science Strategy Committee Attendance	Oversight & Governance Committee
Mr Colm McKenna (Chair)	9/10	-	-	-	-	-
Mr Colin Coffey (Deputy Chair)	10/10	-	4/4	-	3/4	3/3
Mrs Maureen McKeague	10/10	-	4/4	4/4	-	-
Mr Ian Buchanan	10/10	5/6	-	-	4/4	-
Dr Michelle Costello-Smith	7/10	-	4/4	-	4/4	-
Ms Theresa Cullen	8/10	-	-	4/4	4/4	-
Mrs Fiona Hanna	9/10	6/6	4/4	-	-	-
Dr Richard Horton	10/10	-	3/4	-	4/4	-
Ms Joan Houston	10/10	6/6	-	4/4	-	-
Mrs Sharon Smyth	10/10	6/6	-	4/4	-	-
Mr Richard Solomon	10/10	6/6	-	4/4	-	1/1*
Ms Kate Burns	6/10	3/6	-	-	4/4	-
Mrs Roberta Brownlee	5/10	-	3/4	4/4	-	3/3

*Richard Solomon was appointed to the Oversight & Governance Committee from 21 December 2018.

Figure 9 – AFBI Board Members Attendance at Meetings 2018-19

Board Performance & Quality of Information used by the Board

In line with its Board Operating Framework, AFBI's Board reviewed its performance and undertook a self-assessment effectiveness review for 2018-19. The review focused on six key governance principles:

- purpose and outcomes;
- roles and responsibilities;
- values and governance;
- decision making and risk management;
- Board capacity and structure; and
- stakeholder accountability and communication.

The Board reaffirmed that its role was to set the strategic direction of the organisation, provide constructive challenge, ensure robust governance, hold the Executive Management Team to account, set the tone of the organisation, ensure that relations with stakeholders are managed effectively and that it is answerable to the DAERA Minister. While scores were relatively lower than in previous years, the review indicated that the Board considered that it was operating effectively.

The review demonstrated that the Board understands its role and strategic priorities and that it promoted high standards of governance, risk and financial management and a culture of performance and delivery. It did however show a continuation of a longer term trend of reduced scores around member development and enhancing relationships with stakeholders.

The quality of information provided to the Board and EMT is of a high standard with executive, financial, whistleblowing and risk register reports provided on a regular basis. The 2018-19 Board self-assessment exercise has highlighted some areas for improvement in relation to the format, content and quality of the information it receives as it seeks to continually review and strive to improve governance and reporting. These are being taken forward by the management team.

Compliance with Corporate Governance Code

As the Accounting Officer of a Non-Departmental Public Body of a Northern Ireland Department, in line with DAO 06/13, I can confirm that AFBI, as an arm's length body of DAERA, complies with all relevant aspects of the Corporate governance in central government departments: Code of Good Practice NI published by DoF in 2013.

Conflicts of Interest

On appointment, Board members are required to provide a list of all interests which might give rise to a conflict of interest. At every Board and sub-committee meeting a standing agenda item on declarations of interest is included and brought to the attention of the members by the Chair. Board papers are not circulated to members who have declared or are deemed to have a specific conflict of interest. Where a conflict of interest is declared, it is recorded and the relevant member(s) leave the Board meetings for the specific agenda item. Members are also asked regularly to update their declarations.

Risk Management Framework and Structure

AFBI has a well embedded risk management and internal control framework in place with direct involvement of the Executive Management Team through the Risk Review Group. AFBI's Risk Management Strategy clearly sets out the roles, responsibilities, procedures and risk appetite for risk management within AFBI. During the year AFBI reviewed and updated its Risk Management Strategy and this was augmented with updated operational guidance and procedures for staff on the management of risks and extending this to project risk management.

Risk management is a standing agenda item for Board and ARAC meetings and AFBI's Risk Register is reviewed by both meetings on a quarterly basis. The Board also reviewed and agreed the organisation's risk appetite. One risk was added to the AFBI Corporate Risk Register (CRR) during 2018-19. Given the significance of the change in data protection legislation, the risk surrounding the uncertainty from the UK Exit from the European Union was added in January 2019.

Information Risk

AFBI's approach to the management of information security risks is proportionate to the nature of the risks and the comparatively limited amount of personal or sensitive information handled by AFBI and its delivery network.

AFBI's Senior Information Risk Owner has provided assurance that the information governance policy framework is effective and that adequate controls and measures are in place to enable AFBI's information systems to withstand threats to their confidentiality, integrity and availability as evidenced by compliance with the NICS Code of Connection which is externally audited.

Following the introduction of the General Data Protection Regulation (GDPR) and Data Protection Act 2018 on 25 May 2018, additional controls and measures were put in place to protect personal data including training in data protection issues, reinforced by advice and guidance on the AFBI intranet, and data protection impact assessments or screening exercises to assess and reduce information risk in new work areas (AFBI teams carried out 29 Data Protection Impact Assessments during the year).

During Quarter 4 of 2018-19, the Institute introduced the automatic encryption of diagnostic animal disease test reports emailed to its clients, such as private veterinary practitioners, to enhance the security of and safeguard the personal data contained within the reports. This measure enhances AFBI's compliance with Article 32 of the GDPR and meets the ICO's recommendation to reduce the risk of personal information being intercepted during electronic transmission.

There have been no reported significant data losses (personal, business-sensitive or commercial-in-confidence) in the course of the year. During 2018-19 there were 20 personal data incidents mostly involving the accidental disclosure of personal data to incorrect email recipients. All of these were handled under the AFBI Data Breach Management Plan and both assessed as low risk incidents. These were dealt with promptly with steps taken to prevent recurrence.

Internal Controls

An important element of AFBI's risk management framework is the system of internal control. This is designed to manage AFBI's risks to a reasonable level, rather than to eliminate all risk of failure to achieve aims and objectives. It can therefore

only provide reasonable and not absolute assurance of effectiveness. A system of internal control was in place throughout the year and is in accordance with guidance defined in Managing Public Money Northern Ireland.

Assurance Statements

I obtained additional assurance through quarterly Assurance Statements provided to me by AFBI's three Heads of Division. In turn I provide a quarterly Assurance Statement to AFBI Sponsor Branch in DAERA in advance of the accountability meetings and a copy of my quarterly statement is provided to ARAC. My Assurance Statements confirmed that the necessary internal controls were in place to provide reasonable assurance in the areas of:

- Accountability & Governance;
- Performance against Key Objectives & Targets;
- Risk Management;
- Business Planning;
- Financial Planning & Monitoring;
- Fraud;
- Economic Appraisal, Post Project Evaluation & Consultancy;
- Procurement;
- Policy Implementation;
- Human Resources;
- Internal & External Audit Reports;
- Data Management; and
- EU exit Planning.

This assurance is subject to the issues set out under the Significant Issues section of the Governance Statement.

Financial Management

AFBI's system of internal financial control is based on a framework of financial information, financial procedures, segregation of duties and a system of delegation and accountability. These include annual budgeting, in year forecasting, corporate budget monitor reports and divisional and branch reports.

Fraud & Whistleblowing

All cases of actual or suspected fraud that came to my attention during the year were reported to DAERA's Principal Accounting Officer, the Comptroller and Auditor General of the NIAO, AFBI's Chair and the Chair of AFBI's ARAC.

I can confirm that there was one whistleblowing case raised within AFBI in 2018-19. In addition, there was one anonymous whistleblowing case related to AFBI received by NIAO.

Key Assurance Providers

AFBI's Internal Audit

AFBI's Internal Audit function is carried out by a professional accounting firm which was appointed in accordance with the Public Sector Internal Audit Standards. Under the terms of the appointment, a Director in the firm acts as AFBI's Head of Internal Audit, who provides me with an independent opinion on AFBI's systems of risk management, control and governance and AFBI received an overall satisfactory level of assurance in respect of 2018-19.

The Public Sector Internal Audit Standards (PSIAS) require AFBI's Internal Auditors to bring to my attention those significant control issues which may be relevant to the preparation of my Governance Statement. There were two significant issues which needed to be brought to my attention (i.e. Priority 1 recommendations).

Internal Audit conducted six audits and one advisory review during the year. In addition, Internal Audit undertook a follow up review of all recommendations made during the 2018-19 year in relation to a number of reviews. This showed satisfactory progress in the implementation of recommendations. The results of this audit work is summarised in the following table.

Audit	Assurance Rating	No of Recommendations by Priority Rating		
		1	2	3
Validation of KPI Outturns 2017-18	Satisfactory	-	-	-

Audit	Assurance Rating	No of Recommendations by Priority Rating		
		1	2	3
Review of Procurement	Limited	2	1	2
Review of Efficiency Management	Satisfactory	-	-	-
Advisory Review of Business Continuity Management	N/A	-	-	-
Review of Contract Management	Satisfactory	0	3	4
Review of Project Management ¹	Limited	0	0	1
Review of Commercialisation and Business Development	Satisfactory	0	1	0
Audit Recommendations Follow-up	N/A	-	-	-
Total		2	5	7

Figure 10 – Internal Audit Reports 2018-19

Audits Classified as Limited

As part of AFBI's 2018-19 Internal Audit Plan, Internal Audit conducted a review of Procurement. This made two 'Priority 1' recommendations and provided a 'Limited' assurance opinion. In line with AFBI's governance arrangements, progress on the implementation of the recommendations are monitored quarterly by the ARAC Committee. In addition the Board and the OD&HR committee also are provided with progress updates.

Enterprise Shared Services audited by Department of Finance Internal Audit

¹ The project Management Review in 2018/19 was as a result of the 'Limited' assurance review undertaken in 2017/18. While only 1 additional priority 3 finding was included, the existing Priority 1 recommendation remains in progress.

To complete this Governance Statement, I have also drawn on assurances received from the Head of Internal Audit in DoF in respect of the Enterprise Shared Services that AFBI avails of. During 2018-19, DoF conducted a number of audits which are summarised in the table below along with the assurance rating received.

Shared Service Utilised	No of Audits Completed	Assurance Rating
HR Connect	5	5 x Satisfactory
Digital Shared Services	1	Satisfactory

Figure 11 – Head of Internal Audit in DoF Opinion on Enterprise Shared Services

External Assurance - NIAO

As disclosed in AFBI's previous Governance Statements, NIAO published a Value for Money review of the period covering AFBI's establishment on 1 April 2006 until 31 March 2011. The report was published on 12 September 2013 and contained 11 recommendations relating to financial management, performance reporting, the management of research and development activities and governance and oversight arrangements within AFBI. The report was examined by the Public Accounts Committee (PAC) in November 2013 which in turn published a report on 19 March 2014 containing six recommendations. A Memorandum of Reply (MOR) to the PAC report was laid in the Assembly in May 2014.

As set out above, implementation of the remaining elements of the PAC/NIAO recommendations continued to be an area of focus for 2018-19 with work ongoing to further embed these into business as usual within AFBI. Progress continued to be monitored through quarterly updates to ARAC.

Progress on the PAC and NIAO recommendations is also a standing agenda item at the Accountability meetings between me as AFBI's Accounting Officer and the DAERA Senior Sponsor which forms part of the overall governance framework.

AFBI's annual accounts are audited by NIAO. In its latest 'Report to Those Charged with Governance', NIAO issued a qualified audit opinion on the basis of a 'limitation

of scope' in relation to royalty income recognised in the Accounts . A total of two priority '1' three priority '2' recommendations were made. Further information is provided at the Significant Issues section.

Monitoring the Implementation of Recommendations

The status of all internal and external audit recommendations along with the PAC and NIAO value for money review recommendations are reported to EMT and on a quarterly basis to the Audit & Risk Assurance Committee to ensure that these are effectively implemented in line with agreed implementation dates. Internal Audit also undertake an annual follow up exercise to validate the reported position on the implementation of recommendations.

In relation to the NIAO and PAC Recommendations there is an agreement that through the corporate and business planning processes, AFBI will report and monitor these requirements as business as usual improvements to financial reporting and governance processes.

In line with the annual Business Plan for 2018-19, AFBI has developed and agreed an efficiency plan and targets which will be monitored and reported to ensure previous efficiencies are maintained and future efficiencies are achieved. This was informed by an advisory review undertaken by AFBI's Internal Audit providers and a follow-up assurance review has been carried out to validate progress made.

Significant Issues

I. Royalty Income

As identified in previous years' Governance Statements, a large component of AFBI's royalty income stream is due to end in the next few years. AFBI continue to work with QUB, who provide an advisory and facilitation role in relation to the protection of AFBI's Intellectual Property Rights (IPR), in order to clarify, maximise and protect the duration and quantum of this important income stream.

Royalty income of £7 million has been recognised in the 2018/19 Accounts, based on the existing patent agreements, particularly Articles 7.3.2, 7.3.3 and 9.1 of the original 1998 Agreement. QUB in conjunction with patent experts have determined the validity of patents and have calculated the value of royalty income

due to AFBI in 2018/19. However, no royalty payments have been received by AFBI since June 2018.

Based on the 1998 Agreement and the fact that sales of products from derived patents have occurred in the relevant periods combined with the patent expert advice, AFBI believes the amounts included in the financial statements to be due and payable and will ensure every effort will continue to be made to recover them.

The NIAO have disagreed that AFBI's recognition of the £7 million income and £2.7 million of associated costs meets the requirements of the relevant accounting standard and have therefore issued qualified audit opinions on the 2018/19 Annual Report and Accounts.

It is AFBI's belief that this is a commercial dispute and is therefore disclosed in the Contingent Liability note to the accounts.

AFBI is reviewing the position to ensure that any lessons learned for any future IPR relationships that AFBI may enter into are considered. Any such future arrangements will be monitored and reviewed through the Oversight & Governance Committee.

II. Finance & Business Systems

AFBI has recognised that it needs to improve its corporate support systems and financial processes. A number of Internal Audit Reports and the Tailored Review of AFBI undertaken by DAERA and reported in 2018-19 have highlighted this as a priority. This is to ensure that they are fit for purpose to support staff and effective decision making with respect to delivering timely information to enable effective control in all relevant areas. As such a significant project is being progressed to deliver a new Business and Finance system to meet the needs of AFBI. During 2018-19 DoF's Business Consultancy Services completed an exercise to define the business requirements for a new business information system, with the report accepted by EMT in September 2018. Following discussion with CPD, AFBI has used the report provided by BCS in an initial market engagement with potential suppliers. This has led to a period of interaction with potential suppliers, which took place during October and November 2018. This preparatory work has clarified the

options to be considered in the Business Case, which is now being progressed in 2019-20.

III. Voluntary Exit Scheme (VES)

During the final stages of the audit of the 2017-18 Annual Accounts, NIAO raised a query about the re-engagement of former staff who left AFBI under its Voluntary Exit Scheme (VES). This led to a report from the Comptroller and Auditor General being appended to the 2017-18 Annual Report and Accounts.

AFBI has no plans to use another VES at this time but has put into place tighter controls and processes should another VES be utilised.

IV. Fixed Term Contracts

During the year an issue arose in relation to the use of staff on fixed term contracts (FTCs). Staff employed on FTCs for 2 years or more are entitled to statutory redundancy payments on the expiry of their contract, if the work that they are undertaking ceases or there are no suitable redeployment vacancies. In line with the delegations within the Management Statement & Financial Memorandum, AFBI has no delegated authority to make redundancy payments without approval from DAERA and DoF. Therefore each time AFBI employs a member of staff on an FTC, AFBI need business case approval by DAERA and DoF.

Due to the increase in administration both for AFBI and DAERA, AFBI were to produce an overarching business case with assistance from DAERA to seek delegated authority to make redundancy payments up to a set amount per year. At that time AFBI was projecting it would employ 12 staff on FTCs, and these 12 posts were appended to the overarching business case. Ultimately after various discussions and re-drafting of the business case, it was not deemed that the numbers were significant enough to approve the overarching business case at that time. As a result, four of the 12 FTCs commenced employment without approvals in place to make redundancy payments.

We have now agreed a process with DAERA to prevent this happening in future.

V. Direct Award Contract

AFBI had a Direct Award Contract (DAC) for the use of a site-wide licence for a statistical software modelling licence which expired on 31 January 2019. There was a delay in carrying out a procurement exercise for a new contract. The company continued to allow AFBI access to the site-wide licence for a short period following the expiration of the DAC. There was no cost incurred by AFBI for access to this licence for this period. Pending a procurement exercise for a site-wide licence a small number of individual licences were purchased in March 2019 with DAC approval. A procurement exercise was subsequently carried out for a site-wide licence and a new contract was awarded in July 2019.

VI. Exchange Rate Risk

AFBI's royalty income stream, coupled with the increase in number of EU funded projects, increases AFBI's exposure to the risks from significant movements in exchange rates as this may have an adverse impact upon income levels. AFBI have taken a number of steps to mitigate the exchange rate risk for example through setting up a Euro bank account and making payments in Euro to EU partners and sub-contractors where appropriate.

UK exit from the European Union

AFBI undertook an examination of their business areas with regard to the implications of Brexit Day 1 Delivery following the guidance provided by the Executive Office. As a result of this exercise, the potential threats and impacts to service delivery on day 1 following the UK exit from the EU and potential key threats and opportunities beyond day 1 were identified and communicated to the Executive Office via DAERA. The key risk to AFBI is the potential impact of Brexit on complex supply chains for laboratory consumables, and parts and maintenance of complex scientific equipment and the specialist (DAERA-owned) facilities which AFBI occupies.

The potential for a no deal Brexit has also raised concerns regarding the sharing of personal data with UK organisations by EU/EEA countries following the UK's exit from the EU. Following the date of the UK's exit, UK legislation (currently in draft) will allow for UK organisations to share data with the EU/EEA.

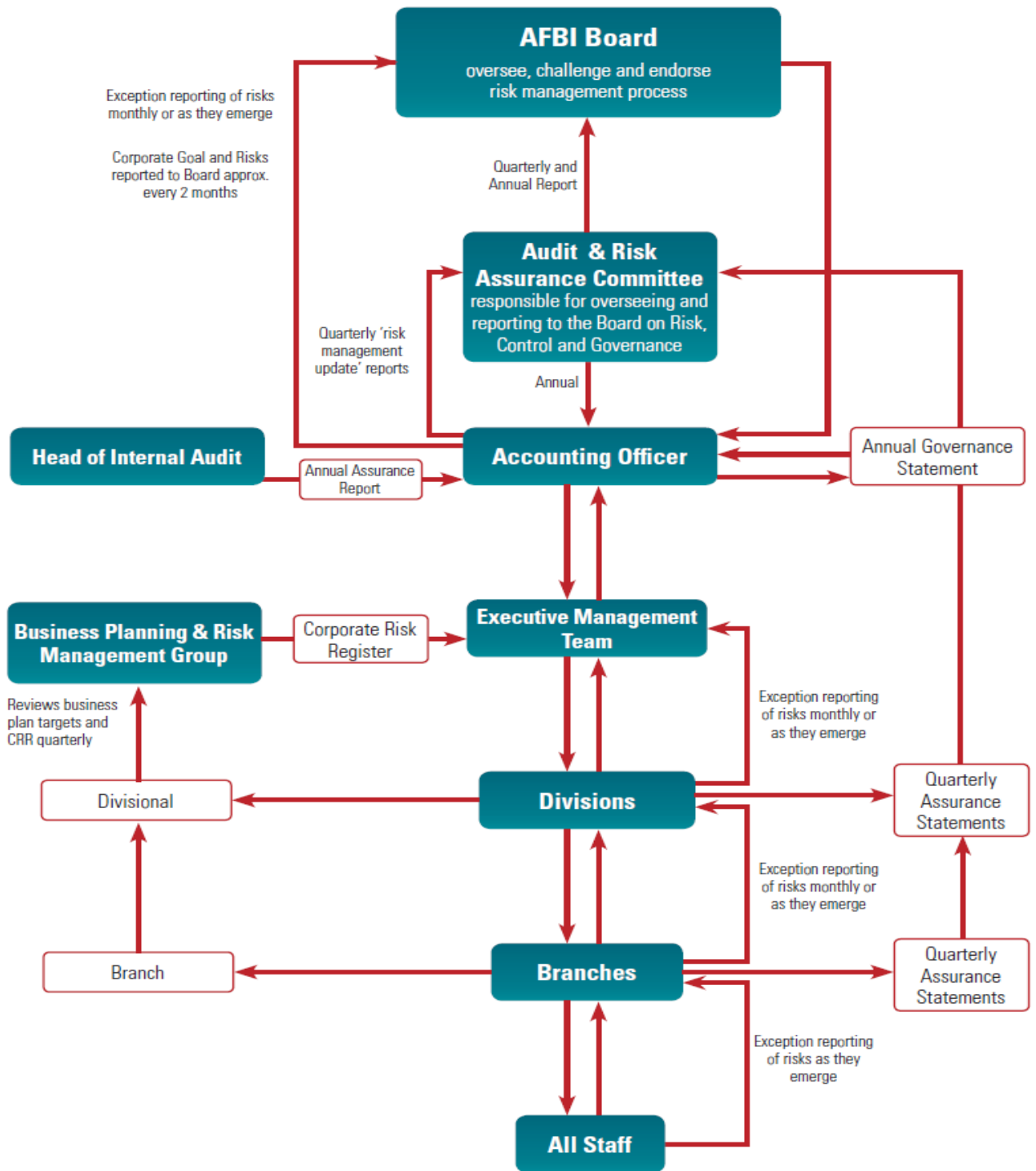
To reflect this an additional risk was added to the CRR to reflect the potential impact of Brexit and in particular a no deal Brexit scenario. This was presented to the ARAC meeting at the end of January 2019. Planning is continuing to ensure that the impacts on supply chains are mitigated. AFBI have also held meetings with senior Departmental staff to ensure that AFBI plans are complementary to those of DAERA and that any potential issues are understood.

Signed 

Dr Stanley McDowell, BVM&S, MSc, DLSHTM, PhD, MRCV Chief Executive and
Accounting Officer

Date: 17 December 2019

Annex A: AFBI's Governance and Risk Assurance Framework



4.3 Remuneration & Staff Report

Chair and Board Members

The Chair is normally appointed for a fixed period of three years, the Deputy Chair for three years and the Board members are appointed for a fixed period of three or four years. Thereafter they are re-appointed in accordance with the Code of Practice.

The remuneration of the Board is set by DAERA. Increases are calculated in line with the recommendations of the Senior Salaries Review Body. There are no arrangements in place for the payment of a bonus. Neither the Chair nor any Board Member receives pension contribution from AFBI or DAERA.

AFBI reimburses the Chair and Board members for any incidental expenses incurred for carrying out their duties relevant to the organisation.

Details of remuneration of the Chair and Board Members (Audited)

In 2018-19, the remuneration for members of the Board was:

Board Member	2018-19				2017-18			
	Salary (to nearest £'000)	Benefits in kind (to nearest £'00)	Pension Benefits (to nearest £'000)	Total (to nearest £'000)	Salary (to nearest £'000)	Benefits in kind (to the nearest £'00)	Pension Benefits (to nearest £'000)	Total (to nearest £'000)
Mr Colm McKenna, Chair*	25-30	-	-	25-30	25-30	-	-	25-30
Mr Colin Coffey	10-15	-	-	10-15	5-10	-	-	5-10
Mr Ian Buchanan	5-10	-	-	5-10	0-5	-	-	0-5
Mrs Maureen McKeague	5-10	-	-	5-10	5-10	-	-	5-10
Dr Michelle Costello-Smith	5-10	-	-	5-10	5-10	-	-	5-10

Board Member	2018-19				2017-18			
	Salary (to nearest £'000)	Benefits in kind (to nearest £'00)	Pension Benefits (to nearest £'000)	Total (to nearest £'000)	Salary (to nearest £'000)	Benefits in kind (to the nearest £'00)	Pension Benefits (to nearest £'000)	Total (to nearest £'000)
Ms Theresa Cullen	5-10	-	-	5-10	5-10	-	-	5-10
Mrs Fiona Hanna	5-10	-	-	5-10	5-10	-	-	5-10
Dr Richard Horton	5-10	-	-	5-10	5-10	-	-	5-10
Ms Joan Houston	5-10	-	-	5-10	5-10	-	-	5-10
Mrs Sharon Smyth	5-10	-	-	5-10	5-10	-	-	5-10
Mr Richard Solomon	5-10	-	-	5-10	5-10	-	-	5-10
Ms Kate Burns	5-10	-	-	5-10	0-5	-	-	0-5
Mrs Roberta Brownlee	5-10	-	-	5-10	0-5	-	-	0-5

The figures quoted above relate to payments made in 2018-19 & 2017-18.

* Mr Colm McKenna, AFBI Chair, completed his Term of Office on 31 March 2019.

Sub-Committees of the Board

The following sub-committees continued to operate during the year and members received the noted remuneration for sitting on these committees (included within total remuneration disclosed in the table above):

Audit & Risk Assurance Committee

Ms Joan Houston, Chair	£2,322
Mrs Sharon Smyth	£2,322
Mrs Fiona Hanna	£2,322

Mr Ian Buchanan	£1,933
Mr Richard Solomon	£2,322
Ms Kate Burns	£1,163

The Audit & Risk Assurance Committee advises the Board on the issues of risk, control and governance. The Accounting Officer, Director of Finance & Corporate Affairs, Head of Finance, representatives from internal and external audit and DAERA's AFBI Sponsor Branch were generally in attendance at Audit Committee meetings.

Organisational Development & HR Committee

Ms Theresa Cullen	£1,548
Mrs Maureen McKeague	£1,548
Ms Joan Houston	£1,548
Mr Richard Solomon	£1,548
Mrs Sharon Smyth	£1,548
Mrs Roberta Brownlee	£1,548

The Organisational Development & HR Committee advises the Board on the remuneration of Executive Management Team (EMT). The members of EMT are equivalent senior servants for the purposed of remuneration which is set by the Minister for Finance. No bonus scheme was available in 2018-19. Whilst the terms and conditions of employment and remuneration of all AFBI employees are in accordance with the overall terms and conditions of the NICS, any proposed changes to the overall framework are also subject to review and scrutiny by this Committee. The Accounting Officer and the Director of Finance & Corporate Affairs generally attended the Organisational Development & HR Committee meetings.

Science Strategy Committee

Dr Richard Horton	£1,548
Dr Michelle Costello-Smith	£1,548
Ms Theresa Cullen	£1,548
Mr Colin Coffey	No Payment ¹
Mr Ian Buchanan	£1,548
Ms Kate Burns	£1,548

The Science Strategy Committee guides the Executive in developing a Science

Strategy for AFBI. This includes assisting EMT to prioritise existing areas of scientific work and identify strategic scientific areas or technologies in which AFBI should potentially become engaged.

Finance and Business Strategy Committee

Mr Colin Coffey, Chair	No Payment ¹
Mrs Fiona Hanna	£1,548
Mrs Maureen McKeague	£1,548
Dr Michelle Costello-Smith	£1,548
Mr Richard Horton	£1,159
Mrs Roberta Brownlee	£1,163

The Finance and Business Strategy Committee supports the Board in discharging its responsibilities for the oversight of financial management including, in particular, the review of financial plans and budget monitoring. The Accounting Officer, Director of Finance & Corporate Affairs and Head of Finance were generally in attendance.

Oversight and Governance Committee

Mr Colin Coffey	No Payment ¹
Mrs Roberta Brownlee	£1,159
Mr Richard Solomon (from 21 December 2018)	£389

¹To Note: Mr Colin Coffey who was Deputy Chair during 2018-19 is not remunerated for attendance at sub-committee meetings.

Chief Executive and Executive Management Team

Remuneration Policy

The Senior Civil Service (SCS) remuneration arrangements are based on a system of pay scales for each SCS grade containing a number of pay points from minima to maxima, allowing progression towards the maxima based on performance. In 2012, upon creation, there were 11 points on each scale. The minimum point has been removed in each year from 2014 to 2016 (the scales now have 8 pay points) to allow progression through the pay scales within a reasonable period of time.

The pay remit (for the NI public sector and SCS) is normally approved by the Minister of Finance but in the absence of an Executive the DoF Permanent Secretary has set the 2018-19 NI public sector pay policy in line with the overarching HM Treasury parameters and in a manner consistent with the approach taken by the previous Finance Minister in 2016-17.

Service contracts

Appointments in AFBI are made in accordance with the Civil Service Commissioners' Recruitment Code, which requires appointment to be on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made.

Unless otherwise stated below, the officials covered by this report hold appointments which are open-ended. Early termination, other than for misconduct, would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme.

Further information about the work of the Civil Service Commissioners can be found at www.nicscommissioners.org

Salary and Pension Entitlements

The following sections provide details of the remuneration and pension interests of the Executive Management Team of AFBI.

Remuneration (including salary) and pension entitlements (Audited):

Name	2018-19				2017-18			
	Salary	Benefits in kind (to nearest £'00)	Pension Benefits* (to nearest £'000)	Total (£'000)	Salary	Benefits in kind (to the nearest £'00)	Pension Benefits* (to nearest £'000)	Total (£'000)
Dr S McDowell CEO (commenced 03 September 2018)	50-55 Full-time Equivalent 85-90 (CEO) 30-35 Full-time Equivalent 70-75 (DCEO)	-	132	210-220	65-70	-	6	70-75
Mrs J Kelly DCEO	70-75	-	29	100-110	45-50 Full-time equivalent 70-75	-	18	60-65
Dr E Magowan DCEO	65-70	-	31	95-100	60-65 Full-time equivalent 65-70	-	97	155-160
Dr A Douglas** DCEO (Acting) (commenced 20 August 2018)	40-45 Full-time Equivalent 65-70	-	33	75-80	-	-	-	-
Dr S Mayne CEO (retired 31 August 2018)	35-40 Full-time Equivalent 90-95	-	(45)	(5)-(10)	85-90	-	83	170-175

Name	2018-19				2017-18			
	Salary	Benefits in kind (to nearest £'00)	Pension Benefits* (to nearest £'000)	Total (£'000)	Salary	Benefits in kind (to the nearest £'00)	Pension Benefits* (to nearest £'000)	Total (£'000)
Ms L Johnston DCEO (Acting) (until 04 August 2017)	-	-	-	-	20-25 Full-time equivalent 65-70	-	22	45-50
Band of Highest Paid Director's Total Remuneration	85-90	-	-	-	85-90	-	-	-
Median Total Remuneration	27,248	-	-	-	27,261	-	-	-
Ratio**	3.56	-	-	-	3.25	-	-	-

*The value of pension benefits accrued during the year is calculated as (the real increase in pension multiplied by 20) plus (the real increase in any lump sum) less (the contributions made by the individual). The real increases exclude increases due to inflation and any increase or decrease due to a transfer of pension rights.

**Reporting bodies are required to disclose the relationship between the remuneration of the highest-paid director in their organisation and the median remuneration of the organisation's workforce. The banded remuneration of the highest paid director in AFBI in the financial year 2018-19 was £85-90k (2017-18, £85-90k). This was 3.56 times (2017-18, 3.25) the median remuneration of the workforce, which was £27,248 (2017-18, £27,261). In 2018-19, no employees (2017-18, 0), received remuneration in excess of the highest-paid director. Remuneration ranged from £389 to £83k (2017-18, £385 to £89k). Total remuneration includes salary, non-consolidated performance-related pay and benefits-in-kind. It does not include severance payments, employer pension contributions and the cash equivalent transfer value of pensions.

Off-Payroll Payments:

Details of off-payroll payments at a cost of over £58,200 per annum	
Opening number of off-payroll engagements at 1 April 2018	1
Number of new engagements during 2018-19	-
Number of engagements coming onto AFBI payroll during 2018-19	-
Number of engagements that have come to an end during 2018-19	(1)
Closing number of engagements at 31 March 2019	-

Details of off-payroll engagements as of 31 March 2019, for more than £220 per day and that last longer than six months	
Number of existing engagements as of 31 March 2019	-
Of which:-	
Number that have existed for less than one year at time of reporting	-
Number that have existed for between one and two years at time of reporting	-

The off-payroll engagement outlined above has been subject to a risk based assessment as to whether assurance is required that the individual is paying the right amount of tax. It was not deemed necessary that assurance was sought.

Details of new off-payroll engagements between 1 April 2018 and 31 March 2019, for more than £220 per day and that last longer than six months	
Number of new engagements between 1 April 2018 and 31 March 2019	-
Number of the above which include contractual clauses giving AFBI the right to request assurance in relation to income tax and National Insurance obligations	-
Number for whom assurance has been requested	N/A

Consultancy Costs

The following table is an analysis of consultancy and temporary staff costs for 2018-19:

	2018-19	2017-18
	£'000	£'000
Consultancy	26	-
Temporary staff costs	2,221	2,469
Total	2,247	2,469

Salary:

Salary includes gross salary, overtime and any other allowance to the extent that

it is subject to UK taxation and any gratia payments.

Benefits in kind:

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HM Revenue and Customs as a taxable emolument.

Pension Entitlements (Audited):

Name	Accrued pension at pension age as at 31/3/19 and related lump sum	Real increase in pension and related lump sum at pension age	CETV at 31/3/19	CETV at 31/3/18	Real increase in CETV	Employer contribution to partnership pension account
	£'000	£'000	£'000	£'000	£'000	Nearest £100
Dr S McDowell	35-40 plus a lump sum of 40-45	5-7.5 plus a lump sum of 5-7.5	727	556	112	-
Mrs J Kelly	0-5	0-2.5	34	12	15	-
Dr E Magowan	15-20	0-2.5	237	190	13	-
Dr A Douglas	20-25 plus a lump sum of 70-75	0-2.5 plus a lump sum of 2.5-5	517	450	28	-
Ms L Johnston	-	-	-	100	-	-
Dr S Mayne	35-40 plus a lump sum of 250-255	0 plus a lump sum of 115-117.5	995	1,027	(28)	-

Northern Ireland Civil Service (NICS) Pension arrangements

Pension benefits are provided through the Northern Ireland Civil Service pension arrangements which are administered by Civil Service Pensions (CSP). The alpha scheme was introduced for new entrants from 1 April 2015. The alpha scheme and all previous scheme arrangements are unfunded with the cost of benefits met by monies voted each year. The majority of existing members of the classic, premium, classic plus and nuvos pension arrangements also moved to alpha from that date. Members who on 1 April 2012 were within 10 years of their normal pension age did not move to alpha and those who were within 13.5 years and 10 years of their normal pension age were given a choice between moving to Alpha on 1 April 2015 or at a later date determined by their age. Alpha is a 'Career Average Revalued Earnings' (CARE) arrangement in which members accrue pension benefits at a percentage rate of annual pensionable earnings throughout the period of scheme membership. The rate is 2.32%.

New entrants joining can choose between membership of alpha or joining a 'money purchase' stakeholder arrangement with a significant employer contribution (partnership pension account).

New entrants joining on or after 30 July 2007 were eligible for membership of the nuvos arrangement or they could have opted for a partnership pension account. Nuvos is also a CARE arrangement in which members accrue pension benefits at a percentage rate of annual pensionable earnings throughout the period of scheme membership. The current rate is 2.3%.

Staff in post prior to 30 July 2007 may be in one of three statutory based 'final salary' defined benefit arrangements (classic, premium, and classic plus). From April 2011, pensions payable under classic, premium, and classic plus are reviewed annually in line with changes in the cost of living. New entrants joining on or after 1 October 2002 and before 30 July 2007 could choose between membership of premium or joining the partnership pension account.

All pension benefits are reviewed annually in line with changes in the cost of living. Any applicable increases are applied from April and are determined by the Consumer Prices Index (CPI) figure for the preceding September. The CPI in

September 2018 was 2.4% and HM Treasury has announced that public service pensions will be increased accordingly from April 2019.

Employee contribution rates for all members for the period covering 1 April 2019 – 31 March 2020 are as follows:

Scheme Year 1 April 2019 to 31 March 2020

Annualised Rate of Pensionable Earnings (Salary Bands)		Contribution rates – all members
From	To	From 01 April 2019 to 31 March 2020
£0	£23,500.99	4.6%
£23,501.00	£54,500.99	5.45%
£54,501.00	£150,000.99	7.35%
£150,001 and above		8.05%

Benefits in classic accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. For premium, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike classic, there is no automatic lump sum (but members may give up (commute) some of their pension to provide a lump sum). Classic plus is essentially a variation of premium, but with benefits in respect of service before 1 October 2002 calculated broadly as per classic.

The partnership pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 8% and 14.75% (depending on the age of the member) into a stakeholder pension product chosen by the employee. The employee does not have to contribute but where they do make contributions, the employer will match these up to a limit of 3% pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.5% of the pensionable salary to cover the cost of centrally provided risk benefit cover (death in service and ill health retirement).

The accrued pension quoted is the pension the member is entitled to receive when they reach their scheme pension age, or immediately on ceasing to be an active member of the scheme if they are at or over pension age. Scheme Pension age is

60 for members of classic, premium, and classic plus and 65 for members of nuvos. The normal scheme pension age in Alpha is linked to the member's State Pension Age but cannot be before age 65. Further details about the NICS pension arrangements can be found at the website www.finance-ni.gov.uk/topics/working-northern-ireland-civil-service/civil-service-pensions-ni.

Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures, and from 2003-04 the other pension details, include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the NICS pension arrangements. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost. CETVs are calculated in accordance with The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2015 and do not take account of any actual or potential benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are taken.

Real increase in CETV

This reflects the increase in CETV effectively funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period. However, the real increase calculation uses common actuarial factors at the start and the end of the period so that it disregards the effect of any changes in factors and focuses only on the increase that is funded by the employer.

Compensation for loss of office (audited)

No compensation has been paid to senior officers by AFBI during the year for loss of office.

Staff Report

Staff costs (Audited):

	Permanently employed staff	Others	2018-19 £000 Total	2017-18 £000 Total
Wages and salaries	18,913	2,221	21,134	20,599
Social security costs	1,944	-	1,944	1,857
Other pension costs	4,100	-	4,100	3,899
Sub Total	24,957	2,221	27,178	26,355
Less recoveries in respect of outward secondments	(92)	-	(92)	(65)
Total net costs	24,865	2,221	27,086	26,290

Pension scheme details

The Northern Ireland Civil Service pension arrangements are unfunded multi-employer defined benefit schemes but AFBI is unable to identify its share of the underlying assets and liabilities. The most up to date actuarial valuation was carried out as at 31 March 2012. The Government Actuary's Department (GAD) is responsible for carrying out scheme valuations. The Actuary reviews employer contributions every four years following the scheme valuation. The 2012 scheme valuation was completed by GAD in February 2015. The outcome of this valuation was used to set the level of contributions for employers from 1 April 2015 to 31 March 2019.

For 2018-19, employers' contributions of £4,048,779 were payable to the NICS pension arrangements (2017-18 £3,808,047) at one of three rates in the range 20.8% to 26.3% of pensionable pay, based on salary bands.

Work was completed on the 2016 valuation, based on the position as at 31 March 2016. The outcome of this scheme valuation informed employer contribution rates for 2019-20. Employer contribution rates payable will range from 28.7% to 34.2% of pensionable pay, based on salary bands. This change is primarily due to the reduction in the SCAPE discount rate (as announced at Budget 2018) to 2.4% pa above CPI. The contribution rates are set to meet the cost of the benefits accruing during 2019-20 to be paid when the member retires, and not the benefits paid during this period to existing pensioners.

Employees can opt to open a partnership pension account, a stakeholder pension with an employer contribution. Employers' contributions of £33,079, (2017-18: £31,226) were paid to one or more of the panel of two appointed stakeholder pension providers. Employer contributions are age-related and range from 8% to 14.75% (2017-18: 8% to 14.75%) of pensionable pay.

The partnership pension account offers the member the opportunity of having a 'free' pension. The employer will pay the age-related contribution and if the member does contribute, the employer will pay an additional amount to match member contributions up to 3% of pensionable earnings.

Employer contributions of £1,641, 0.5% (2017-18 £1,163, 0.5%) of pensionable pay, were payable to the NICS Pension schemes to cover the cost of the future provision of lump sum benefits on death in service and ill health retirement of these employees. Contributions due to the partnership pension providers at the reporting period date were £0. Contributions prepaid at that date were £0.

1 person (2017-18: 1 person) retired early on ill-health grounds; the total additional accrued pension liabilities in the year amounted to £Nil (2017-18: £4,015).

Average number of persons employed

The average number of whole-time equivalent persons employed during the year was as follows:

			2018-19	2017-18
	Permanent staff	Others	Total	Total
Directly Employed	611	89	700	688
Other	-	13	13	12
Total	611	102	713	700

Other directly employed staff are defined as agency staff employed on a temporary contract.

3.1 Reporting of Civil Service and other compensation schemes – exit packages (Audited)

Figures in brackets represent 2017-18 comparative.

Exit package cost band	Number of Compulsory Redundancies	Number of Other Departures Agreed	Total Number of Exit Packages by cost band
<£10,000	-	- (-)	- (-)
£10,000 - £25,000	-	- (-)	- (-)
£25,000 - £50,000	-	- (-)	- (-)
£50,000 - £100,000	-	- (-)	- (-)
£100,000 - £150,000	-	-	-
£150,000 - £200,000	-	-	-
Total number of exit packages	-	- (-)	- (-)
Total resource cost/£	-	- (-)	- (-)

Redundancy and other departure costs have been paid in accordance with the provisions of the Civil Service Compensation Scheme, a statutory scheme made under the Superannuation Act 1972. Exit costs are accounted for in full in the year of departure. Where the Institute has agreed early retirements, the additional costs

are met by the Institute and not by the Civil Service pension scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table.

AFBI's accounting policy in respect of pensions is at Note 1 to the accounts.

Provision of information to and consultation with employees

AFBI ensures that all staff are kept informed of plans and developments through meetings, monthly team briefs, staff newsletters and the publication of business and training plans. Staff have access to welfare services and trade union membership. AFBI use the established Whitley process of staff consultation. The Whitley Council and Committees provide an agreed forum for discussion and they are attended by employer and employee (trade union) representatives.

Career Development

AFBI continues to promote opportunities for career development internally and during the course of this year a total of 36 staff have achieved promotion in a wide range of disciplines and grades.

One of AFBI's strategic goals is to sustain and develop our knowledge base through attracting and investing in talented people.

In support of this objective, AFBI's Learning and Development Unit provide expert advice on learning and development opportunities covering the diverse range of skills required across the organisation.

This Unit also administers AFBI's Assistance to Study programme which has provided support for 16 staff this year in their pursuit of professional qualifications specific to AFBI's business.

Recruitment

AFBI continues to develop its workforce in line with its business aims and has made a total of 53 new appointments this year, covering grades across the scientific, administrative and industrial disciplines. This number reflects both permanent and temporary appointments.

As at 31 March 2019 the number of the staff employed by AFBI was as follows:

	Males	Females	Total
Board	5	8	13
Executive Management Team	2	2	4
Other staff	373	261	634
Total	380	271	651

Work Experience

AFBI is committed to providing work experience opportunities for students at all levels to assist them in developing the key skills required to be successful in today's working environment.

38 students in higher education were given the opportunity to develop key work-related skills through a relevant, supervised work placement programme. Work experience was also given to 70 students covering a range of areas within AFBI.

Sickness absence

AFBI had an operational objective of an average of 7.5 working days lost per staff member. Northern Ireland Statistics Research Agency (NISRA) has provided an outturn figure of 7.4 days for 2018-19 (10.6 days in 2017-18).

Equal Opportunities

AFBI's commitment to equality of opportunity and to creating and sustaining a working environment where everyone is treated with respect and dignity, free from any form of inappropriate behaviour, and one in which all employees can give of their best, is embodied in the AFBI Value 'Respecting People' and its Associated Behaviours, and in the Dignity at Work policy to which AFBI adheres. This policy is available to all staff through the Human Resources Connect (HR Connect) portal and the AFBI intranet. AFBI's commitment to equality of opportunity is embedded in the equality awareness training for all staff.

Information and guidance to staff on a wide range of equal opportunity issues is available on the AFBI Intranet.

Employment of People with Disabilities

As part of its overall Equal Opportunities policy, AFBI is fully committed to ensuring that all of its policies and working practices meet or exceed the requirements of the Disability Discrimination Act 1995.

AFBI provides disabled staff with an opportunity to discuss disability issues, ensures that reasonable adjustments are made and Personal Emergency Evacuation Plans are in place where necessary.

AFBI engages with Ulster Supported Employment Limited (USEL) and Disability Action in the employment of disabled persons.

Disability awareness is embedded in equality training for all staff and information on disability issues, including articles from Disability Action are made available through the AFBI intranet.

Security of Personal Data

AFBI is committed to the safeguarding of personal data and has set in place appropriate technical and organisational measures to ensure its security. During 2017-18, AFBI placed a strong focus on preparing for compliance with the EU General Data Protection regulation (GDPR) and UK Data Protection Act (DPA) 2018. Specific Information Governance pages have been created on the Intranet containing detailed guidance for staff in relation to identifying personal information and the requirements of DPA 2018 and GDPR.

All members of staff have been advised that it is their personal responsibility to ensure that any document with sensitive information, including personal data, is appropriately secured and to ensure that, in the case of data held electronically, appropriate access controls are put in place to prevent unauthorised access, whether accidental or deliberate, by others. There have been no reported significant data losses in the course of the year other than one breach involving accidental disclosure of personal data to two recipients and one breach whereby appropriate safeguards were not used during the transfer of personal information. Both of these were handled under the AFBI Data Breach Management Plan and

both assessed as low risk incidents. These were dealt with promptly with steps taken to prevent recurrence.

Signed 

Dr Stanley McDowell, BVM&S, MSc, DLSHTM, PhD, MRCVS
Chief Executive and Accounting Officer

Date: 17 December 2019

4.4 Assembly Accountability and Audit Report

The following sections are subject to audit.

Losses

AFBI does not have any losses to report which exceed £250,000.

Special Payments

AFBI does not have any payments to report which exceed £250,000.

Audited Remote Contingent Liabilities

AFBI does not have any remote contingent liabilities to report.

Audited Fees and charges

A detailed analysis of fees and charges information is provided below:

Category of Income	Basis of Charges	Income Received 2018-19 £'000	Direct Cost 2018-19 £'000	Annual (surplus)/ deficit 2018-19 £'000	Income Received 2017-18 £'000	Direct Cost 2017-18 £'000	Annual (surplus)/ deficit 2017-18 £'000
Income from Analytical, Diagnostic and Research work ¹	Not full recovery of cost	(7,853)	6,178	(1,675)	(7,894)	6,033	(1,861)
Royalties	Per contract	(7,031)	1,782	(5,249)	(8,626)	1,978	(6,648)
Sale of Farm Produce	Market value	(773)	523	(250)	(822)	723	(99)
Charter of Ship	Market value	(33)	-	(33)	(34)	-	(34)
Other	Market value	(148)	92	(56)	(137)	68	(69)
Total		(15,838)	8,575	(7,263)	(17,513)	8,802	(8,711)

¹ Income from analytical, diagnostic and research work is made up of multiple projects including Statutory and commercial work that is all individually priced.

Disclosure to Auditor

So far as I am aware, as Accounting Officer, there is no relevant audit information of which the Institute's auditors are unaware; and, as Accounting Officer, I have taken all steps that I ought to have taken to make myself aware of any relevant audit information and establish that the AFBI's auditors are aware of that information.

Signed 

Dr Stanley McDowell, BVM&S, MSc, DLSHTM, PhD, MRCVS
Chief Executive and Accounting Officer

Date: 17 December 2019

4.5 Auditors Certificate

Agri-Food and Biosciences Institute 2018-19

THE CERTIFICATE OF THE COMPTROLLER AND AUDITOR GENERAL TO THE NORTHERN IRELAND ASSEMBLY

Qualified opinion on financial statements

I certify that I have audited the financial statements of the Agri-Food and Biosciences Institute (AFBI) for the year ended 31 March 2019 under the Agricultural (Northern Ireland) Order 2004. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes including significant accounting policies. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion, except for the effects of the matter described in the basis of opinions section of my certificate, the financial statements:

- give a true and fair view of the state of the Agri-Food and Biosciences Institute's affairs as at 31 March 2019 and of the net expenditure for the year then ended; and
- have been properly prepared in accordance with the Agricultural (Northern Ireland) Order 2004 and the Department of Agriculture Environment and Rural Affairs directions issued thereunder.

Qualified opinion on regularity

In my opinion, except for the effects of the matter described in the basis of opinions section of my certificate, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by the Assembly and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Basis of qualified opinions

Royalty income totalling £7 million and £2.7 million of expenditure including administration fees to Queens University Belfast, inventor payments and corporation tax have been recognised in the financial statements. The £7 million patent income is an estimate based on the validity of the patents during the 2018-19 financial year and a report from QUB which concluded on the income these patents might generate. There is currently no documentation to suggest that the vaccine company agrees that this or any other sum is due to AFBI.

In previous years payments have been made to AFBI by QUB in two parts in June and December each year. These payments are usually based on sales reports from the vaccine company to the Universities detailing vaccine sales in various territories. AFBI has not received any sales reports and only one small payment from QUB since June 2018. Whilst attempts by the Universities to resolve the matter are ongoing, with QUB acting as AFBI's agent, these have so far been unsuccessful.

As there is currently no indication that the Agri-Food and Biosciences Institute will receive patents income the estimate does not meet the recognition requirements of IFRS 15. As a consequence, the £7

million income and £2.7 million of related expenditure should not be accounted for in the financial statements.

The regularity opinion has been qualified as AFBI has not adjusted the financial statements to remove the material misstatement. If the adjustment was to be made then the additional net expenditure of £4.3 million would cause a breach of the amounts approved by the Department for the year by £3.96 million. I consider this breach to be irregular therefore I have qualified my opinion on regularity due to £3.96 million of expenditure in excess of the amounts approved.

I conducted my audit in accordance with International Standards on Auditing (UK) (ISAs) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of this certificate. My staff and I are independent of the Agri-Food and Biosciences Institute in accordance with the ethical requirements of the Financial Reporting Council's Revised Ethical Standard 2016, and have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my opinions.

Other Information

The Accounting Officer is responsible for the other information included in the annual report. The other information comprises the information included in the annual report other than the financial statements, the parts of the Accountability Report described in the report as having been audited, and my audit certificate and report. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

Opinion on other matters

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with directions made under the Agricultural (Northern Ireland) Order 2004 ; and
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Responsibilities of the Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer Responsibilities, the Accounting Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Auditor’s responsibilities for the audit of the financial statements

My responsibility is to audit, certify and report on the financial statements in accordance with the Agricultural (Northern Ireland) Order 2004.

My objectives are to obtain evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council’s website www.frc.org.uk/auditorsresponsibilities. This description forms part of my certificate.

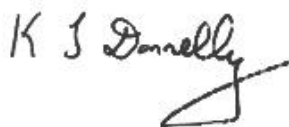
In addition, I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by the Assembly and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept;
- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records;
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with the Department of Finance’s guidance.

My detailed observations are included in my report attached to the financial statements.



KJ Donnelly
Comptroller and Auditor General
Northern Ireland Audit Office
106 University Street
Belfast
BT7 1EU

December 2019

5. Financial Statements

Statement of Comprehensive Net Expenditure for the year ended 31 March 2019

	Note	2018-19 £000	2017-18 £000
Income			
Income from contracts with customers	4	(15,838)	(17,513)
Other operating income	4	(4,472)	(5,700)
Total operating income		<u>(20,310)</u>	<u>(23,213)</u>
Expenditure			
Staff costs	3	27,178	26,355
Depreciation and impairment charges	3	3,463	2,227
Other operating expenditure	3	29,813	29,206
Total operating expenditure		<u>60,454</u>	<u>57,788</u>
Net operating expenditure		<u>40,144</u>	<u>34,575</u>
Corporation tax charge	3	940	1,140
Net Expenditure for the year		<u>41,084</u>	<u>35,715</u>
Other comprehensive net expenditure			
Net (gain) on revaluation of property, plant and equipment	5/9	(236)	(103)
Net (gain) on revaluation of Intangible assets	6/9	(10)	(16)
Comprehensive net expenditure for the year		<u>40,838</u>	<u>35,596</u>

The notes on pages 105 to 131 form part of these accounts.

Statement of Financial Position as at 31 March 2019

	Note	2019		2018	
		£000	£000	£000	£000
Non-current assets:					
Property, plant and equipment	5	15,928		13,165	
Intangible assets	6	430		484	
Biological assets	7	1,337		1,569	
Trade and other receivables	12	459		1,063	
Total non-current assets			18,154		16,281
Current assets:					
Inventories	10	588		479	
Trade and other receivables	12	17,224		12,911	
Cash and cash equivalents	11	2,804		2,386	
Total current assets			20,616		15,776
Total assets			<u>38,770</u>		<u>32,057</u>
Current liabilities					
Trade and other payables	13	(10,789)		(13,476)	
Provisions	14	(247)		(447)	
Total current liabilities			(11,036)		(13,923)
Total assets less current liabilities			<u>27,734</u>		<u>18,134</u>
Non-current liabilities					
Deferred Income	13	(2,899)		(2,090)	
Provisions	14	(34)		(120)	
Total non-current liabilities			(2,933)		(2,210)
Total assets less total liabilities			<u>24,801</u>		<u>15,924</u>
Taxpayers' equity and other reserves					
Revaluation Reserve			5,044		4,781
General Fund			19,757		11,143
			<u>24,801</u>		<u>15,924</u>

The financial statements on pages 100 to 104 were approved by the Board on 17 December 2019 and were signed on its behalf by:

Signed 

Dr Stanley McDowell, BVM&S, MSc, DLSHTM, PhD, MRCVS
Chief Executive and Accounting Officer

Date 17 December 2019

The notes on pages 105 to 131 form part of these accounts.

Statement of Cash Flows for the year ended 31 March 2019

		2018-19		2017-18	
	Note	£000	£000	£000	£000
Cash flows from operating activities					
Net expenditure for the year			(41,084)		(35,715)
Adjustment for non-cash transactions	3	4,209		2,729	
Use of bad debt provision		(22)		-	
(Increase) in trade receivables	12	(3,674)		(2,779)	
(Increase) in inventories	10	(109)		(2)	
(Decrease)/Increase in trade payables	13	(468)		5,092	
Use of provisions	14	(284)		(100)	
			(348)		4,940
Net cash outflow from operating activities					
			(41,432)		(30,775)
Cash flows from investing activities					
Purchase of plant and equipment	5	(6,071)		(2,499)	
Purchase of intangible assets	6	(56)		(201)	
Purchase of biological assets	7	(28)		(19)	
Proceeds of disposal of property, plant and equipment		21		1	
Proceeds of disposal of biological assets		735		726	
Net cash outflow from investing activities					
			(5,399)		(1,992)
Cash flows from financing activities					
Grant from sponsoring entity		47,249		34,614	
Net financing					
			47,249		34,614
Net increase in cash and cash equivalents in the period					
			418		1,847
Cash and cash equivalents at the beginning of the year					
	11		2,386		539
Cash and cash equivalents at the end of the year					
	11		2,804		2,386

The notes on pages 105 to 131 form part of these accounts

Statement of Changes in Taxpayers' Equity for the period ended 31 March 2019

	Note	General Fund £000	Revaluation Reserve £000	Taxpayers' equity £000
Balance as at 31 March 2017		10,596	3,017	13,613
Grant from sponsoring entity		34,614	-	34,614
Net gain on revaluation of plant and equipment	5	-	103	103
Net gain on revaluation of intangible assets	6	-	16	16
Relifing adjustment	5/6	-	1,985	1,985
Release of reserves to the SoCNE		-	-	-
Notional charges - IT Assist	3	1,308	-	1,308
Transfers between reserves		340	(340)	-
Net expenditure for the year		(35,715)	-	(35,715)
Balance at 31 March 2018		11,143	4,781	15,924
Grant from sponsoring entity		47,249	-	47,249
Net gain/(loss) on revaluation of plant and equipment	5	-	236	236
Net gain/(loss) on revaluation of intangible assets	6	-	10	10
Relifing adjustment	5/6	-	1,172	1,172
Release prior years relifing		867	(867)	-
Notional charges - IT Assist	3	1,294	-	1,294
Transfers between reserves		288	(288)	-
Net expenditure for the year		(41,084)	-	(41,084)
Balance at 31 March 2019		19,757	5,044	24,801

The notes on pages 105 to 131 form part of these accounts.

Notes to the accounts for the year ended 31 March 2019

1. Statement of accounting policies

These financial statements have been prepared in accordance with the 2018-19 *Government Financial Reporting Manual (FReM)* issued by the Department of Finance (DoF). The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Agri-Food and Biosciences Institute (AFBI) for the purpose of giving a true and fair view has been selected. The particular policies adopted by AFBI are described below. They have been applied consistently in dealing with items that are considered material to the accounts. These financial statements have been prepared in sterling and are rounded to the nearest £'000.

Accounting convention

These accounts have been prepared under the historical cost convention modified to account for the revaluation of plant and equipment, intangible assets, biological assets and inventories.

Property, plant and equipment

AFBI does not own any other land or buildings but leases them from the Department of Agriculture, Environment and Rural Affairs (DAERA).

Other non-property assets are stated at current cost using appropriate indices to account for the effects of inflation. No independent valuer is involved in the valuation of assets. The date of the revaluation is the reporting date of 31 March each year.

The threshold for capitalisation is £5,000 excluding any VAT capitalised.

Donated fixed assets

Donated fixed assets are capitalised at their fair value on receipt and this value is credited to the General Fund. Donated fixed assets are valued and depreciated as described below for purchased assets. Gains and losses on revaluations are also taken to the General Fund and, each year, an amount equal to the depreciation

charge on the asset is released from the donated asset charged to the Statement of Comprehensive Net Expenditure. Any impairment on donated assets charged to the Statement of Comprehensive Net Expenditure is matched by a transfer from the General Fund.

Depreciation

Depreciation is charged on a straight line basis in order to write off the valuation of assets, less estimated residual value, of each asset over the expected useful life.

Assets are generally depreciated from the period of acquisition and not depreciated in the period of disposal. However, an exception to this practice occurs when AFBI makes a late addition in the financial year. Where the cost of the asset remains unpaid at the date the financial statements are prepared, the depreciation charge for the asset is included in the following year's financial statements.

The useful lives of tangible assets, which are reviewed annually, are:

Plant	5 to 44 years
Equipment	3 to 28 years
Transport equipment: ship/boats	5 to 16 years
Transport equipment: vehicles	3 to 27 years
Information technology: computers	4 to 25 years

The useful lives of intangible assets, which are reviewed annually, are:

Software licences	3 to 16 years
-------------------	---------------

Intangible assets

Software licences are stated at current cost using appropriate indices to account for the effects of inflation. Software assets are depreciated from the period of acquisition and not depreciated in the period of disposal.

Biological assets

Biological assets comprise cattle, sheep and pigs which are used for research purposes. They are categorised according to the attributes used in the market to facilitate their valuation at the reporting date. Cattle were further grouped as follows:

- Beef cattle are grouped by gender, breed and age.
- Dairy cattle are grouped by lactation and breed.

Biological assets are valued at fair value less estimated costs at the point of sale at the end of the reporting period. This is further disclosed in accordance with IAS 41 Agriculture, by showing the aggregate value of purchases, sales, changes in value due to changes in physical conditions of the herd and changes in the value of the herd due to changes in market price.

Changes in value due to changes in physical conditions of the herd represent births which took place during the current financial year. The economic value of these transactions is debited or credited to the Statement of Comprehensive Net Expenditure when they occur.

Changes in value of the herd due to changes in market price represent the difference between the purchase cost or the value brought forward of each animal and the market value at the end of the reporting period. The difference is recognised in the Statement of Comprehensive Net Expenditure.

Inventories

Inventories are valued at the lower of cost and net realisable value.

Research and Development Expenditure

Research and development expenditures include all costs relating to the scientific and technical patent work, education and training necessary to ensure the development, start-up and commercialisation of new or improved products or processes.

Research expenditure is recognised as an expense when incurred.

Development expenditure on new or substantially improved products is capitalised as an intangible asset and amortised through cost of sales over the expected useful life of the product concerned. Capitalisation commences from the point at which the technical feasibility and commercial viability of the product can be demonstrated and AFBI Management is satisfied that it is probable that future economic benefit will result from the product once completed. This is usually at the

point of regulatory filing in a major market and approval is highly probable. Capitalisation ceases when the product is ready for launch.

Cash and cash equivalents

Cash and cash equivalents comprise of cash and deposits with commercial banks. At each year end, the carrying value of cash at bank and in hand approximates their fair value due to their short-term nature.

Operating income

In 2018-19 AFBI implemented IFRS 15 changing the disclosure of income as either Revenue from contracts with customers or Other Operating Income. There was no material impact on the income that AFBI recognises. Revenue from contracts with customers is income that relates directly to operating activities of AFBI and comprises fees and charges, to be recovered for services provided to external customers, Royalties, charter of ship and rents receivable. In order to estimate royalty income not yet notified, AFBI rely on information provided by our royalty administrators. Other Operating Income is Income received from EU initiatives and other various Grants.

Grant income

Grants for revenue purposes that are received to finance the purchase of specific goods or services are reported as income in the Statement of Comprehensive Net Expenditure.

Grants for capital purposes that are received to finance the purchase of tangible non-current assets are reported as deferred income and released to the Statement of Comprehensive Net Expenditure on a systematic and rational basis over the useful lives of the related assets.

Employee benefits

Under the requirements of IAS 19 Employee Benefits, staff costs must be recorded as an expense as soon as the organisation is obligated to pay them. This includes the cost of any untaken leave that has been earned at the year end. The figure has been based on a specific report run from the Personnel system which calculates the year end balance using leave balances on the system. It is not anticipated that the level of untaken annual and flexi leave will vary significantly from year to year.

Leases

Operating lease rentals are charged directly to the Statement of Comprehensive Net Expenditure over the period of the lease. There are no finance leases.

Financial instruments

AFBI is not allowed to borrow or invest surplus funds as per the Management Statement and Financial Memorandum. AFBI has financial instruments in the form of trade receivables and payables and cash and cash equivalents. Financial assets and liabilities are generated by operational activities and are not held to handle the risk profile facing AFBI in undertaking its operations.

- *Liquidity risk*
AFBI's net revenue resource requirements are financed by the Grant-In-Aid agreed with DAERA, as is its capital expenditure. It is not, therefore, exposed to significant liquidity risks.
- *Interest rate risk*
All AFBI's financial assets and liabilities carry nil rate of interest and it is not therefore exposed to significant interest rate risk.
- *Foreign currency risk*
The majority of AFBI's operations, assets and liabilities are denominated in sterling. Transactions in foreign currencies are translated into sterling using the rate at the date of the transactions. Balances held in foreign currencies are translated at the rate of exchange ruling at the date of the SoFP. Exchange differences are recognised in the SoCNE in the period in which they arise. See note 8 for additional information.

Provisions

AFBI makes provisions for liabilities and charges where, at the Statement of Financial Position date, a legal or constructive liability exists (i.e. a present obligation for past events exists), where the transfer of economic benefits is probable and a reasonable estimate can be made. Where the time value of money is material, AFBI discounts the provision to its present value using a standard government discount rate.

Critical accounting estimates and key judgements

The preparation of financial statements in conformity with IFRS requires the use of accounting estimates and assumptions. It also requires management to exercise its judgement in the process of applying AFBI's accounting policies. AFBI continually evaluates its estimates, assumptions and judgements based on available information and experience. As the use of estimates is inherent in financial reporting, actual results could differ from these estimates.

Estimation techniques used and changes in accounting estimates

Provision is made for all debts greater than 90 days old which are considered doubtful.

The effect of a change in accounting estimate is recognised by including it in the Statement of Comprehensive Net Expenditure in:

- the period of the change, if the change affects that period only; and
- the period of the change and future periods, if that change affects both.

Value added tax

Value added tax (VAT) is accounted for in accordance with the Statement of Standard Accounting Practice 5, in the absence of an International Financial Reporting Standard (IFRS). Amounts are shown net of VAT and irrecoverable VAT is charged to the Statement of Comprehensive Net Expenditure, or included in the capitalised cost of fixed assets.

Third party assets

AFBI does not hold any third party assets.

Operating segments

IFRS 8 Operating Segments requires the identification of operating segments on the basis of internal reports reviewed by AFBI's Chief Decision Maker in order to allocate resources to each specific segment and assess its performance.

AFBI has completed a review against the criteria set out in IFRS 8 and considers that the disclosure format within the accounts meets IFRS 8 criteria.

Contingent liabilities

In addition to contingent liabilities disclosed in accordance with IAS 37, AFBI discloses for Assembly reporting and accountability purposes certain statutory and

non-statutory contingent liabilities where the likelihood of a transfer of economic benefit is remote, but which have been reported to the Assembly in accordance with the requirements of Managing Public Money Northern Ireland.

Where the time value of money is material, contingent liabilities which are required to be disclosed under IAS 37 are stated at discounted amounts and the amount reported to the Assembly separately noted.

Contingent liabilities that are not required to be disclosed by IAS 37 are stated at the amounts reported to the Assembly.

Reserves

Revaluation Reserve

The Revaluation Reserve reflects the unrealised balance of the cumulative indexation and revaluation adjustments to assets other than donated assets and those funded by grants.

General Fund

The General Fund represents AFBI's total assets less total liabilities which is not represented by other reserves and financing items.

Pensions

Past and present employees are covered by the provisions of the Principal Civil Service Pension Scheme (Northern Ireland) (PCSPS (NI)), which is a defined benefit scheme and is unfunded. AFBI recognises the expected cost of providing pensions on a systematic and rational basis over the period during which it benefits from employees' services by payment to the PCSPS (NI) of amounts calculated on an accruals basis.

All pension contributions are charged to the Statement of Comprehensive Net Expenditure when incurred.

Accounting standards, interpretations and amendments to published standards adopted in the year ended 31 March 2019

The Institute has reviewed the standards, interpretations and amendments to

published standards that became effective during 2018-19 and which are relevant to its operations. The Institute anticipates that the adoption of these standards will have no material impact on AFBI's financial position or results of operations.

The International Accounting Standards Board (IASB) issued new and amended standards (IFRS 10, IFRS 11 & IFRS 12) that affect the consolidation and reporting of subsidiaries, associates and joint ventures. These standards were effective with EU adoption from 1 January 2014. Accounting boundary IFRSs are currently adapted in the FReM so that the Westminster departmental accounting boundary is based on the Office for National Statistics (ONS) control criteria, as designated by Treasury. A similar review in NI, which will bring NI Departments under the same adaptation, has been carried out and the resulting recommendations were agreed by the Executive in December 2016. With effect from 2020-21, the accounting boundary for Departments will change and there will also be an impact on Departments around the disclosure requirements under IFRS 12. ALBs apply IFRS in full and their consolidation boundary may change as a result of the new standards.

Accounting standards, interpretations and amendments to published standards not yet effective

In addition, certain new standards, interpretations and amendments to existing standards have been published that are mandatory for AFBI's accounting periods beginning on or after 1 April 2019 or later periods, but which AFBI has not adopted early. Other than as outlined below, AFBI considers that these standards are not relevant or material to its operations.

Standard	IFRS 16 Leases (Replaces IAS 17 Leases and related interpretations)
Effective date	January 2019 (EU Endorsed 31 October 2017). FReM application is revised to 2020-21 from 2019-20.
Summary	<p>The IASB issued IFRS 16 in January 2016 with an effective date for annual periods beginning on or after 1 January 2019.</p> <p>IFRS 16 represents a significant change in lessee accounting by largely removing the distinction between</p>

	<p>operating and finance leases and introducing a single lessee accounting model. A lessee is required to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value on the Statement of Financial Position. There are corresponding changes to the disclosure requirements to show the effect that leases have on the financial position, financial performance and cash flows of the lessee.</p> <p>The lessor accounting model is substantially unchanged from its predecessor, IAS 17.</p>
Comments	<p>It is AFBI's expectation that the adoption of IFRS 16 will result in an increase in reported assets (in the form of right-of-use assets) and reported liabilities (representing the obligation to make future lease payments).</p>

2. Statement of Operating Expenditure by Operating Segment

Segmental selection is based on the organisational structure that AFBI uses to make decisions on resource allocation as well as the availability of financial information based on that structure. AFBI has two operational divisions supported by the Finance and Corporate Affairs Division (FCAD). The operational divisions are:

Sustainable Agri-Food Sciences Division (SAFSD) provides statutory services including certification of monitoring for DAERA of pasture, seeds and plant health, and provides specialist advice on crop plants, varieties and disease problems. SAFSD provides scientific support for the growth, sustainability and competitiveness of Northern Ireland's farming, fishing and agri-food industries, and assists the industry to maintain high standards of environmental protection and animal welfare. SAFSD's research takes account of environmental needs and sustainable economic growth in Northern Ireland's countryside.

Veterinary Sciences Division (VSD) delivers world class veterinary science to the

animal, food and fish based sectors of the agri-food industry.

Analysis of net expenditure by segment

	2018-19				2017-18			
	SAFSD	VSD	FCAD	Total	SAFSD	VSD	FCAD	Total
Gross expenditure	24,544	13,117	23,733	61,394	22,285	13,035	23,608	58,928
Income	(9,653)	(3,467)	(7,190)	(20,310)	(9,975)	(4,189)	(9,049)	(23,213)
Net expenditure	14,891	9,650	16,543	41,084	12,310	8,846	14,559	35,715

In accordance with IFRS 8, as total assets, net assets or additional information are not reported separately to AFBI's Board, no disclosure in respect of assets and liabilities has been made.

3. Expenditure

	Note	2018-19 £000	2017-18 £000	
<i>Staff costs¹</i>				
Wages and salaries		18,913	18,130	
Other pension costs		4,100	3,899	
Agency staff		2,221	2,469	
Social security costs		1,944	1,857	
		27,178	26,355	
<i>Other expenditure</i>				
Operating lease		5,663	5,874	
Accommodation costs		3,782	3,302	
Laboratory expenditure		3,691	3,724	
Ship Operating costs		2,589	2,585	
Contracted out services		2,396	2,673	
Irrecoverable VAT ²		2,102	1,759	
Royalty costs		1,782	1,976	
Agriculture / Horticultural / Livestock costs		1,630	1,308	
Operating expenses		1,592	1,823	
Maintenance of machinery and vehicles		1,086	1,116	
EU Interreg contractor payments		999	762	
Personnel costs		882	883	
Office costs		794	840	
External Audit fees ³		52	45	
Internal Audit fees		27	34	
		29,067	28,704	
<i>Non cash items</i>				
Depreciation	5	3,297	2,100	
Amortisation	6	166	127	
		3,463	2,227	
Notional Charges		1,294	1,308	
Provisions provided for in year	13	44	147	
Provisions not required written back	13	(46)	(85)	

Indexation of fixed assets	9	(42)	49
(Profit)/loss on disposal of non-current assets		(16)	27
Loss on disposal of biological assets		81	10
(Decrease) in debt provision		(13)	(64)
Changes due to changes in physical condition of biological assets		(46)	(67)
Change in market value of biological assets		(510)	(823)
		<u>746</u>	<u>502</u>
Taxation charges ⁴		940	1,140
		<u>61,394</u>	<u>58,928</u>

¹Further analysis of staff costs is located in the Staff Report (on page 87).

²VAT cannot be reclaimed on research performed for Government Departments or on work which is grant funded. As a proportion of AFBI's work is research for Government Departments and/or is grant funded, it cannot claim back all VAT. The "Irrecoverable VAT" line is the amount of VAT which AFBI cannot claim from HMRC. This VAT expense should ideally be expensed to the various Government / grant funded projects. However, the agreed process with HMRC is complex. AFBI are currently investigating means by which it can accurately allocate the expense to individual projects.

³During the year AFBI did not purchase any non-audit services from its auditor (NIAO) (2017-18: £Nil).

⁴Corporation tax is charged on AFBI's royalty income, adjusted for a 10% administration fee and rewards to staff payments. The rate of corporation tax for 2018-19 was 19% (2017-18: 19%).

4. Income

	2018-19	2017-18
	£000	£000
Income from contracts with customers		
Income from analytical, diagnostic work and research contracts	7,853	7,894
Royalties ¹	7,031	8,626
Sale of milk and general produce	773	822
Charter of the ship	33	34
Refunds	7	22
Recoveries in respect of outward secondments	92	65
Rents receivable	49	50
	<u>15,838</u>	<u>17,513</u>
Other Operating income		
EU Grant	3,029	4,418
Other Grants	1,443	1,282
	<u>20,310</u>	<u>23,213</u>
Total	<u>20,310</u>	<u>23,213</u>

¹Royalty income is received gross of a 10% administration fee. The administration fee is then paid over on receipt of a VAT invoice.

5. Property, Plant and Equipment

2018-19

	Information Technology	Plant & Machinery¹	Transport Equipment	Total
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2018	1,252	32,031	5,143	38,426
Additions	226	4,294	141	4,661
Disposals	-	(887)	(115)	(1,002)
Reclassification	-	-	-	-
Revaluations & Impairments	7	540	98	645
At 31 March 2019	1,485	35,978	5,267	42,730
	Information Technology	Plant & Machinery	Transport Equipment	Total
Depreciation				
At 1 April 2018	806	20,581	3,874	25,261
Charge for the year	124	2,744	429	3,297
Relieving adjustment	(60)	(985)	(80)	(1,125)
Disposals	-	(884)	(113)	(997)
Revaluations & Impairments	4	287	75	366
At 31 March 2019	874	21,743	4,185	26,802
Carrying amount				
At 31 March 2018	446	11,450	1,269	13,165
Carrying amount				
At 31 March 2019	611	14,235	1,082	15,928
Asset financing:				
Owned	611	14,235	1,082	15,928
Finance leased	-	-	-	-
On-balance sheet PFI contracts	-	-	-	-
Carrying amount at 31 March 2019	611	14,235	1,082	15,928

¹ Plant & Machinery includes a donated asset of scientific equipment with a carrying value of £18k at 31 March 2019

5. Property, Plant and Equipment

2017-18

	Information Technology	Plant & Machinery¹	Transport Equipment	Total
	£000	£000	£000	£000
Cost or valuation				
At 1 April 2017	1,015	28,735	5,295	35,045
Additions	269	4,240	44	4,553
Disposals	(25)	(1,174)	(196)	(1,395)
Reclassification	(21)	8	13	-
Revaluations & Impairments	14	222	(13)	223
At 31 March 2018	1,252	32,031	5,143	38,426
Depreciation				
At 1 April 2017	877	21,168	4,236	26,281
Charge for the year	37	1,742	321	2,100
Relifing adjustment	(91)	(1,345)	(474)	(1,910)
Disposals	(25)	(1,163)	(192)	(1,380)
Revaluations & Impairments	8	179	(17)	170
At 31 March 2018	806	20,581	3,874	25,261
Carrying Amount				
At 31 March 2017	138	7,567	1,059	8,764
Carrying Amount				
At 31 March 2018	446	11,450	1,269	13,165
Asset financing:				
Owned	446	11,450	1,269	13,165
Finance leased	-	-	-	-
On-balance sheet PFI contracts	-	-	-	-
Carrying amount 31 March 2018	446	11,450	1,269	13,165

¹ Plant & Machinery includes a donated asset of scientific equipment with a carrying value of £24k at 31 March 2018

6. Intangible assets

Intangible assets comprise of software licences.

	2018-19
Cost or valuation	£000
At 1 April 2018	1,052
Additions	56
Disposals	(2)
Revaluation & Impairments	24
At 31 March 2019	<u>1,130</u>
Amortisation	£000
At 1 April 2018	568
Charge for the year	166
Relifing	(47)
Disposals	(2)
Revaluations	15
At 31 March 2019	<u>700</u>
Carrying amount	
At 31 March 2019	<u>430</u>
Carrying amount	
At 31 March 2018	<u>484</u>
	2017-18
Cost or valuation	£000
At 1 April 2017	962
Additions	201
Disposals	(143)
Revaluation & Impairments	32
At 31 March 2018	<u>1,052</u>
Amortisation	£000
At 1 April 2017	630
Charge for the year	127
Relifing	(75)
Disposals	(130)
Revaluations	16
At 31 March 2018	<u>568</u>
Carrying amount	
At 31 March 2018	<u>484</u>
Carrying amount	
At 31 March 2017	<u>332</u>

7. Biological Assets

	2018-19	2017-18
	£000	£000
Valuation as at 1 April 2018	1,569	1,396
Purchases	28	19
Decreases due to sales	(816)	(736)
Changes in value of herd due to changes in physical condition		
- Deaths	(100)	(111)
- Births	146	178
Changes in value due to changes in market price	510	823
	<hr/>	<hr/>
Valuation as at 31 March 2019	1,337	1,569

8. Financial Instruments

As the cash requirements of AFBI are met through Grant-In-Aid provided by DAERA and commercial income received, financial instruments play a more limited role in creating and managing risk than would apply to a non-public sector body. The majority of financial instruments relate to contracts to buy non-financial items in line with AFBI's expected purchase and usage requirements and AFBI is therefore exposed to little credit, liquidity or market risk. However, AFBI's royalty income stream, coupled with the increase in the number of EU funded projects, increases AFBI's exposure to the risks from significant movements in exchange rates as this may have an adverse impact upon income levels. In 2018-19, 35% or £7.131m of AFBI's external income was originally denominated in foreign currency and converted to sterling by a third party before receipt by AFBI (2017-18: 48% or £11.129m). Also in 2018-19, 11% or £2.230m of AFBI's external income was received in Euro and translated into sterling using the rate at the transaction date (2017-18: 10% or £2.402m). These amounts were subject to the risk of exchange rate movements. AFBI has taken a number of steps to mitigate the exchange rate risk for example through setting up a Euro bank account and payment in Euro to EU partners and sub-contractors where appropriate.

9. Indexation

Indexation of non-current assets took place during 2018-19 which resulted in £246k being credited to the Revaluation Reserve and indexation of £42k being debited to the Statement of Comprehensive Net Expenditure. Indexation of non-current assets took place during 2017-18 which resulted in £119k being credited to the Revaluation Reserve and indexation of £49k being credited to the Statement of Comprehensive Net Expenditure.

Breakdown of impairments/indexation by category

	2018-19	2017-18
	£000	£000
Charged to statement of comprehensive net expenditure	(42)	49
Charged to revaluation reserve	(246)	(119)
	<u>(288)</u>	<u>(70)</u>

10. Inventories

	2018-19	2017-18
	£000	£000
Feedstuffs and sundry stocks at Hillsborough and Stoney Road sites	337	331
Consumables at Newforge and Stoney Road sites	251	148
	<u>588</u>	<u>479</u>

11. Cash and cash equivalents

	2018-19	2017-18
	£000	£000
Balance at 1 April	2,386	539
Net change in cash and cash equivalent balances	418	1,847
Balance at 31 March	<u>2,804</u>	<u>2,386</u>
The following balances at 31 March were held at:		
Cash in hand	3	3
Cash at bank	2,801	2,383
Balance at 31 March	<u>2,804</u>	<u>2,386</u>

12. Trade receivables and other current assets

	2018-19	2017-18
	£000	£000
Amounts falling due within one year		
Prepayments and accrued Income	10,899	7,952
EU accrued income	3,494	2,682
Trade receivables	2,787	2,242
Other receivables	44	35
	<u>17,224</u>	<u>12,911</u>
Amounts falling due after more than one year		
EU Accrued Income	425	1,063
Prepayments and accrued Income	34	-
	<u>459</u>	<u>1,063</u>

13. Trade payables and other current liabilities

	2018-19	2017-18
Amounts falling due within one year	£000	£000
VAT	65	162
Other taxation and social security	345	576
Trade payables	277	1,385
Other payables	134	39
Capital creditors	1,242	2,652
Accruals and deferred Income	8,726	8,662
	<u>10,789</u>	<u>13,476</u>
 Amounts falling due after more than one year		
Accruals and deferred income	2,899	2,090
	<u>2,899</u>	<u>2,090</u>

Within accruals and deferred income, £3,828k (2017-18: £2,322k) relates to grant funding secured for the purchase of capital assets and has been treated as deferred income. The method of income recognition is in line with the depreciation of these assets. During this financial year, depreciation of £606k (2017-18: £195k) was charged on these assets and an equivalent amount of income was released to SoCNE.

14. Provisions for liabilities and charges**2018-19**

	Legal	Decommissioning	Injury	Other	Total
	£'000	costs	benefit	£'000	£'000
		£'000	£'000		
Balance at 31 March 2018	274	156	137	-	567
Provided in the year	33	-	-	11	44
Provisions not required written back	(46)	-	-	-	(46)
Provisions utilised in year	(71)	(156)	(57)	-	(284)
Balance at 31 March 2019	<u>190</u>	<u>-</u>	<u>80</u>	<u>11</u>	<u>281</u>

Analysis of expected timing of discounted flows

	Legal £'000	Decommissioning costs £'000	Injury benefit £'000	Other £'000	Total £'000
Not later than one year	190	-	57	-	247
Later than one year and not later than five years	-	-	23	11	34
Later than five years	-	-	-	-	-
Balance at 31 March 2019	190	-	80	11	281

2017-18

	Legal £'000	Decommissioning costs £'000	Injury benefit £'000	Other £'000	Total £'000
Balance at 1 April 2017	299	156	150	-	605
Provided in the year	145	-	2	-	147
Provisions not required written back	(85)	-	-	-	(85)
Provisions utilised in year	(85)	-	(15)	-	(100)
Balance at 31 March 2018	274	156	137	-	567

Analysis of expected timing of discounted flows

	Legal £'000	Decommissioning costs £'000	Injury benefit £'000	Other £'000	Total £'000
Not later than one year	274	156	17	-	447
Later than one year and not later than five years	-	-	60	-	60
Later than five years	-	-	60	-	60
Balance at 31 March 2018	274	156	137	-	567

Provisions have not been discounted as the time value of money is not material.

Legal

This relates to personal injury legal cases and intellectual property claims. Legal claims are assessed by independent solicitors and a provision of 100% of the likely maximum claim value is made. This percentage is to be reviewed on an ongoing basis to ensure it continues to represent a reasonable estimate of the expenditure on such

claims.

Decommissioning costs

This relates to a piece of equipment which holds radioactive material and as such falls under the High Activity Sealed Radioactive Sources (HASS) Regulations 2003. The material is used by AFBI in the course of its business. The provision is required to cover the cost of compliance with HASS Regulations when the equipment is disposed of. This piece of equipment was disposed of during 2018-19 and the provision brought forward from 2017-18 was fully utilised during the year.

Injury Benefit

This relates to payments to staff members who have suffered an impairment to earnings as a result of an injury that has been sustained within the context of one of the qualifying conditions outlined within the legislation governing the scheme, which is known as the Civil Service Injury Benefit Scheme (NI) (CSIBS(NI)). Injury benefit is paid when a qualifying injury impairs the individual's earning capacity.

Other

AFBI uses fixed term contracts of employment to support its core base of permanent staff in order to manage peaks and troughs of work. Fixed term contract employees are entitled to redundancy payments on expiry of their fixed term contract if they have 2 or more years' service, the work that they are undertaking is ceasing and there are no suitable redeployment vacancies. AFBI has reviewed its remaining fixed term contracts and considers that a provision of 50% of the likely maximum liability is made. This will be kept under review.

15. Capital commitments

	2018-19	2017-18
	£000	£000
Contracted Capital Commitments at 31 March not otherwise included in these financial statements		
Assets under construction	-	-

16. Leases

16.1 Operating leases

AFBI has an operating lease with DAERA for the land and buildings it occupies. During 2018-19, £5,663k (2017-18: £5,874k) was included as an expense on operating leases in the Statement of Comprehensive Net Expenditure. Total future minimum lease payments under operating leases are given in the table below for each of the following periods:

	2018-19	2017-18
	£000	£000
Obligations under operating leases comprise:		
<i>Land and buildings</i>		
Not later than one year	6,623	5,663
Later than one year and not later than five years	26,492	-
	<u>33,115</u>	<u>5,663</u>
	2018-19	2017-18
	£000	£000
<i>Photocopiers</i>		
Not later than one year	21	12
Later than one year and not later than five years	55	38
	<u>76</u>	<u>50</u>

16.2 Finance leases

AFBI has no finance lease commitments at the year end (2017-18: Nil).

17. Commitments under PFI contracts

AFBI had no PFI contracts during 2018-19 (2017-18: Nil).

18. Other financial commitments

AFBI had no other financial commitments at the year end (2017-18: Nil).

19. Contingent liabilities disclosed under IAS 37

Royalty Income

AFBI receives royalty income from the sale of vaccine products in various countries worldwide. QUB provide an advisory and facilitation role in relation to the protection of AFBI's Intellectual Property Rights (IPR). The income received over the last number of years averages approximately £7m per annum.

As disclosed in the contingent liability note in the 2017/18 Annual Report & Accounts, the royalty income AFBI received in respect of unpatented territories was currently subject to discussion regarding the interpretation of the licence agreement.

Royalty income of £7 million has been recognised in the 2018/19 Accounts, based on the existing patent agreements, particularly Articles 7.3.2, 7.3.3 and 9.1 of the original 1998 Agreement. Consequently, approximately £2.7 million of associated costs in respect of administration fees to QUB, inventor payments and corporation tax has also been recognised in the financial statements. QUB in conjunction with patent experts have determined the validity of patents and have calculated the value of royalty income due to AFBI in 2018/19.

Under the original 1998 research and licensing agreement between QUB, University of Saskatchewan (USK) and the vaccine company involved (the 1998 Agreement) patent royalties are paid to QUB and USK (together "the Universities") from the vaccine company. The Agreement signed in 1998 specifies when patent royalty payments should be made to the Universities. Under a separate 1999 memorandum of agreement between QUB and the Department of Agriculture for Northern Ireland (now DAERA), QUB is due to pay to AFBI any royalties which it receives from the vaccine company less a management fee.

In previous years, payments have been made to AFBI by QUB in June and December each year in line with the 1998 Agreement. These payments are based on sales reports from the vaccine company to the Universities detailing vaccine sales in various territories.

AFBI has not received any sales reports or payments since June 2018 and attempts by the Universities to resolve the matter are ongoing. It is AFBI's belief that this is a commercial dispute and as such is disclosed in this note to the accounts.

Court of Appeal judgement on backdated PSNI Holiday Pay

On 17th June 2019 the Court of Appeal ruled in respect of Northern Ireland Industrial Tribunal's November 2018 decision on cases taken against the PSNI on

backdated Holiday Pay. It is recognised that the final detail remains to be determined by the Industrial Tribunal who will be guided by the Court of Appeal's Judgement.

This is an extremely rare and complex case with a significant number of issues that still need to be resolved, including further legal advice with regards to the Judgement; the scope; timescales; process of appeals and engagement with Trade Unions. The legal issues arising from this judgment and the implications for the Northern Ireland Civil Service (NICS) and wider public sector will need further consideration. The Department of Finance (DoF) is leading a piece of work across the NICS, reviewing the implications for each of the major staffing groups across the public sector.

Until there is further clarity when this work has concluded, and based on the inherent uncertainties in the final decision that will be made, a reliable estimate cannot be provided at this stage.

20. Related-party transactions

Government

The Department of Agriculture, Environment and Rural Affairs (DAERA) is the sponsor department of AFBI with which it had various material transactions during the year and is regarded as a related party. DAERA's executive agencies also had transactions with AFBI.

In addition AFBI had some transactions with other government departments and central government bodies. Most of these transactions have been with Northern Ireland departments and their executive agencies such as DoF (including CPD and Pensions Branch), Department for Communities, FSA (NI) and Northern Ireland Water.

CIELivestock Limited (CIEL)

AFBI is a Category A member of the Centre for Innovation Excellence in Livestock Limited (CIEL). CIEL is one of a number of Centres for Agricultural Innovation, a collaborative model between the agri-tech sector and government. These centres have been set up to help the UK turn agricultural innovation into commercial opportunities for UK businesses, encourage inward investment and improve farming practice.

This membership enabled AFBI to be part of a wider group of highly regarded research bodies, and from 2015-16, when it became a member, to date it has enabled AFBI to avail of income from CIEL which it has used to purchase equipment to promote, develop and facilitate the advancement of the UK livestock industry.

Below is a summary of the financial transactions between AFBI and CIEL during the financial year.

AFBI issued sales invoices with supporting claim information totalling £95,000 plus VAT to CIEL in year to March 2019. Also, in year to March 2019, AFBI issued invoices and supporting claim information to CIEL totalling £931,805 plus VAT for the purchase of assets which were delivered prior to the year end.

During 2018-19, £913,491 of assets were purchased using the CIEL income and are reported within AFBI's non-current assets at 31 March 2019 (2018: £1,991,648). In 2018-19 AFBI received £697,708 (2018: £1,908,748) from CIEL increasing the amounts owed by CIEL to AFBI at 31 March 2019 to £1,232,166 (2018: £697,708).

Food Standards Agency (FSA)

During 2018-19, one member of AFBI Board was on the Board of the Food Standards Agency (FSA). AFBI received revenue from the FSA in 2018-19 totalling £424,580 (2017-18: £539,391) for the provision of analytical services. At 31 March 2019, the FSA owed a balance to AFBI of £29,183 (2018: £123,787).

Other

A review of the conflict of interest declarations completed during the year was carried out and other than those noted above, no Board member, key manager or other related party has undertaken any material transactions with AFBI during the year.

Any other compensation payments issued to the AFBI Board in relation to IAS 19 Employee Benefits are disclosed within the Remuneration Report.

21. Third-party assets

AFBI does not hold any third party assets.

22. Events after the Reporting Period

AFBI does not have any events after the reporting period to disclose.

Date of authorisation for issue

The Accounting Officer authorised these financial statements on 17 December 2019.

7 - Report by the Comptroller and Auditor General to the Northern Ireland Assembly

Agri-Food and Biosciences Institute 2018-19

Introduction

1. This report highlights significant matters arising from my audit of the Agri-Food and Biosciences Institute's (AFBI) financial statements for 2018-19. I have qualified my opinion on the financial statements as I disagree with AFBI's recognition of £7 million income due under royalty agreements and related expenditure of £2.7 million. The royalty income AFBI is due to receive is currently subject to a dispute regarding the interpretation of the licence agreement.

Background

2. Under a 1998 research and licensing agreement between The Queen's University of Belfast (QUB), University of Saskatchewan (USK) and a vaccine company (the 1998 Agreement) patent royalties are paid to QUB and USK (together "the Universities") by the vaccine company. The vaccine company is due to pay a percentage royalty on the net sales of all vaccine products manufactured by making use of the results of joint research and/or protected by a patent for the duration of the patent protection. In addition, where no patent is granted in relation to a vaccine product or in a territory in which a vaccine product is sold, royalties are payable over a shorter term.
3. A separate 1999 memorandum of agreement between QUB and the Department of Agriculture for Northern Ireland (now DAERA) (the 1999 Agreement), requires QUB to pay to AFBI any royalties which it receives from the vaccine company less a QUB management fee. However, QUB have received only one payment since June 2018 of £68,000 for patent royalties for this financial year from the vaccine company which was passed onto AFBI. AFBI recorded income of £7 million in its 2018-19 financial statements and £6.9 million as a receivable at the year-end arising from this agreement.

Summary of findings

4. International Financial Reporting Standard 15 (IFRS15) governs how income should be recorded within annual financial statements. The £7 million in income included in the financial statements is an estimate based on the validity of the patents during the 2018-19 financial year and a report from QUB which concluded on the income these patents might generate. As there is currently no indication that the amounts will be received the inclusion of this estimate is not in accordance with IFRS15. Consequently, the inclusion of £2.7 million of expenditure (associated fees, corporation tax and administration costs) is also incorrect. Comprehensive net expenditure is therefore understated by £4.3 million.
5. The 1998 Agreement specifies in Article 7.3.3 when patent royalties' payments should be made to the Universities; however the 1999 Agreement does not specify when QUB should pay AFBI following receipt of royalties from the vaccine company. In previous years payments have been made to AFBI by QUB in two parts in June and December each year in line with Article 7.3.3. These payments are usually based on sales reports from the vaccine company to the Universities detailing vaccine sales in various territories. AFBI has not received any sales reports and only one small payment from QUB since June 2018 and whilst attempts by the Universities to resolve the matter continue, with QUB acting as AFBI's agent, these have so far been unsuccessful. There is currently no documentation to suggest that the vaccine company agrees that £7 million or any other sum is due to AFBI. The regularity opinion has been qualified as AFBI has not adjusted the financial statements to remove the material

misstatement. If the adjustment was to be made then the additional net expenditure of £4.3 million would cause a breach of the amounts approved by the Department for the year by £3.96 million. I consider this breach to be irregular therefore I have qualified my opinion on regularity due to £3.96 million of expenditure in excess of the amounts approved.

AFBI's response

6. Based on the 1998 Agreement and the fact that sales of products from derived patents have occurred in the relevant periods combined with the patent expert advice, AFBI believes the amounts included in the financial statements to be due and payable and will ensure every effort will continue to be made to recover them. Therefore, AFBI have recognised the £7 million income and £2.7 million of associated expenditure in these financial statements.
7. It is very concerning that payments due have not been received to date and AFBI will consider carefully all options open to obtaining these amounts, including the legal enforcement of QUB and USK contractual rights. In addition, AFBI is reviewing the position to ensure that any lessons learned for any future commercial relationships that it may enter into are considered. Any such arrangements will be monitored and reviewed through the Oversight and Governance Committee.
8. It is AFBI's belief that this is a commercial dispute and the matter is included as a Contingent Liability in the notes to the accounts.

Conclusions

9. AFBI continues to work with QUB to obtain documented details from the vaccine company of vaccine sales and royalty income due during the 2018-19 financial year. This estimated £7 million of overdue royalty payments is a significant level of income due to the public purse. Its recovery should remain a priority for AFBI.
10. I recommend that AFBI reviews the management and contract arrangements for lessons learned before entering into future contracts for patents and royalty income.
11. In the short term, AFBI should also identify actions to ensure that such a situation as this does not re-occur in the future. I will keep this under review in the coming year.



K J Donnelly
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20 December 2019