

Cumann Lúthchleas Gael

Páirc an Chrócaigh

Baile Átha Cliath 3

Tender Request: GAA - “The Development of an Automated Hurley & Sliotar Interaction Testing System”

Introduction

The Gaelic Athletic Association (GAA) is a national organisation responsible for the promotion, development and co-ordination of Gaelic games including Hurling, Gaelic Football, Rounders and Handball.

The GAA is keen to build on the strides that have been made in recent years in terms of the creation of sliotar specifications and a licensing system to ensure consistency of use, fair play and the upholding of the Association’s good name.

In this context, the GAA is pleased to announce an opportunity in this space for the right person to help address current shortcomings regarding sliotar and hurley testing and performance.

Background to the Request for Tender

The GAA invites tenders to undertake research into hurley and sliotar performance.

Currently, the coefficient of restitution (level of bounce/liveliness) is used as a key specification criterion for the sliotar. There are other relevant factors, such as viscoelasticity (sliotar deformation and reformation) and shore hardness (sliotar indentation), among others, that also impact on performance.

The Association currently conducts randomised tests – both lab and field based – to enforce the regulations related to the sliotar that have come into effect. While the current testing model is exacting, it does not provide exhaustive data on the basis that some of the variables do not lend themselves to precise measurement, for example, the strength and proficiency of players striking the sliotar, their level of fatigue and the type of hurley used by each player.

Research Aim

This research aims to provide an evidentiary base to inform current and future regulations related to the hurley and sliotar. Specifically, the GAA would like to ensure that the testing employed to enforce hurley and sliotar regulations are valid, reliable, and contextually relevant.

A key element of this study will be the development of an automated hurley and sliotar interaction system which will provide a definitive measure of sliotar performance when struck at a consistent speed and will help to compute the striking impact of different types of hurley.

Such automated testing systems are commonplace in sports like golf, where using some current testing methods – e.g., using different players to strike sliotars – are not utilized. This will increasingly be the case within the GAA as the sliotar licensing system takes root and stakeholders seek definitive data on equipment performance.

Management of the Research Process

A Research Advisory Group will oversee the research process. The group's role will involve discussing and approving aspects of the research and advising and supporting the researchers. Membership of the Advisory Group will include key members of GAA personnel. Day-to-day management of the contract will be led by GAA Player Welfare Manager, Eoghan Tuohey (eoghan.tuohey@gaa.ie), who will also act as the key contact person.

Research Outputs

The tenderer must submit regular progress reports and attend review meetings with the Advisory Group. In addition, final outputs will include (but not be limited to):

- A detailed report of the research process and findings.
- A roadmap on how to future-proof the process of regulation enforcement.
- Produce a detailed analysis of the current range of commercial sliotars.
- Produce a report on a functional automated interaction system, sliotar delivery system and impact analysis system.
- Produce a report on the sensing methods and hurley/sliotar impact design.
- Produce a report on the review and analysis of current hurley design and a set of standardisation recommendations for the hurley moving forward.

Requirements

- A strong background in engineering, materials science, technology, product development/design, or a related relevant field.
- Experience in conducting research, including literature reviews, data analysis, and report writing.
- Excellent analytical and problem-solving skills.
- Ability to work independently and meet deadlines.
- Effective communication and presentation skills.

Format of Tenders

Applicants should submit a tender document which addresses the points listed below in the order given. The tender document should be no more than 3,000 words (excluding CVs and references, which should be added as appendices). Please find the information headings to be addressed in the tender document below.

General information

- Name, address, telephone number and e-mail address of the applicant, identifying the principal/day contact as appropriate.
- Name, address, telephone number and e-mail address of any third parties, partners or collaborators involved in the tender, along with a description of their role or the element of the contract that they will fulfil.
- Confirmation of acceptance by the applicant and any third parties of the conditions of the tendering process as set out.

Previous relevant experience and expertise

- Outline of the qualifications and relevant experience of each member of the research team. Please add a summary CV of each member of the research team as an appendix to the tender document. Each CV must not exceed two A4 pages.
- Please describe how the team's expertise and competencies relate to the area of work described in the tender, substantiated with evidence such as published work if possible.
- Provide evidence to demonstrate the team's knowledge of current relevant national and international policy and practice and/or methods of acquiring these.

Methodology Outline - how the project will be undertaken

This should start with an overview of your proposed approach covering the following areas:

- The proposed elements/areas of investigation/examination.
- Methods to be used to investigate each element.
- Approach to identifying and consulting key stakeholders, staff and experts.
- Nature and types of data to be gathered.
- Specific approaches and tools to be used to gather data and ensure it is robust.
- Methods used for analysis of data.
- Your approach to ensuring high ethical standards is applied before, during and after the project/research duration.
- The methodology to be used, including the strengths and weaknesses of the proposed approach.

Timetable

State the overall project timescale, outlining the key milestones and actions to be undertaken and the calendar / timeframe for each.

Schedule of costs

- Quote costs in euro (€).
- The proposed contribution of any partners or third-party funding to be sought for the project.
- The budget must show the total costs of the research project, including any expenditure to third parties, collaborators, or subcontractors.
- Use the following as main headings for the breakdown of costs, subdivided as required.
 - Salaries (include details for each person involved and note their role or position in relation to the project).
 - Data collection and processing costs, including IT.
 - Administration (explain the basis of apportionment of costs).
 - Overheads (give details of cost headings for overheads and explain the basis of apportionment of costs).
 - Other costs appropriate to a project of this nature (which must be specified and defined).

Requests for further information or clarification

Requests for further information or clarification of any aspect of this process or expectations for this evaluation can be made by email to: eoghan.tuohey@gaa.ie. To ensure equitable treatment of prospective tenderers, where such additional information or clarification is provided, the GAA will seek to make relevant information available to all. Therefore, please provide a contact email address with your tender to facilitate this information-sharing.

Changes to invitation to tender

The GAA reserves the right to update or alter the information contained in this document at any time, but not later than seven days before the closing date for the receipt of tenders. Participating tenderers will be informed as the need arises. There is no obligation on the GAA to accept the lowest cost or any tender, and it may be decided, following the review of the tenders, not to proceed or to proceed with a new invitation to tender or an amended version of the proposed research.

Submission of Tenders

All tender materials must be submitted to GAA Player Welfare Manager, Eoghan Tuohey (eoghan.tuohey@gaa.ie) via email by 04/04/2024. Submissions by each applicant will be noted through return email. Applicants are advised to submit all materials in standard format (PDF or Microsoft Word/Excel). The GAA is not responsible for any corruption of files which may occur in the submission process. The GAA will not be liable for any costs incurred by candidates in the preparation of tenders or any associated work effort. Late submissions will not be considered. The GAA will award the contract to its best advantage and is not bound to accept any tender application. All unsuccessful tenders will be advised of the result.

The GAA reserves the right to -

- Extend the time of lodgment of responses to the Request for Tender and/or to vary the timings and process for their Request for Tender
- Vary any requirements of the services required for the Request for Tender
- Following evaluation, accept or reject any or all responses to the Request for Tender
- Seek and obtain clarification of any responses to the Request for Tender, including additional information.
- Request providers to amend their responses.
- Accept any proposal in part or in total.

Assessment Criteria

Potential candidates will be assessed both on their tender proposals and, if required, a follow-up interview. They will be assessed against the following major attributes -

- Interpretation of the brief and proposed methodology (300)
- Proven capability and experience in research, consultation and relevant field of work (300)
- Capacity to complete the work (200)

Application Deadline

The deadline for applications to be considered will be 04/04/2024.