

# Stirling and Clackmannanshire City Region Deal – National Aquaculture Innovation and Technology Hub (NATIH) – Outline Business Case

Joint Committee – Tuesday 29th November 2022

Agenda Item: 6.2

#### **Executive summary**

This paper seeks Joint Committee approval for the National Aquaculture Innovation and Technology Hub (NATIH) Outline Business Case (OBC). This OBC relates to Phase 1 of the project, which sits within the Innovation Theme of the City Region Deal portfolio of projects and programmes.

#### **Authors**

Nicola Drago Ferrante, Growth Deal Programme Officer

nicola.drago.ferrante@stir.ac.uk



#### Recommendations

#### Joint Committee is asked to:

- Approve the fourth iteration of the Outline Business Case for the National Aquaculture Innovation and Technology Hub (NATIH). This recommendation is conditional on endorsement of the OBC by Scottish and UK Governments being obtained before 29 November 2022.
- 2. Note the development activity that is ongoing as part of the project.

## **Implications**

None

## Legal & Risk Implications and Mitigation

As part of City Region Deal Governance arrangements, approval of the OBC by Joint Committee is required to progress to Full Business Case development. The project would suffer delay if approval were not given.

## Background

- 1. The Outline Business Case (OBC) seeks approval for the £12 million required to deliver the first phase of the National Aquaculture Technology and Innovation Hub (NATIH) project. The £17 million NATIH project will be delivered by the University of Stirling's Institute of Aquaculture (IoA).
- 2. The IoA hosts world leading aquaculture expertise, bringing together cross-disciplinary teams. During the 2021 Research Excellence Framework (REF) period, the IoA secured £19 million of research funding and engaged in 228 research partnerships across 44 different countries.
- 3. However, IoA's aquatic facilities badly need to be replaced and upgraded. The bio-secure challenge facilities were closed several years ago with research on disease increasingly relying on facilities elsewhere. Alongside the new facilities the IoA itself is currently developing a new industry focused strategy designed to leverage private sector investment.
- 4. The improved aquatic facilities, available through NATIH, will enable the University to apply its research and innovation expertise on global aquatic food systems. The NATIH project will help improve the University of Stirling's position to secure both global impact and secure city region benefits (including investment and jobs) that would otherwise have arisen elsewhere, including outside of the UK.
- 5. The key features of the first phase of the NATIH project are:



- Experimental aquatic facilities flexible facilities with controlled temperature rooms expanding research on temperate and tropical species. This will increase the capacity of research facilities by around 300%.
- **Bio-secure challenge facilities** a bio secure level 2 challenge facility to study bacterial, viral, and parasitic disease of fish.
- Collaboration space repurposed buildings to provide high quality business space for the NATIH team to work and meet with stakeholders in the aquaria facility.
- Business accelerator specialist aquaculture business support facilities to make sure businesses (particularly micro and SMEs) benefit fully and rapidly from new technologies, opportunities, and solutions.

### Considerations

- 6. The fourth iteration of the NATIH Outline Business Case (OBC) has been amended in response to feedback received from both the UK and Scottish Governments on 9<sup>th</sup> August 2022.
- 7. The main area of significant change from previous versions is in the financial case. The capital investment in the first phase of NATIH has risen, reflecting rising construction costs. The previous financial case referenced the prospect of securing additional funding from the Wolfson Foundation and this has now been included.
- 8. As requested by the Scottish Government, the details of the financial case have been expanded in Appendix F2.
- 9. All other parts of the business case have been updated (including the economic and commercial cases) but without significant change.
- 10. The OBC and appendices outline the objectives and benefits across the next 15 years from the NATIH project. These are to:
  - Increase R&D capacity by providing environmentally controllable, experimental aquatic and challenge facilities. This is projected to see a 300% increase in research capacity, with £7,000,000 in additional annual research income after 15 years (based on Research and Infrastructure income from RISE activities). The project will also support 30 research staff (including PhD students and research assistants); 360 partnerships with the aquaculture community; 54 partnerships with Centres of Excellence; Research or Innovation Centres; 600 research projects to improve the environment, aquatic organism and human health, and welfare 30 case studies on NATIH research impact on the environment, aquatic organism and human health and welfare.
  - Support organisations and entrepreneurs to translate and adopt findings of applied research into new markets, products, services, or improved business outcomes. The project is expected to support; 173 organisations; 60 start-up entrepreneurs supported; 60 organisations supported to scale up, and 30 case studies demonstrating the impact of research adoption on business outcomes.



- Deliver a NATIH skills portfolio that meets the current and future needs of industry and promotes opportunities for under-represented groups within the city region. Over 15 years, NATIH will; engage with 13,869 (total number) people in the NATIH skills portfolio of which; 6,935 women and girls; 2,774 people with a disability; 3,600 people accessing industry co-produced CPD2; 100 NATIH beneficiaries progressing into employment or higher levels of education or training, and 600 pupils from employability, school, college, and university engaging with industry on their journey to employment. There is expected to be 300 overseas learning/employment placements for NATIH learners (UK based), with 60 learning/employment placements secured for people who reside in the city region and 300 overseas learning/employment facilitated by NATIH for overseas learners across the innovation community.
- 11. NATIH is one of the largest of the projects and programmes within the City Region Deal portfolio. As such, it has a central role in the delivery of the Deal's Strategic Outcomes. The OBC and appendices contain more detailed information on the manner in which these Strategic Outcomes will be met, however the following is a summary for Joint Committee:
  - Inclusive Economic Growth NATIH Business Accelerator will connect businesses to
    academic teams and infrastructure enabling them to innovate, develop prototypes, carry
    out proof of concept activity, start up and scale up. The UoS CRD Sustainable
    Procurement Strategy will enable NATIH to support the development of resilient
    regional supply chains and stimulating innovation within the supply chain to meet the
    evolving needs of the project working with entrepreneurs and working alongside the
    regional business base.
  - Higher Value Jobs NATIH will create jobs directly and indirectly as outlined in the NATIH
    OBC Economic Case. The clustering effect of NATIH as outlined in the Economic Case will
    support an increase in regionally available jobs. Through the UoS CRD Procurement
    Strategy NATIH will support Fair Work throughout the supply chain including the
    payment of Real Living Wage, closing the gender pay gap and discouraging the
    inappropriate use of zero hours contracts.
  - Shared Prosperity NATIH OBC Economic Case outlines the carbon impact of the NATIH project. The first phase of the NATIH project is likely to have a carbon capital increase then operationally net zero, with the potential to move towards category 2, whole life carbon net zero.
  - Inclusive Skills Ecosystem NATIH will deliver an aquaculture related skills portfolio to support an inclusive skills ecosystem for the sector. This will include skills at postgraduate and undergraduate level in addition to Continuing Professional Development, micro-credentials, and open access courses. Through working with the CRD Skills and Inclusion Project, it will work with stakeholders in the skills community (schools, colleges, and community-based learning providers) to improve access to opportunities for CRD target groups: women, young people, those living in the 20% most deprived communities and people with a disability.



# **Resource Implications**

inancial Details	
he full financial implications of the recommendations are set out in the report. his includes a reference to full life cycle costs where appropriate.	Yes
inance Officers have been consulted and have agreed the financial implications s set out in the report.	Yes
taffing	
he full implications on staffing are set out in the report.	Yes
xempt Reports	
s this report exempt?	No
qualities Impact	
lave you undertaken the required equalities impact assessment to ensure that o groups are adversely affected by the recommendations?	Yes
egality	
thas been confirmed that in adopting the recommendations contained in this report, the Joint committee is acting within its legal powers.	Yes
ustainability and Environmental	
has been confirmed that sustainability and environmental issues have been onsidered within the report.	Yes
Policy Implications	
lone	
Consultations	

# **Background Papers**

None

Have you used other documents to compile your report?



None

## **Appendices**

Please list any appendices attached to this report. If there are no appendices, please state "none".

1. National Aquaculture Innovation and Technology Hub (NATIH) – Outline Business Case

## Approved by:

John Rogers, Executive Director Research, Innovation and Business Engagement

john.rogers@stir.ac.uk