NRC



Prior Information Notice for the Procurement of Augmented Reality (AR) / Virtual Reality (VR) Systems for Rehabilitation Services

Description of the Procurement:

The National Rehabilitation Centre (NRC) is the first of its kind in the UK and will aim to deliver the specific and sophisticated rehabilitation people need to help them transition back to their normal lives after the setback of serious injury or illness. It should be viewed as a flagship project providing technological advances and transformation of NHS rehabilitation services. It will have the facilities to treat patients and also train and educate significant numbers of staff in this field and integrate research and innovation in rehabilitation to provide new practical solutions for patients. The NRC will be a pilot site for a new clinical model and proof of concept, which will then be rolled out nationally. This provides a unique opportunity to work with the team to identify solutions that can transform patient care and advancements in the field of rehabilitation nationally.

This Prior Information Notice (PIN) is intended to enable the NRC to better understand technology available and define the specification for a tender exercise later in the year.

The NRC is seeking to explore the market potential for Augmented Reality (AR) and Virtual Reality (VR) systems tailored specifically for rehabilitation services for patients. The use of AR and VR technologies in rehabilitation is an emerging field that promises to enhance patient recovery through immersive, customisable therapy sessions. These technologies are expected to aid in various rehabilitation processes including but not limited to physical, cognitive, functional and vocational rehabilitation. We would like this technology to provide:

- Delivering cognitive rehabilitation (e.g. planning, problem solving, attention, spatial attention)
- Developing perceptual functional assessment and treatment programs for different functional tasks
- Method of training mental health skills, e.g. relaxation and attention training
- Augment mental health treatment e.g. exposure therapy for anxiety
- Support upper limb rehabilitation
- Be able to have patient's home/other environments uploaded onto it to support discharge planning and preparation (like estate agents use for viewing houses)
- Vocational rehab and driving assessment

We understand there may be a need to use various software applications depending on the outcome required using the AR or VR technology, however, to prevent duplication and waste, NRC would if feasible like to use the same central hardware without having to use different software options to fulfil each of the different rehab requirements. We would also like to consider the future proofing possibilities of these technologies with further software options and updates to be available within the hardware solution, as well as looking to other possibilities for use within the NRC setting.

The main objective of procuring AR/VR systems is to:

- Enhance the effectiveness of rehabilitation treatments.
- Provide personalised therapy experiences.
- Increase patient engagement and motivation.
- Monitor and track patient progress with precision.
- Integrate with existing health management systems.

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The scope of the AR/VR systems includes:

- Hardware (Headsets, Controllers, Sensors, etc.)
- Software (Therapy Modules, Patient Management Systems, Data Analytics, etc.)
- Support and Maintenance Services.
- Training for staff on system usage and maintenance.

The NRC are seeking innovation and new technology ideas to enable us to define this specification.

We are looking for suppliers who have proven experience in delivering AR/VR solutions in healthcare or similar sectors. Suppliers are requested to provide Brochures and demonstrate:

- Evidence of technical capabilities and previous projects.
- Compliance with healthcare regulations and data protection standards, including DTAC and DCB0129 where relevant.
- Ability to provide comprehensive after-sales support.
- Willingness to collaborate with other commercial software companies and research colleagues.

At this stage, any information gathered through this market engagement exercise may inform internal business planning and any possible subsequent procurement process and will NOT be appraised in any future tender evaluation exercise. Please note that participation or non-participation in this preliminary market consultation exercise shall not prevent any supplier participating in any potential procurement process, nor is it intended that any information supplied shall place any provider at an advantage or disadvantage in any forthcoming procurement process.

We intend to engage in open discussion with service providers on a variety of subjects pertaining to the AR & VR technology. The Authority is using the Atamis e-tendering portal to conduct the procurement process ("the e-Tendering Portal"). All communications should be carried out via the e-Tendering Portal. Consultation for this PIN closes on Thursday 12th June 2024.

Suppliers will be contacted directly within this time period, for further information and possible demonstrations.

If Bidders have any problems with the e-Tendering Portal, they should contact the helpdesk on 0800 9956035 or by sending an email to support-health@atamis.co.uk .The helpline is open Monday to Friday between 8 am and 6 pm excluding public and bank holidays.