

TENDER QUERIES AND RESPONSES

Tender Reference: AR/02/2024

Date: 14th January 2025

Subject: Land-based Augmented Reality Project

1. Educational Content:

Q: Could you please specify the expected educational content to be created within the tender scope?

A: The content will focus on Agriculture, Animal Care, Horticulture, and Equine Studies, including practical simulations, anatomy and physiology visualisations and training for high-risk or complex tasks.

The educational content will specifically address the following:

- Agriculture: Simulations for machinery operation, crop management techniques and animal husbandry practices.
- Animal Care: Interactive modules for animal anatomy and physiology, safe animal handling procedures and veterinary care basics.
- Horticulture: Practical exercises on plant propagation, pest and disease identification and greenhouse management.
- Equine Studies: Visualisations of equine anatomy, demonstrations of proper grooming and saddle fitting and safe handling practices for horses.

The content will include immersive AR tools to support these areas, providing hands-on experiences and visual aids tailored to enhance vocational training in the listed disciplines.

2. Target Platforms:

Q: What are the target hardware models the software needs to support? For example, will it be aimed at native apps for iOS, Android, and possibly Meta Quest 3 in passthrough mode, or should it be a web or standalone application for Mac and PC?

A: The software must support mobile devices (iOS and Android), web-based applications for Mac and PC and provide offline access where connectivity is limited.

3. Integration with Existing Systems:

Q: Are there specific existing systems or learning management platforms that the software must integrate with?

A: Integration with Learning Management Systems such as Moodle, Blackboard, or Canvas is required. Compatibility with SCORM or xAPI standards is necessary.

4. Content Management:

Q: Should the software be designed as a platform capable of hosting content, with some initial content developed as part of this tender, and allow educators to add their own materials in the future?

A: The platform should allow hosting of the initial content and provide functionality for educators to create and manage their own materials.

5. Backend Requirements:

Q: Are there existing backend systems currently being used for AR? If so, could you provide details on their hosting and functionality?

A: No current backend AR systems are in use. A reliable and scalable solution with cloud-based hosting is preferred.

6. Usage Context:

Q: Will the software primarily be used in classroom environments, or is it intended for independent use by students at home?

A: The software will be used in both classroom/practical settings and independently by students at home.

7. Training Content Scope:

Q: Is creating any of the training content part of the tender scope, or does the scope focus solely on creating the shell platform where content will later be added for each category?

A: The scope of the tender includes both the creation of the AR platform (shell) and the development of some initial training content specific to the identified categories: Agriculture, Animal Care, Horticulture, and Equine Studies. This initial content is expected to serve as a foundation and example for future content additions.

8. Backend Solution:

Q: We propose using Amazon Web Services (AWS) to power the server and database for the system. Would this be an acceptable solution?

A: Yes, Amazon Web Services (AWS) is an acceptable solution for hosting the server and database. However, any proposed backend solution must comply with relevant data protection and privacy regulations applicable to educational institutions.

9. Existing Materials:

Q: Can you please share any existing materials that will be ported to the new AR platform? Ideally, a few varied examples of the content would help us understand the AR functionalities that need to be built.

A: We will provide sample materials currently used in training, such as diagrams, videos, and existing digital resources. These materials will give insights into the AR functionalities required, particularly for simulations, anatomy visualisations, and interactive training. A detailed list or examples can be shared upon contract award.

10. Budget Flexibility:

Q: Is there any flexibility on the budget? The scope of building the platform appears to be quite extensive, even without factoring in the creation of educational content.

A: The budget for the project is set at £40,000–£50,000, inclusive of VAT. While this is the indicative range, we encourage bidders to propose cost-effective solutions within this limit. Any additional features or functionalities beyond the specified scope may need to be negotiated separately.

11. Application Hosting:

Q: Is support for iOS and Android expected as native app store-hosted applications, or would a web-based AR solution suffice?

A: Support for iOS and Android as native applications hosted on app stores is preferred, but a web-based AR solution may be acceptable provided it meets all functionality and performance requirements, including offline accessibility and usability across devices.

12. Integration Documentation:

Q: Is there any existing documentation available on the required integration with systems like Moodle, Blackboard, or Canvas?

A: At this stage, there is no existing documentation detailing integration with systems like Moodle, Blackboard, or Canvas. However, compatibility with such systems is a requirement, and suppliers will need to propose how integration can be achieved based on typical API standards and interoperability practices.

13. Learner Numbers:

Q: How many lessons per subject do you require?

A: The tender scope includes the creation of foundational content for each subject area: Agriculture, Animal Care, Horticulture, and Equine Studies. The exact number of lessons per subject has not been predetermined, but the focus is on providing key simulations and visualisations that demonstrate the platform's potential and support practical learning objectives.

14. Collaborations:

Q: Can you expand with some examples on what collaborations and joint experiences between colleges will be?

A: Collaborations and joint experiences may include sharing AR resources across colleges, enabling collective access to the platform, and co-developing subject-specific content. For example, one college might develop an AR simulation for animal dissections while another focuses on horticultural anatomy, and both can share these resources via the platform.

15. Success:

Q: What does “success” look like for this project?

A: Success will be measured by:

- Improved student engagement and motivation through interactive AR experiences.
- Positive feedback from educators regarding usability and value in teaching.

- Potential evidence of improved learning outcomes, such as higher student grades or better skill retention.
- Successful collaboration among colleges, leading to cost-effective resource sharing and expanded AR adoption.

16. Editing:

Q: What level of editing or “lesson-building” do you expect teachers to handle on their own?

A: Teachers should be able to make minor edits, such as customising pre-built AR lessons, adding annotations, or uploading supplementary materials. Advanced content creation (e.g., developing new simulations or models) is not expected to be within their remit.

17. Animation:

Q: Are 3D animated models must-haves, or can partial 2D/2.5D solutions suffice?

A: While 3D animated models are preferred for immersive learning, partial 2D/2.5D solutions may be acceptable if they meet the learning objectives and provide cost-effective alternatives.

18. Storylines:

Q: Are advanced interactive storylines essential, or can we do simpler experiences with hotspots?

A: Advanced interactive storylines are not essential. Simpler hotspot-based experiences that are engaging and effective in delivering educational content are acceptable.

19. Support:

Q: What are your expectations for ongoing support (bug fixes, updates, expansions) beyond August 2025?

A: Ongoing support beyond August 2025 should include:

- Regular software updates and bug fixes.
- Compatibility updates for new devices or operating systems.
- Maintenance to ensure platform stability and usability.
- Optional expansion support for adding new features or content as required.

20. Additional Funding:

Q: Is there any plan for additional funding for ongoing technical support and adding additional lessons?

A: At present, there is no guarantee of additional funding beyond the initial contract value. However, ongoing needs may be assessed, and additional funding could be sought depending on the success and adoption of the platform.

21. Learning Management System:

Q: Which Learning Management Systems (LMS) and existing AR solutions do we need to integrate with?

A: The platform must integrate with widely used LMS platforms such as Moodle, Blackboard, and Canvas. No specific existing AR solutions have been identified for

integration, but the platform should be adaptable for compatibility with other standard educational technologies.

22. Budget:

Q: Please can you confirm if the £40,000–£50,000 does include VAT within the cost, as the government website states the cost excludes VAT?

A: The budget of £40,000–£50,000 includes VAT. This is in line with the stated tender documentation.