



Candidate Information Booklet

Head of Agronomy and Plant Science

**Agri-Food and Biosciences Institute
Northern Ireland (AFBI)**

IRC302776

Completed Application Forms must be submitted no later than 12 noon on
Monday 3rd June 2024

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Communication between HRConnect and you

HRConnect will issue competition communications electronically. Please ensure you check your email account regularly, to make sure that you don't miss any important communications.

Please update us with any changes to your email address and home address to ensure you are fully informed at all times.

Equal opportunities

Agri-Food and BioSciences Institute (AFBI) is an equal opportunities employer and has been awarded the Bronze Charter Mark in recognition for our commitment towards Gender Diversity and Inclusion in the workplace. All appointments will be made strictly on the basis of merit. If you have any queries with regard to this recruitment process or require any documentation in an alternative format, please contact HRConnect via email Recruitment@HRConnect.nigov.net or call 0800 1 300 330.

We would particularly welcome applications from females and those from a Roman Catholic background.

Feedback - AFBI is committed to providing feedback to assist the development of current and future applications.

Recruitment overview

Thank you for your interest in our organisation. At AFBI you will find a fantastic team spirit and a commitment to the development of both you and your skills so that you can choose to have a long-term career with us.

This Candidate Information Booklet offers specific information to applicants.

Please read this document carefully in advance of submitting your application and retain it for reference throughout the recruitment process.

At AFBI, we take great pride in the work we undertake. All AFBI employees are appointed on merit on the basis of fair and open competition.

We wish you every success in your application!

Important dates - It is intended that interviews for this post will take place in AFBI HQ, Newforge Lane, Belfast during week commencing Monday 24th June 2024

Compulsory documentation - It is compulsory that all candidates invited to attend an assessment and/or interview, bring sufficient identification. Your attendance may not be permitted in instances where identification cannot be shown.

FOREWORD FROM THE CHIEF EXECUTIVE

Thank you for your interest in this important post of Head of Agronomy and Plant Science in AFBI.

The Agri-Food and Biosciences Institute (AFBI) is non-departmental public body sponsored by the Department of Agriculture, Environment and Rural Affairs (DAERA) and is the Northern Ireland government's main research and science provider in the agri-food and marine sectors. In addition to our work for DAERA, AFBI also undertakes a substantial and increasing programme of externally funded R&D and other scientific work, which is secured from a range of public sector funding organisations, other public sector bodies, industry funders and commercial companies.

AFBI science is critical to Northern Ireland's long term economic and environmental sustainability, contributing to the protection of our terrestrial and marine environments, leading improvements in our agri-food systems, helping protect animal and plant health, and ensuring the safety of the food that we eat. By delivering essential statutory testing, monitoring and surveillance programmes, research and development work as well as emergency response capability and expert scientific advice, AFBI scientists enable the NI agri-food industry to market products nationally and internationally while ensuring long term environmental sustainability, from soil to sea. The science is critical to the work of our sponsoring department DAERA and contributes significantly to the overall achievement of the NI Executive's programme for government.

The Institute is now seeking an enthusiastic, international recognised scientist with a high level of expertise and knowledge of agronomy and plants sciences to join its scientific team and lead our work in this area. The Head of Agronomy and Plant Sciences will lead AFBI's statutory work programme on variety and seed testing as well as a research programme to develop new methods for variety testing with a specific focus on using 'omics' technology as well as imagery. The research programme will also focus on the impact of climate as well as climate change on plant performance, productivity and the agronomy of plant production i.e. the interaction between soil, its health, the wider climatic environment, the application of nutrients and the productivity of grass and cereals. The appointee will also have oversight of AFBI's grass breeding research programme and scientific direction.

This is a challenging and rewarding post, which will provide the opportunity to contribute significantly to the sustainability of the agri-food industry. It will also influence future policy and governmental strategies as well as contribute to AFBI's long term success as it continues to develop the quality and range of scientific work undertaken for DAERA and for AFBI's local, national and international funders and stakeholders.

Thank you for your interest in this competition.

Dr Stanley McDowell (Chief Executive)

BACKGROUND

ABOUT THE AGRI-FOOD AND BIOSCIENCES INSTITUTE

AFBI is a non-departmental public body sponsored by DAERA and a leading provider of scientific research and services to government, non-governmental organisations and commercial companies.

We are an internationally recognised multidisciplinary scientific organisation with a broad remit of work spanning the key goals of 1) leading improvements in the agri-food industry to enhance its sustainability 2) protecting animal, plant and human health and 3) enhancing the natural and marine environment.

AFBI is located on seven sites across Northern Ireland, with its headquarters at Newforge Lane, Belfast. Other AFBI sites are located at Stormont, Hillsborough, Crossnacreevy, Loughgall, Omagh and Bushmills. In addition, AFBI has a 53 m dedicated marine research vessel RV Corystes based in the Port of Belfast.

Our Vision

Scientific excellence delivering impactful and sustainable outcomes for society, economy and the natural environment.

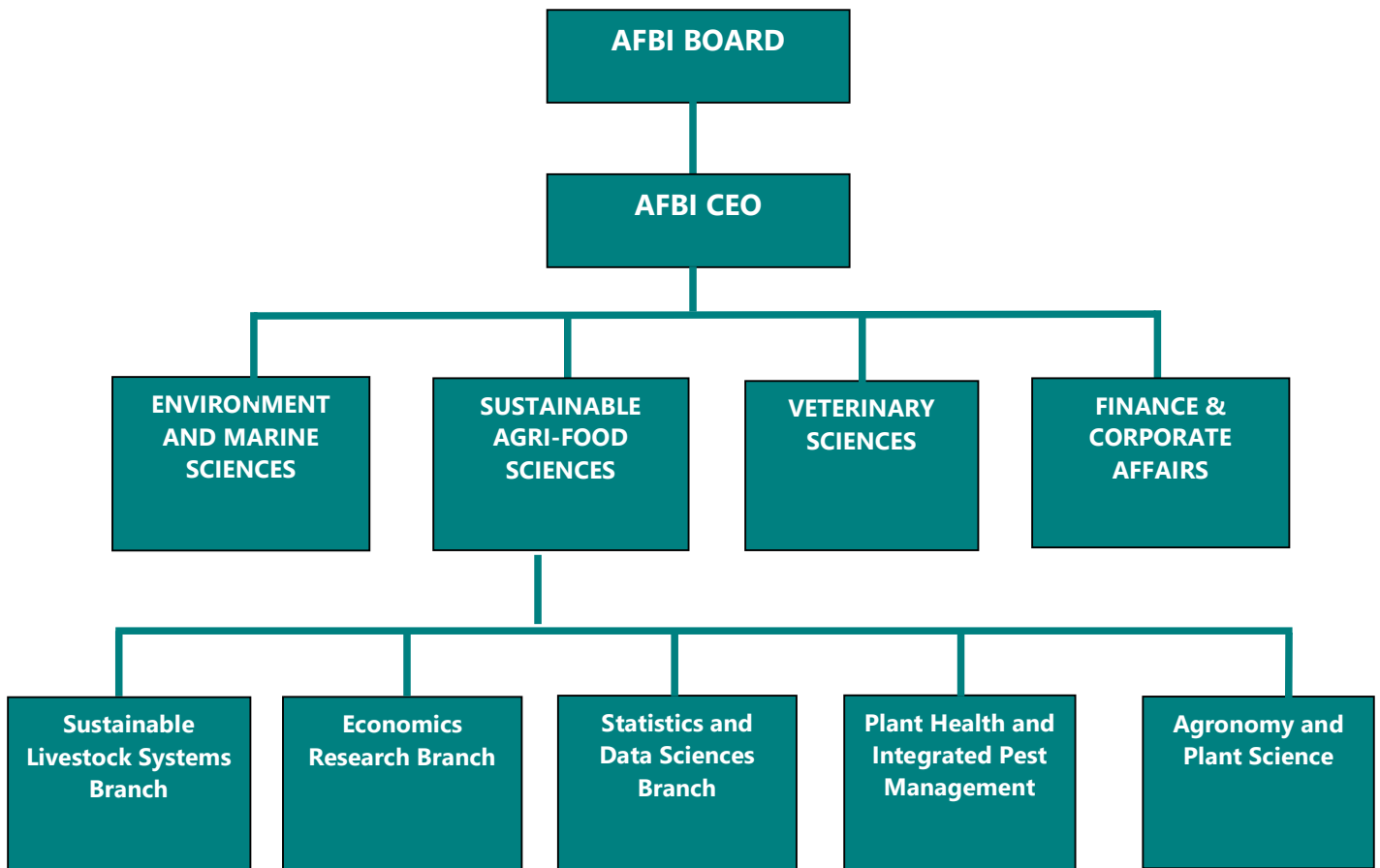
Our Purpose

To deliver trusted, independent research, statutory & surveillance science and expert advice that addresses local and global challenges, informs government policy and industry decision making, and underpins a sustainable agri-food industry and the natural and marine environments.

As the Northern Ireland government's main research and science provider in the areas of agri-food, fisheries and the environment, AFBI plays a major role in the Northern Ireland knowledge economy. AFBI's scale, relationships with a wide range of international research organisations and close links with local universities and industry mean that it is ideally placed to carry out research that has both global and local impact. AFBI's science is outcome-driven and aimed at solving important practical problems for a wide range of local, national and international funders in the public and private sectors. Our staff carry out world class scientific research, surveillance, and analytic and diagnostic testing for a wide range of customers in the fields of animal health and welfare, sustainable agricultural systems, plant science, food safety, environmental protection, fisheries and aquatic ecosystems, and agricultural and rural economics.

The organisation has a staff complement of approximately 700 people, with an annual turnover of approximately £80 million. We are currently organised across 4 divisions – Environment and Marine Sciences Division (EMSD), Sustainable Agri-Food Sciences Division (SAFSD), Veterinary Science Division (VSD) and Finance and Corporate Affairs Division (FCAD).

ORGANISATIONAL STRUCTURE



SUSTAINABLE AGRI-FOOD SCIENCES DIVISION (SAFSD)

SAFSD is a highly multidisciplinary division with a focus on livestock, plants and in general agriculture production, its impact on the environment and the economy. This multi-disciplinary team of approximately 220 staff are sited across AFBI Newforge, Hillsborough, Loughgall and Crossnacreevy. Collectively the division conducts science across all aspects of the food production chain pre farm gate, taking research from the soil through to the plant, the animal and the resultant food quality and nutritional value, while also working with colleagues at VSD to ensure animal health and food safety is optimised. A key element of the work also examines quantitative and qualitative socio-economic impacts.

SAFSD utilises a highly instrumented platform across livestock and land management to service its main deliverables of research and innovation and monitoring and surveillance. SAFSD also collaborates extensively with other research organisations, industry and government departments locally, nationally and internationally. A key drive within SAFSD is to produce high quality peer review publications while also ensuring the research conducted has impact through an active dissemination programme.

The division has five branches which collaborate increasingly with each other. These are:

Agronomy and Plant Science Branch leads AFBI's statutory work programme on variety and seed testing as well as a research programme to develop new methods for variety testing. Work also focuses on the agronomy of plant (grass and cereal) production as well as grass breeding research which brings forward the next generation of grass varieties for NI farms. Research to understand and develop novel crops and land use interventions to adapt to climate change is also a key focus.

Economic Research Branch focuses on economic modelling from a micro (farm) scale to a macro (National) scale. Its focus is to understand the impact of external factors, such as trade, on the economic performance of NI's agri-food industry. Its work also informs NI's climate action plans and informs policy development through the testing of strategies and initiatives to improve the economic performance of NI in an environmentally sustainable manner.

Plant Health and Integrated Pest Management Branch has a focus on statutory analysis and research to deliver effective surveillance and diagnostics to protect NI's high plant health status. Research to develop and facilitate the uptake of integrated pest management across the NI farming system to ensure that pesticide usage is sustainable and as environmentally benign as possible, while maintaining productivity is also a focus.

Statistics and Data science Branch supports AFBI scientists undertake sophisticated statistical analysis and increasing the application of data analytics to complex issues.

Sustainable Livestock Systems branch has a key focus on research to reduce the environmental impact of livestock production (dairy, beef, sheep, pigs and

poultry) whilst optimising the productivity of the system as well as protecting animal health and welfare and supporting a circular economy. This work spans both the animal and where applicable, its grazing platforms. Key disciplines used in this work programme relate to nutrition, genetics, data analytics, management and modelling.

ENVIRONMENT AND MARINE SCIENCES DIVISION (EMSD)

Environment and Marine Sciences Division (EMSD) was established as a separate science division in 2021 following a review of AFBI's organisational structure. The establishment of the Division reflected the increasing importance and amount of scientific work undertaken by AFBI in the agri-environment, marine and aquatic ecosystems areas.

The Division is focused on evidence-based science, which is key to addressing significant environmental challenges whilst ensuring the sustainable use of natural resources and the future prosperity of the agri-food sector.

A key priority of this division is to deliver on a high impact and quality integrated programme of research spanning from 'the soil to the sea'.

VETERINARY SCIENCES DIVISION (VSD)

VSD currently employs approximately 260 veterinary, scientific, technical and support staff across its four Branches (Bacteriology, Chemical Sciences, Disease Surveillance and Investigation, and Virology). The Division is predominantly based at Stoney Road, Belfast with a smaller disease surveillance centre based at Omagh, Co. Tyrone.

The Division undertakes an integrated programme of statutory, disease surveillance, emergency response and R&D work on the diseases of major animal and human health significance along with significant programmes of work on the chemical and microbiological safety of food. The work supports government policy and disease eradication and control programmes in areas such as bovine tuberculosis, food-borne zoonotic infections and transboundary diseases. One of the key roles of the Division is in delivering a laboratory response to local, national and international emergencies involving animal diseases, and food and feed contamination incidents.

VSD also provides a disease investigation service covering all of the major farm animal species and fish and provides commercial laboratory services in support of industry led disease eradication and control programmes. The work of the Division is underpinned by research and development (R&D) on animal diseases and food safety issues relevant to the local industry.

The VSD Stormont site will soon benefit from a major infrastructure project in terms of the Animal Health Sciences Building which will replace the existing main building currently housing 3 of the divisional branches. In addition, a second major science IT project is underway to replace several of the existing

Laboratory Information Managements Systems (LIMS) with a single modern cloud-based LIMS.

FINANCE AND CORPORATE AFFAIRS DIVISION

The Finance and Corporate Affairs Division (FCAD) currently employs approximately circa 100 staff across its Branches. The Division is based primarily at AFBI headquarters, Newforge Lane, Belfast but with staff deployed at some of the larger sites.

The Division supports the AFBI Chief Executive and Executive management team (EMT) in securing and deploying the financial, people and infrastructure resources of AFBI. The Division has a key role in ensuring that AFBI is an efficient, effective, sustainable and accountable organisation with high standards of governance.

The Division has responsibility for leading and providing the support services across the Institute including finance, governance and performance, information systems, research support, corporate communications, human resources, health and safety, estates and emergency planning.

About the Agronomy and Plant Sciences Branch

Agronomy and Plant Science Branch sits within the Sustainable Agri-Food Sciences Division (SAFSD) and is based across AFBI's Crossnacreevy and Loughgall sites. The branch provides a UK based statutory function aligned with variety and seed testing of grasses and cereals as well as a programme of research on agronomy which includes a focus on plant genetics and genomics, especially aligned with adapting to climate change. Knowledge exchange activities to a wide variety of stakeholders is also undertaken extensively.

The work of the Branch aligns closely with AFBI's strategic theme of 'Leading Improvements in the Agri-food Industry to Enhance its Sustainability'. The work of the branch is focused on delivering the following two high level strategic initiatives:

To identify and explore opportunities for new land management and alternative food production systems which optimise the economic value of the NI food system and promote the circular bioeconomy within it.

To explore and harness opportunities for industry aligned with climate change adaption while minimising the risks from climate change.

Plant breeding, plant and seed testing, and agronomy are essential for optimising land use and management. What is grown on the land, in terms of species, varieties and seed quality, and how that land is managed, is key to meeting productivity and environmental goals. There is also opportunity to look afresh at how productive land is used in Northern Ireland in the coming years to both mitigate the emissions from food production, as well as harness opportunities to support food and energy production as a result of climate change.

The work program of the branch will have a core focus on grass and cereal varieties which present opportunities for climate resilience in the future as well as crops and agronomic techniques which maximize the economic value that can be attained from land whilst minimizing the environmental impact of land use. As such agronomy research within the branch will work closely with Agri-environment colleagues to focus on soil health and evaluate the impact of what is applied to and grown in the soil as well as work to identify novel and sustainable replacements to peat.

A major work program of the branch includes AFBI's forage grass breeding research based at AFBI Loughgall. This highly successful program has produced on average 1.5 new improved varieties per year. As such 39 improved forage grass varieties have entered the market and have been used extensively on farms across the UK and Ireland and beyond.

AFBI Crossnacreevy's work focuses on conducting statutory testing of herbage and cereals. The realtime testing of varieties, to a high quality standard, to determine if they are novel and merit Plant Breeders' Rights ensures new germplasm is reaching market every year.

The statutory testing and advice provided by the branch is required to support DAERA's compliance with a range of regulations and legislation including the UK Plant Varieties Act 1997; Plant Breeders' Rights Regulations 1998; Seeds (National List of Varieties) Regulations 2001 and Seeds (Variety Lists) Regulations (Northern Ireland) 2020 as well as The Seeds Act (Northern Ireland) 1965 (as amended) and The Seed Marketing Regulations (Northern Ireland) 2016 (Statutory Rule no. 2016/244).

As the Official Seed Testing Station (OSTS) for Northern Ireland the branch is responsible for conducting Statutory Seed and Certification for Northern Ireland. In this role AFBI collaborates closely with the other 2 OSTs in the UK – Science & Advice for Scottish Agriculture (SASA) and National Institute of Agricultural Botany (NIAB) and is an ISTA (International Seed Testing Association) designated laboratory.

Senior staff within the branch lead on and contribute to wider UK and international forums aligned with variety and seed testing such as:

- a. UK Policy and Strategy in plant varieties and seeds,
- b. UPOV International working group on plant variety protection for agricultural crop varieties,
- a. UK National List and Seeds Committee.

The Branch has a complement of approximately 40 permanent staff along with PhD students, postdoctoral researchers and visiting workers. The funding structure is approximately 50% statutory and advisory work linked to legislative compliance in support of DAERA and, 50% research for DAERA and other external funders. The branch has extensive land platforms and access to state of the art technologies as well as greenhouse facilities.

Job Information and Employee Benefits

A reserve list will exist and will be held for a period of 12 months from the date of interview to cover any similar vacancies which may arise.

Salary

Currently the salary for the post will be within the range £65,409 - £71,353 within which pay increases will be on an incremental basis provided staff performance reports are satisfactory.

Starting salary will be at the minimum of the scale.

Working Hours

The successful candidate will normally be required to work 5 days each week, totalling 37 hours. AFBI operates a flexi working system.

Location

The successful candidate will be based at AFBI Crossnacreevy, 50 Houston Road, Belfast, BT6 9SH or AFBI Loughgall, 12 Manor Farm, BT61, 8JB. They will be expected to visit both sites regularly and they may also be expected to work at other AFBI sites in Northern Ireland as required.

It is envisaged that some element of home working and / or remote working may be possible in line with the AFBI Hybrid Working policy and business need.

Travel

The post will entail travel locally, nationally and internationally and for this reason the successful candidate will require access to a form of transport which will permit them to meet the requirements of the post in full.

Pre-employment checks

Pre-employment checks consist of a qualification check and an AccessNI check. The security check required for this post is basic level. HRConnect will provide your details to Experian who will undertake this check. This is a two-part process during which all communications will be issued to you electronically.

Annual Leave

In addition to the usual public and privilege holidays, there is an annual leave allowance of 25 days, increasing to 30 after five year's satisfactory service.

Probationary Period

The post holder will serve 12 months' probation in the new post. This will commence from the date of appointment. At the end of the probation period a formal review will be conducted.

Professional Development

We believe in our employees and understand the importance of investing in ongoing development. Support for professional development will always be considered.

Employee Benefits

AFBI offers employees an unrivalled benefits package. For further information please click [here](#).

Further Information

Further Information about the post may be obtained from SAFSDpeopleandculture@afbini.gov.uk

For information on how the recruitment process will be managed and for further recruitment and selection resources, please click [here](#).

For information on our equal opportunities, please click [here](#).

Job Background

The post holder will report to the Director of Sustainable Agri-Food Sciences Division. The key responsibilities of the post are as follows:

Objectives of the role

The Head of Agronomy and Plant Science in AFBI will lead AFBI's work on statutory analysis, research and advice aligned with variety and seed testing, as well as plant genetics and agronomy research with a focus on novel crops and land use interventions to support climate change adaptation. To fully perform this role, extensive collaboration with other AFBI branches, as well as external organisations will be required. The activities of the branch are key to supporting DAERA's compliance with a range of regulations and legislation. The work also contributes significantly to leading improvement in the agri-food industry to drive sustainability through exploring novel and innovative land uses to support food and feed production whilst minimising the environmental impact of land use and adapting to climate change.

The person appointed to the post will be expected to provide vision, scientific leadership and strategic direction for their work area and team and as a member of the wider head of branch leadership team, assist in AFBI's strategic development and corporate management.

The role includes a significant management component and the successful candidate must be able to demonstrate strong interpersonal skills and have the ability to present a clear and compelling vision of the future for staff. This will include fostering an environment and culture that delivers excellence in all activities and that is inspiring, creative and rewarding for staff.

Key responsibilities of the post include:

Scientific Leadership

- Provide overall scientific leadership of the Branch and set the strategic direction for current and future work programmes, to include expanded collaborations and development of new areas of work.
- Provide authoritative and expert advice to DAERA and stakeholders.

Programme Delivery

- Lead the development and delivery of a complex statutory analysis programme plus associated research, to deliver the goals of the branch, while interacting with a wide range of customers, including government departments, universities and colleges, the agri-food industry, supply chain representatives and research sponsors, to promote the scientific excellence of AFBI.
- In agreement with DAERA and other funders agree and develop a programme of relevant statutory analysis projects and R&D for both the short and long term.
- Ensure the scope of ISO17025:2017 accreditation for the Branch activities is compliant with national and international requirements.

- Secure competitive research and other funding from local, national and international sources.

Leadership and People Management

- Providing effective leadership and vision to staff, innovatively and effectively leading and managing change.
- Maintaining a positive working environment and a clear understanding of the business goals for all staff.
- Ensuring effective staffing structures are in place with the appropriate levels of skills and expertise.

Finance and Corporate Governance

- Lead the preparation of budget plans and manage the branch resources and budget allocations and ensure that the required income targets are achieved.
- Maintaining a sound system of internal control including ensuring compliance with corporate policies and other governance requirements.
- Ensuring compliance with the relevant legislation such as data sharing, health and safety.

Planning and Strategy

- Preparing the branch annual business plan and manage the delivery of related KPI's.
- Clearly communicating goals and objectives to key stakeholders and managing performance against agreed targets in line with strategic plans.

Public Affairs and Policy

- Representing and negotiating on behalf of AFBI on scientific and policy matters at local, national, and international level.
- Communicate the work of the branch to other scientists, the agri-food industry, other stakeholders and the wider public.

Continuous Professional Development

To maintain an up-to-date knowledge of scientific advances, applicable legislation and policies aligned with the work of the branch. To maintain and communicate to colleagues an awareness of developments in these areas and the relevance of these to AFBI science.

This list is not exhaustive, and the successful candidate will be required to carry out other duties as allocated by management.

Eligibility Criteria

Applicants must, by the closing date for applications provide evidence in their application form that they meet the following eligibility criteria.

1. A PhD in Agronomy, Plant Science or in a closely related area relevant to the work of the branch.
2. At least 5 years post-doctoral experience of successfully leading, managing and delivering substantial science programmes in the areas relevant to the work of the branch.
3. Experience of leading and managing people and resources to achieve science and/or business objective.
4. A recognised international standing within the field of Agronomy, Plant Science or in a closely related area evidenced through at least two of the following;
 - Authorship of scientific publications in peer reviewed journals and other research outputs;
 - Award of competitive research funding;
 - Representation on scientific groups at national and / or international level.

For eligibility criterion 4, candidates should provide full supporting information by submitting a fully cited bibliography of all peer reviewed publications and other research outputs; details of award research funding; and representation on scientific groups at national and / or international level.

Candidates can provide this information within the application form itself, or it can be sent by the closing date for applications as a separate attachment to: recruitment@hrconnect.nigov.net. The document should be marked with the relevant competition reference number (IRC302776), competition title and your full name.

Shortlisting Criteria

In addition applicants should be aware that after an eligibility sift, should it be necessary to shortlist candidates to go forward to interview, the Panel will carry out an objective evaluation of the breadth and depth of information provided by candidates in response to eligibility criterion 2 - 4. This will be completed on a scored basis. Only the highest scoring applicants will proceed to interview.

Person Specification

This position is analogous to Grade 6 Level in the NICS.

Candidates will be expected to demonstrate the skills and competencies set out in the Essential Criteria. In addition, they will also be required to demonstrate competency in Professional Knowledge & Skills pertaining to this post together with the skills and competencies set out in the Northern Ireland Civil Service (NICS) competency framework at Level 4 for the purpose of personal and professional development.

Selection panels will design questions to test the applicant's knowledge and experience in each of the above areas and award marks accordingly.

You should refer to the behaviours listed under level 4 of the relevant competence areas.

To view the NICS Competency Framework, please click [here](#).

Interview Criteria

In addition to satisfying the eligibility criteria and shortlisting criteria (if applicable) applicants will also be expected to display the following qualities and skills at interview-

Presentation

Candidates will be required to deliver a presentation, lasting no more than 7 minutes, the subject of which will be provided to candidates in the invitation to interview letter.

Candidates should fully prepare their presentation in advance of the interview and no preparation time will be provided on the day of interview. Your presentation should be delivered via PowerPoint and you will be asked to submit it to HRConnect by a specific date prior to your interview. Full details will be provided should you be invited to interview. Following the presentation, the panel may elect to ask questions on the presentation.

Candidates are only permitted to bring a copy of the slide presentation into the interview i.e. additional presentation or speaking notes are not permitted.

The presentation will be used to partly assess the '**Seeing the Big Picture**' competence.

Marks available: 20

Minimum standard: 12

1. Professional Skills and Knowledge

Marks available: 40

Minimum Standard: 24

2. Leading & Communicating

Marks available: 20

Minimum Standard: 12

3. Managing a Quality Service

Marks available: 10

4. Making Effective Decisions

Marks available: 10

5. Changing & Improving

Marks available: 10

6. Collaborating and Partnering

Marks available: 10

Total marks available: 120
Overall pass mark: 72 (60%)