

Catalyst

Request for Tender

Website Design, Development and Content
Management System for:

“Connecting NI to the Global Innovation Ecosystem”
online platform



Contents

| Chapter Title | Page No. |
|-----------------------------------|----------|
| Catalyst | 02 |
| Scope and budget outline | 03 |
| Functional scope | 04 |
| Standard and process requirements | 10 |
| System Requirements | 11 |
| Instructions for submission | 14 |
| Annex A: Format of response | 15 |

1.Catalyst

Catalyst is a science and technology hub focussed on fostering innovation and developing entrepreneurs in Northern Ireland. Over 2700 engineers, researchers, entrepreneurs, and executives work on our campuses enabling us to invest the surplus generated from our property operations to provide the underwriting necessary for our community-led support ecosystem that supports over 900 entrepreneurs per year in Northern Ireland. We work for the greater good to build a connected innovation community in an entrepreneurial ecosystem throughout Northern Ireland.

1.1 The 'Connecting NI to the Global Innovation Ecosystem' Project

Vision

The Global Open Innovation Network will be a platform to connect key components of the Northern Ireland innovation ecosystem together, and further to international linkages to help link a complex landscape and to promote collaboration locally, nationally, and internationally on the key growth areas of Greentech, H&LS and Fintech. This unique proposition will address the issue of a disconnected and complex ecosystems, by providing a central point of focus for the innovation curious and ambitious in NI and support their activity.

Description

Building on the Cambridge Network model (www.cambridgenetwork.co.uk) the NI Global Innovation network will provide greater connectivity within the NI ecosystem to link business, research organisations and government to stimulate sharing and collaboration on ideas from external and internal sources using an easy-to-use interface.

The aim is to encourage effective knowledge sharing, resources, information, and problems with external partners for solutions and suggestions; this will increase R&D activity, increase innovation rates across the wider business base by being openly accessible to all sectors and will offer the opportunities needed to support the number and scale of high growth Innovation Driven Enterprises.

Implementation of a Global Open Innovation Network would provide greater connectivity across the regional innovation ecosystem but could also be utilised to connect to a larger innovation network via national and international partnerships aligned to 10X sectors of interest. This will result in NI companies contributing to global research consortia and potential new market of which Sejong centre for creative economy and innovation, and its Technopark, as a key

stakeholder. The network will also showcase the world class capability that exists in NI which can be leveraged by global partners.

2.Scope Outline

The key areas of scope for this project are outlined below:

Timeline: Completion of MVP site: End June 2024 – Full project delivery Q4 2024

Budget: We are seeking costings on *proposals in the region of £80,000-95,000 excluding VAT*, for delivery of the full scope within this Request for Proposal, with the Minimum Viable Product (MVP) June deliverables to be a proportion of this fee, based on agreed final MVP scope, upon selection of the chosen vendor.

Scope of activities required:

- Fully defined project scope, definition, and project plan
- Project management and governance
- Functional and Technical specification creation
- User-centred research and UX artefacts focussed on key user types
- UX design planning and documentation
- Information Architecture creation
- UI and interaction design
- Plans and costs for future e-commerce subscription model integration
- Front-end and back-end development (including any API integration)
- Content Management System provision including any initial licence fees for a period of 1 year from launch (inclusive of any 3rd party applications)
- Support and management of website files handover for hosting
- Content Management System training for up to 2 key staff

3.Functional Scope

This is not a full functional specification. A draft functional specification has been created and will be shared with all expressions of interest in this project. The chosen agency will be responsible for creating a final version, and the production of a supporting technical specification, upon completion of scoping, project planning and research.

To aid with the creation of suitable proposals and to aid prioritisation of content, we have aimed to describe in the main where possible, functionality that will be a core requirement as part of the MVP deliverable. We have highlighted areas where we believe functionality will evolve and be introduced after the creation of MVP across any relative objectives, functions, or requirements. We have highlighted these exclusions and future builds (still to be costed in overall budget) via an Asterix. *

3.1 Platform Objectives:

The primary objectives of the project are to:

Facilitate Collaboration: Create an environment that encourages collaboration by connecting organisations, academia, and global innovation centres with shared interests in Fintech, Greentech, and H&LS.

Knowledge Sharing: Establish a comprehensive knowledge-sharing platform through a centralised Resource Centre, featuring research papers, case studies, best practices, and industry reports.

Event Facilitation: Provide a central hub for industry-related innovation events, fostering networking opportunities, collaboration, and knowledge exchange*

Innovation Catalysis: Drive innovation by offering a Collaboration Hub where organisations can initiate and manage projects, supported by advanced tools for effective communication and document sharing.

3.1.1 Target Audiences:

The primary stakeholders of the Online Innovation Portal include:

- Organisations (SMEs, MNCs): Seeking collaboration opportunities, sharing resources, and accessing a diverse talent pool.
- Academia: Engaging in collaborative research projects, accessing industry insights, and participating in events.
- Global Innovation Centres: Expanding their network, sharing best practices, and engaging in cross-border collaborations.

- Government Representatives: Utilising the platform for policy discussions, monitoring industry trends, and supporting innovation initiatives. *

3.2 Key Features and Functionality:

Collaboration Hub: The portal will feature a dynamic Collaboration Hub, allowing users to initiate, manage, and express an interest in joining R&D led innovation projects. A matching criterion (to be defined as part of project scoping) will facilitate partner matching based on project interests, budget, location, expertise etc. Discussion forums will enable in-depth conversations and idea exchange aligned to this too.

- The primary enabler of the collaboration hub will be the search engine which needs to span both opportunities, and general b2b connectivity within the portal based on interests. As a result, the search must be able to allow matching across several key and advanced areas. *
- The exact specification of the main website search engine, and whether it is one search, or unique search journeys should be defined as part of the project design but should have, at a minimum.

3.2.1 Search Engine core criteria / scope

(not exhaustive and needs validated through research)

3.2.1.1 Organisation level search:

1. Research and Development Interests:
 - To specify the areas of research and development interest, including technology focus, scientific disciplines, or industry sectors.
2. Collaboration Type:
 - Research and Development Partnerships
 - Joint Ventures
 - Consortium Formation
 - Cluster Initiatives
 - Mergers and Acquisitions
3. Industry Focus:
 - Identify specific industries or sectors of interest (e.g., healthcare, technology, energy, etc.)
4. Geographical Focus:
 - Specify regions, countries, and well-known districts of interest. The specificity and granularity of the geographies to be defined through further research.

5. Size and Type of organisation:
 - Small and Medium Enterprises (SMEs)
 - Large Corporations
 - Research Institutions
 - Non-Profit organisations
6. Technology Readiness Level (TRL):
 - Indicate the desired TRL level for potential collaborative partners.
7. Innovation Capacity:
 - Evaluate innovation capabilities, including patents, research publications, and innovative projects. (exact criteria to be defined)
8. Financial Capacity:
 - Budget size
9. Collaboration History
10. Sustainability Criteria:
 - To be defined
11. Timeline and Availability:
 - The timeline for initiation and agreement for collaboration opportunities
12. Key Contacts:
 - Identify key contacts and preferences

3.2.1.2 Opportunity level search: (dependent on data availability, see functional spec for more granular initial specification)

1. Location:
2. Industry Sector:
3. Tender Type:
4. Funding Type:
5. Project Size:
6. Project Duration:
7. Budget Range:
8. Deadline for Submission:
9. Keywords:
10. Procurement Method:
11. Eligibility Criteria:
12. Document Availability:
13. Sustainability Focus:
14. Government/Non-Governmental Initiatives:
15. Industry Standards and Certifications:
16. Contact Information:

Provide clear contact details for obtaining additional information or clarifications.

3.2.1.3 In addition, 'clusters' should be a criterion for search, and be able to be refined by data such as:

Cluster Type:

Industry Focus:

Geographical Location:

Cluster Size:

Collaboration Goals:

Cluster Activities:

Membership Criteria:

Cluster Initiatives:

Technology Readiness Level (TRL):

Communication Channels:

Membership Application Process:

3.3 Key platform sections

3.3.1 Resource Centre

A searchable database will house research papers, case studies, best practice models and industry reports. Tools for sharing success stories and best practices will contribute to a culture of learning and improvement for all. The contents will be categorised, downloadable and the title and synopsis will be searchable through the site search. *

3.3.2 Events

A user-friendly calendar will showcase upcoming conferences, workshops, and networking events relevant to the global innovation community. These events will be title, synopsis and outbound link to the event platform / website hosted by the event provider. Event listings will be added via API import or content management manual upload. *

Events should be tagged in the CMS to enable filtering across a range of key criteria such as below (*see functional specification draft for more granular initial specification around events*) *

1. Event Type:
2. Industry Sector:
3. Geographical Location:
4. Event Format:
5. Event Size:
6. Innovation Focus:
7. Event Theme or Topic:
8. Event Frequency
9. Collaboration Opportunities:

10. Registration Fees:
11. Event Duration and Dates
12. Event Applicability for Different Stakeholders:

3.3.3 Profile Management

Users will have detailed profiles reflecting their expertise, location(s), size, project collaboration history, key contacts, and preferences. The profile will also house in progress contacts, shortlisted opportunities, shortlisted contacts. The platform's recommendation engine should leverage this information to connect users with relevant opportunities.

3.3.4 Innovation zone / destination section

These areas will effectively be landing pages for key innovation zones / destinations. Northern Ireland will be one of these, and other regions will be invited to provide content for their own zones / destinations. These key sections will have the core USP's and stats of the area, the commercial, research and academic contacts signed up within the system listed and searchable. In addition, this section will contain existing opportunities for tender / proposal or advertised collaboration opportunities listed. This area of the site needs to be extremely visually appealing and Northern Ireland and key regions within Northern Ireland should be used and prioritised as a showcase for launch.

3.3.5 Contact

This will enable visitors to get in touch with the management organisation supporting the platform, regarding queries on use or errors. The platform will initially exist without service level support or curation responsibility. Catalyst with support via our chosen web design and development partner will be responsible for initial content for MVP.

3.3.6 Portal Information Architecture: Key Sections

The **Home page** should offer an intuitive dashboard, featuring an overview of ongoing collaborations, upcoming events, highlighted projects, and relevant news. Essentially a hub of activity with a clear proposition and user journey begun of how to join, and get onboard.

The **Collaboration Hub** will be the heartbeat of the platform, allowing users to connect and view opportunities, with the added context of being able to identify other organisations with capabilities in the domain of relevance or that have tagged as a favourite. Discussion forums will provide spaces for in-depth conversations, fostering idea exchange.

Project creation will be a user-friendly process, prompting users to specify objectives, timelines, and collaboration preferences.

Discussion forums will be organized by topic, ensuring focused conversations and knowledge sharing.

Advanced algorithms will facilitate partner matching, connecting entities with shared interests and complementary expertise.

Document sharing functionality, coupled with version control, will streamline collaboration efforts, ensuring a coherent project timeline.

Contact details. Once listed on the platform, organisations and team members' contact details will be shared upon completion of a basic form to deter spam and to allow for an organisation to grant access based on answers to key criteria.

The **Resource Centre** will serve as a repository for research papers, case studies, and best practices, supporting informed decision-making and innovation. *

The searchable database will categorise resources, enabling users to find relevant information efficiently. *

Tools for sharing best practices and success stories will encourage a culture of learning and continuous improvement.*

Integration with external databases will provide access to funding opportunities, grants, and industry reports, enriching the platform's resource pool.

The **Events section** will feature a dynamic calendar of industry-related events, providing opportunities for networking and collaboration. *

Profile Management will allow users to create and maintain detailed profiles, reflecting their expertise and collaboration preferences.

User and organisation profiles will capture comprehensive details, including expertise, past collaborations, and preferences.

Preferences for collaboration interests will guide the platform's recommendation engine, enhancing user experience.

Notifications and alerts will keep users informed about relevant opportunities, requests to share information, requests to discuss collaboration etc ensuring proactive participation.

4. Standards and Process Requirements.

4.1 System Architecture

The technical architecture will incorporate a responsive web design ensuring optimal user experience across multiple desktop and mobile devices. Robust security measures, including encryption, will safeguard user data. Integration with external APIs, including global innovation centres, where available, will provide real-time updates, enriching the platform's global connectivity.

4.2 Implementation Plan

The implementation will follow a phased approach, including user onboarding, feature rollouts, and marketing campaigns, to ensure widespread adoption. Regular feedback mechanisms will be established to iteratively improve the platform based on user insights.

We would like the implementation plan to be co-designed with the chosen web design and development partner, within the timelines detailed in this documentation.

4.3 Risks and Mitigations

Data Security: Rigorous testing and continuous monitoring of the solution will mitigate the risk of data security breaches. We require information from proposals of how risks will be mitigated.

4.4 Measurement of Success

Success will be measured through a range of user engagement metrics, including the number of international collaborations initiated, knowledge resources accessed, and event participation rates. Focus on connections and engagement via NI companies will be key.

Regular user feedback surveys will provide insights for continuous improvement. *

The solution at a minimum should have Google Analytics integrated and a dashboard created to include reporting on key pre-defined metrics during project scoping.

In conclusion, the Online Innovation Portal will be positioned as a transformative force, unifying Northern Ireland's innovation landscape. By strategically addressing the complexities of the ecosystem, the platform is poised to drive collaboration, knowledge exchange, and innovation, ultimately propelling the growth of Fintech, Greentech, and Health & Life Sciences in the region.

5. System Requirements

5.1 Technical Requirements:

The responsive web design will ensure a seamless experience for users across devices, promoting inclusivity and accessibility.

Robust user authentication mechanisms will safeguard sensitive information, while authorization protocols will manage user roles effectively.

The database will store detailed user profiles, collaboration and connection histories, and project view / shortlisting details, fostering a rich and evolving knowledge base of member organisations.

Integration with external APIs, including reputable global innovation centres' sharable content, will enable real-time updates, enriching the platform's global connectivity and reduction of load on content management administration.

Cybersecurity measures, including encryption and regular audits, will be implemented to ensure the confidentiality and integrity of user data.

5.2 Software Requirements

A versatile Content Management System (CMS) will empower administrators to update content dynamically, keeping the platform current and relevant. The Content management system should be open source, and non-proprietary to the development organisation responsible for website build.

Collaboration tools, such as chat, forums, and video conferencing, should be possible to be integrated for future development and release within the application.

Secure Payment via a subscription model, should be factored into the website functionality and back-end requirements. This is not part of the initial MVP scope and needs defined and co-designed between Catalyst, key platform users and the chosen design and development partner.

Analytics tools including Google analytics (minimum requirement) will provide insights into user behaviour, collaboration patterns, and platform effectiveness, aiding in continuous improvement.

5.3 Risks

Data security breaches will be mitigated through encryption, regular security audits, and compliance with industry standards.

Low user adoption initially will be addressed through targeted marketing, onboarding support, and awareness campaigns.

Resistance to change in traditional collaboration methods will be acknowledged, with comprehensive user training programs and change management strategies implemented.

5.4 Assumptions

Support from key stakeholders to enable MVP launch, including government bodies, industry leaders, and academia, will be secured through ongoing engagement and collaboration, led by Catalyst.

Availability of external APIs for integration will be confirmed through thorough agency research and contingency planning in collaboration with Catalyst.

5.5 Key Sources of Data

Registration details will capture essential information, including organisational affiliations, roles, and contact details.

Collaboration history will provide a dynamic record of past project history, facilitating the identification of successful collaboration patterns.

User-generated content, including forum discussions, project updates, and resource uploads, will contribute to the evolving knowledge base.

5.6 External Data

Industry reports and research papers from reputable sources will be curated to ensure the Resource Centre's richness and relevance.

Event details and schedules from trusted sources will populate the Events calendar, ensuring users have access to the latest opportunities. *

5.7 Testing

User Acceptance Testing

Evaluation of ease of use for various user roles will involve real users navigating the platform, providing valuable feedback for improvements.

Validation of collaboration features will include simulated project scenarios, ensuring that the platform effectively facilitates collaboration.

Data security measures will undergo rigorous testing to identify vulnerabilities and ensure robust protection mechanisms.

5.8 Performance Testing

Platform response times under various loads will be tested to identify potential bottlenecks and optimize performance.

Scalability testing will ensure that the platform can accommodate a growing user base and increasing data volumes.

5.9 Maintenance and Upgrades

Regular monitoring of user feedback will inform iterative improvements to the platform, ensuring it remains aligned with user needs.

Periodic security audits and updates will be conducted to address emerging cybersecurity threats and maintain a secure environment.

Continuous improvement, guided by technological advancements and user expectations, will be an ongoing process, ensuring the platform evolves in tandem with the innovation landscape.

By meticulously implementing this detailed functional specification, the envisioned online portal will not only connect Northern Ireland organisations with local and global partners but will also serve as a dynamic hub for innovation, addressing the complexities of the existing ecosystem and fostering sustainable growth in key sectors.

6. Instructions for Submission of Applications

1. Evaluation Criteria

The evaluation criteria that will be used in the award of this contract are:

| | |
|--|-----|
| Understanding of the brief and challenge | 25% |
| Experience and Proven Capability | 25% |
| Methodology, Team & Delivery | 30% |
| Value for Money | 20% |

2. Format of Response

Responses to how the brief can be met, aligned to the scoring criteria above should be completed via the designated areas in the next chapter. (7. Format of response) demonstrating understanding, proof of capabilities and confidence in delivery of the work as defined in chapters 3.4 and 5. Costs should be clearly segmented and detailed, with clarity on rates (resource type / blended etc) and where cost ranges are documented, any parameters / assumptions that these are based on.

3. Completions and Submission of Proposals

The proposal must be completed as directed and returned to Catalyst by email.

Replies can be sent by email to andrew.mccrea@wearecatalyst.org with the subject line 'Proposal for website design and build for: Connecting NI to the Global Innovation Ecosystem' to arrive by 5:00pm on Friday 30 February

4. Formal Contact

Applicants seeking to clarify any points of doubt or difficulty relating to this documentation before submitting proposals should contact: -

Andrew McCrea, Innovation Delivery Manager, Open Innovation at Catalyst. Email: andrew.mccrea@wearecatalyst.org

Any questions or requests for clarification must be received by noon on Wednesday 21 February.

Format of Response

Annex A

Company Details

| | |
|---------------|--------------------|
| Company Name: | Contact Telephone: |
| Contact Name: | Contact E-Mail: |

Customer References

Please note, customer references will only be contacted if your organisation is shortlisted.

Reference 1

| | |
|---------------|--------------------|
| Company Name: | Contact Telephone: |
| Contact Name: | Contact E-Mail: |

Reference 2

| | |
|---------------|--------------------|
| Company Name: | Contact Telephone: |
| Contact Name: | Contact E-Mail: |

Selection Criteria 1

Understanding of the brief and challenge – 25%

Please do not submit more than one additional A4 page.

Selection Criteria 2

Experience and Proven Capability – 25%

Please do not submit more than one additional A4 page.

Selection Criteria 3

Methodology Team and Delivery – 30%

Please do not submit more than one additional A4 page.

Selection Criteria 4

Value for Money – 20%

Please do not submit more than one additional A4 page.

We confirm that the service outlined in your Terms of Reference can be carried out within the specified timescale at the total cost quoted above.

Signed for and on behalf of Applicant:

Date: _____

Print Name: _____

NORTHERN IRELAND SCIENCE PARK (HOLDINGS) LIMITED

VAT REGISTRATION

Part 1 or Part 2 to be completed as appropriate by the Tenderer and returned at the time of tendering.

1. My/Our VAT Registration Number is: _____

Signed by:

For and on behalf of:

Date

2. We are **"EXEMPT"** from VAT under the terms of the Finance Act 1972.

Signed:

For and on behalf of:

Date:

NORTHERN IRELAND SCIENCE PARK (HOLDINGS) LIMITED

FAIR EMPLOYMENT DECLARATION

DECLARATION AND UNCERTAKING TO BE SIGNED BY ALL MAIN CONTRACTORS, NOMINATED SUB-CONTRACTORS OR CONSULTANTS TENDERING FOR THE EXECUTION OF WORKS OR THE SUPPLY OF GOODS OR SERVICES AND MUST BE RETURNED AT THE TIME OF TENDERING.

FAIR EMPLOYMENT AND TREATMENT (NORTHERN IRELAND) ORDER 1998

1. Article 64 of the Fair Employment and Treatment (Northern Ireland) Order 1998 provides inter alia that a public authority shall not accept an offer to execute any work or supply any goods or services where the offer is made by an unqualified person in response to an invitation by the public authority to submit offers. Article 64(4) also provides that the public authority shall take all such steps as are reasonable to secure that no work is executed or goods or services supplied for the purposes of such contracts as are mentioned above by an unqualified person.
2. For the purposes of Articles 64 – 66 of the Order, an unqualified person is a person on whom a notice has been served under Article 62(2) or Article 63(1) of the Order and which has not been cancelled.
3. Mindful of its obligations under the Order, NISP has decided that it shall be a condition of tendering that a contractor shall not be an unqualified person for the purposes of Article 64 – 66 of the Order.
4. Contractors are therefore asked to complete and return the form endorsed hereon, with their tender, to confirm that they are not unqualified persons and to undertake that no work shall be executed or goods or services supplied by an unqualified person for the purposes of any contract with NISP to which Article 64 of the Order applies.

FAIR EMPLOYMENT AND TREATMENT (NORTHERN IRELAND) ORDER 1998

I/We hereby declare that I am/we are not unqualified for the purposes of the Fair Employment and Treatment (Northern Ireland) Order 1998.

I/We undertake that no work shall be executed, or goods or services supplied by any unqualified person for the purposes of any contract with NISP to which Article 64 of the Order applies.

Signed: _____

Duly authorised to sign for and on behalf of:

Date:

NORTHERN IRELAND SCIENCE PARK (HOLDINGS) LIMITED

CERTIFICATE RELATING TO BONA FIDE TENDER

1. The essence of tendering is that the client shall receive bona fide competitive tenders from all firms tendering. In recognition of this principle, we certify that this is a bona fide tender intended to be competitive and that we have not fixed or adjusted the amount of the tender by or under or in accordance with any agreements or arrangements with any other person.
2. We also certify that we have not:
 - a) Communicated to a person other than the person calling for these tenders the amount or approximate amount of the proposed tender, except where the disclosure, in confidence, of the appropriate amount of the tender was necessary to obtain insurance premium quotations required for the preparation of this tender;
 - b) Entered into any agreement or arrangement with any other person that he shall refrain from tendering or as to the amount of any tender to be submitted;
 - c) Offered or paid or given or agreed to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the said work any act or thing of the sort described above.
3. We undertake that we will not do any of the acts mentioned in paragraphs 2a, 2b or 2c above at any time before the acceptance or rejection of this tender.
4. In this certificate the word "person" includes any persons and anybody or association corporate or unincorporated any "any agreement or arrangement" includes any such transaction, formal or informal and whether legally binding or not.

Dated this _____

Signed by or on behalf of the Tenderer:

Name of Tenderer:

Registered Address:

NORTHERN IRELAND SCIENCE PARK (HOLDINGS) LIMITED

FORM OF TENDER

CONTRACT FOR

1. I/We the undersigned hereby tender for the above contract in accordance with the attached Conditions or Contract and Specification at the prices quoted.
2. I/We agree that this Tender together with your written acceptance thereof shall constitute a binding contract between us in relation to the whole or such part of the Tender as may be specified in your written acceptance.
3. I/We accept and agree to abide by the attached Conditions of Contract which take precedence over any terms, conditions, stipulations or provisos which may appear on or be annexed to any correspondence submitted by me/us in connection with this Contract.
4. I/We understand that NISP does not bid itself to accept the lowest or any tender submitted in response to this enquiry and may accept the whole or part of any tender.
5. I/We understand that the acceptance of any Tenders will be on the basis of the published evaluation criteria.
6. I/We understand that the acceptance of this Tender does not bind NISP to place any orders under it and that NISP may accept more than one Tender for the supply of the service covered by this Tender.
7. I/We understand that NISP reserves the right to discontinue the award procedure in the event of irregular tenders or in the absence of appropriate tenders and in such circumstances may use the negotiated procedure without a further call for competition.
8. I/We warrant that I/we have all the requisite corporate authority to sign this tender.

Dated this _____

Signed by or on behalf of the Tenderer:

Name of Tenderer:

Registered Address:
