

CoSTAR Live Lab Call Brief

New Frontiers for Live Performance

Led by CoSTAR Live Lab

Supported by CoSTAR National Lab

TIMELINE:

- **Open Date for Applications:** Thursday 6 February 2025
- **Closing Date for Applications:** Thursday 20 March 17.00 GMT
- **Application Outcome:**
You will be informed in writing of the outcome within 8 weeks of the closing date.
- **Project Start and Duration:**
Projects can be up to 3 months in duration and must begin after 1 May 2025 and end no later than 31 October 2025.

SYNOPSIS

CoSTAR Live Lab invites companies, technologists, and creatives to help us shape the future of live performance. Based at Yorkshire's world-renowned Production Park – where icons like Beyoncé, Metallica, and The Rolling Stones prepare for their world tours - CoSTAR Live Lab offers a unique setting for innovation. Our capabilities include isolated experimental spaces, marker-less motion capture, high resolution immersive audio and scalable virtual production all supported by a team of leading researchers with expertise in the use of immersive and virtual technologies, virtual production workflows, user experience, and the ethical use of AI for the creative industries.

This call invites applications from teams with creative R&D projects focussed on the live performance sector, that would benefit from access to Live Lab's cutting-edge infrastructure to accelerate and advance their innovation activity. In addition, applicants

can apply for cash funding of up to £13,000 to contribute to the costs of their R&D project. In total, the support package on offer is valued at over £100,000 per project.

WHAT WE ARE LOOKING FOR

We are seeking proposals from industry-focussed innovators that are tackling the unique challenges of the live performance sector, from advanced digital production workflows to audience engagement, with a focus on sustainability and scalability. We are excited to see what new creative and technical possibilities you will develop through access to our advanced R&D infrastructure.

These projects will also help the CoSTAR Live Lab to trial, test and showcase new ways of supporting R&D in the creative industries.

The projects selected through this call are expected to deliver tangible outputs. These may be early-stage prototypes or proof-of-concept demonstrations, or later stage product developments that leverage Live Lab's advanced infrastructure.

This call seeks projects that will push the boundaries of immersive and interactive experiences across key application areas, including (but not limited to):

- **Live Performance and Hybrid Events:** Our Networked Immersive Experience Labs and private 5G network support the development of both in-person and hybrid performance formats, enabling seamless interaction between remote and live audiences through cutting-edge immersive technology.
- **Virtual Production:** From film and TV to live events, our virtual production facilities—spanning the [XPLOR virtual production volume](#) at Production Park and [experimental stages at York](#)—empower seamless integration of real and virtual spaces and innovative production workflows.
- **Audience Engagement and Interaction:** Our dedicated User Experience lab allows real-time collection of biometrics and other UX data, essential for developing and refining new interactive tools. With scalability from small group tests in a home environment to large-scale, arena-style experiences at Production Park, this lab is instrumental in driving real-time audience feedback and interaction.
- **Networked and Distributed Performances:** Enabling collaborations across multiple venues, Live Lab's networked infrastructure provides a testbed for multi-site, synchronized experiences. Projects can use our networked capabilities within

our isolated spaces and /or experiment with cross-campus setups between Production Park and York.

- **Volumetric Capture and Motion Tracking:** Equipped with [Vicon](#)'s advanced marker less motion capture technology and a robust high-performance network, we enable real-time interactive data capture for realistic, high-fidelity digital assets for real-world live performance, digital twinning and broadcast.
- **Spatial Audio and Sound Reinforcement:** Home to extensive expertise in immersive audio, our facilities include four spatial audio systems, including a large-scale 32-channel L-ISA system by [L-Acoustics](#). These systems support the creation of rich, multidimensional sound experiences vital to live and virtual environments.
- **Future Venue Design:** We can prototype and test scalable venue setups that integrate immersive and interactive technologies, redefining audience engagement and adaptability for various performance formats.
- **Creative and Immersive Technology Development:** Leveraging AR, VR, AI, and an extensive suite of XR tools, Live Lab supports groundbreaking creative projects that advance storytelling, interactivity and live performance through cutting-edge technologies and real-time computational power.

SOCIAL IMPACT

Environmental Sustainability and Equality, Diversity and Inclusion (EDI) are central to our work at CoSTAR and all our Access Programmes. All projects, regardless of their main R&D focus, are expected to have a demonstrable engagement with either EDI, sustainability or both. This will be supported by training and mentorship in social impact areas that include; equitable design, developing environmental sustainability principles and working with diverse user groups.

The application will ask you to outline how your proposal and project team intend to engage with either EDI or sustainability (or both) and the additional support you would most benefit from.

Please consider:

- Does your company have an EDI policy/action plan?

- What experience, if any, does the team have in delivering ‘inclusive innovation’ e.g. working with diverse user groups, engaging in participatory design, developing assistive technology or addressing bias in emerging technologies?
- Is your business actively integrating sustainability principles into its products, strategies and operations?
- Any there any specific challenges or opportunities relating to sustainability arising from your project?
- What experience, if any, does the team have of addressing technological challenges around sustainability and carbon measurement?

INTELLECTUAL PROPERTY (IP) ARRANGEMENTS

Successful Applicants will own any new IP created through their projects. If the Successful Applicant successfully commercialises the project and achieves net sales in excess of £500,000 on products/services integrating the new IP, they shall pay a royalty at a rate agreed at contract. Negotiation on royalty would be on ‘fair and reasonable terms’. Should the Successful Applicant have not commercialised any new IP within 2 years of the project completion, the rights will be assigned to Live Lab in order to further CoSTAR Network’s public purposes. In addition, Successful Applicants have the option to use available Live Lab background IP under a free licence for the purposes of the project, with any background to be clearly detailed and agreed at the point of contracting. Any use of background IP for commercial purposes beyond the project will be subject to agreeing a commercial licence. IP created by the Successful Applicant with Live Lab can be used for R&D purposes by the CoSTAR Network. If a different company (the ‘Non-Applicant Company’) who has created IP with any lab in the CoSTAR Network, wishes to use the IP developed by the Successful Applicant for commercialisation purposes, then such IP will be licenced to the Non-Applicant Company subject to payment of royalties to the Successful Applicant, to the Live Lab (where the Successful Applicants IP was developed) and to the lab of the CoSTAR Network where the Non-Applicant Company developed the IP.

WHAT IS ON OFFER

CoSTAR support for this call offers a combination of access to equipment and facilities, research expertise, and additional cash funding to support project costs. The total value of

this support package is valued at over £100,000 per project. Up to three projects will be funded as part of this open call.

Successful projects will have the opportunity to access:

- **Equipment and facilities:** up to two intensive one-week development sprints at CoSTAR Live Lab. This includes on-boarding and orientation on the required equipment by our technical team. Please see Appendix A for a description of the Live Lab facilities below.
- **Research Expertise:** staff will guide and collaborate with you during the tenancy, and will also be able to provide up to 10 days of ad-hoc support outside of these sprint windows over the project's total duration. Please see Appendix B for a description of Live Lab's research expertise below.
- **Cash funding:** up to £13,000 is available to contribute to costs in undertaking the project, such as contracting performers, interaction design, editing, consumables etc. Please see section on Eligible Costs.
- **Travel Budget:** if a project requires a period of residency (two or more days) at Live Lab and if travel distance is more than two hours from that lab, a company stipend of up to £4,000 is available to support travel and accommodation.

WHO CAN APPLY

This competition invites applications from teams from anywhere in the UK. Teams may include a variety of UK-based companies, technologists, researchers and creative practitioners, however, the lead applicant must be a UK-based company and demonstrate a high level of ambition to deliver technological advancement and business growth in its application to creative industries challenges.

Organisations applying must meet the following Eligibility Criteria;

- have a lead applicant that is an enterprise or legal entity registered and trading in the UK
- be from or support the screen and/or performance sectors
- have an operations and/or project team based in the UK
- intend to carry out any project work arising from this award in the UK
- intend to exploit the results of work from or in the UK
- only include eligible project costs in their application (see guidance on Eligible Costs)
- not attribute more than 75% of project costs to subcontractors. Subcontractors can be from anywhere in the UK

ELIGIBLE COSTS

ALLOWABLE COMPANY COSTS

- Travel and subs - if a project requires a period of residency (two or more days) at the relevant Lab and if travel distance is more than two hours by public transport or car from that lab, a company stipend of up to £4,000 is available to eligible companies upon submission of actual costs incurred. Travel and subs may be an area where SMEs applying can demonstrate priority need for use of the Lab via their willingness to share the burden of such costs via in-kind.
- Licensing of relevant software and access to licensable IP
- Materials e.g. props (real or digital)] and design
- Staffing: direct project staff including freelancers
 - No profit element and no mark up of staff / labour
 - A maximum of 20% management of staff overhead on the lead beneficiary [not on the overall budget]
 - Subcontractors can be paid at 100%
- Where the applicant can evidence need for essential hardware not available within CoSTAR required for projects in exceptional cases.
- Reimbursement of costs:
 - Large Organisations 50% of eligible costs
 - SMEs subject to total project cost:
 - Under £50k = 100% eligible costs
 - Over £50k = 70% of eligible costs
 - SMEs must take ownership of their own subsidy control status
- Access to CoSTAR partner facilities that benefit from discounted rates agreed by labs and their partners under CoSTAR arrangements

ALLOWABLE RESEARCH COSTS

- Research staff time not funded by CoSTAR grants elsewhere – to be paid as fixed grant awards with no overheads.

DISALLOWED COSTS

- Overhead of any universities partnering on the project
- SME production fee/profit margin from commercial operators
- Charging of staff within their already funded commitment to CoSTAR grant (include leverage)
- Infrastructure already paid for in the CoSTAR grant
- Use of sub-contractors based solely outside the UK
- Project specific Marketing & Communications activity

HOW TO APPLY

To apply, please complete the [online application form](#) on the Submittable platform by the deadline on Thursday 20 March, 2025, 17.00 GMT. You will be informed in writing of the outcome within 8 weeks of the closing date.

The application form contains 10 questions, each with a limit of 500 words. for the full application. These questions relate to the assessment criteria outlined below.

During the application process you will be asked for a high-level project plan and budget (where necessary). Please note that if you are successful, you may be asked for more detailed documentation as part of the contracting process.

For more information, please join our Webinar on Friday 21 February at 12.30-13.30 GMT. Please see full details on the [website](#).

Accessible Applications

Support is available for those who require assistance with the application process.

Reasonable adjustments may include:

- Submitting an application via a form in Microsoft Word format (available upon request)
- Options made available for video or audio submissions in place of written answers for each section in the application
- All webinars will be accessible with visual/written briefs made available for review during and after the event
- Individual requests for access support will be accommodated wherever possible and equitable

To request support please contact costar.pilots@rhul.ac.uk

Assessment Criteria

Once CoSTAR has received your application, it will go through a formal assessment process. This will be undertaken by an independent panel of CoSTAR assessors and partners. The assessors will consider the following criteria:

- The problem that your innovation seeks to address is well defined
- The proposed solution is clear and achievable
- The specific R&D focus and/or innovation of the project is novel and well-articulated*
- The proposed solution has strong commercial value, with an appropriate route to market
- The project team has strong leadership, and the range of skills and experience needed to deliver the project
- The project management plan and approach to risk management is appropriate and achievable*
- The request for CoSTAR support is clear and reasonable
- There is a clear rationale for why CoSTAR support is required to progress and/or accelerate the project
- The project is of clear value to the performance and/or screen sectors
- There is a strong approach to engaging with Social Impact (EDI and/or Environmental Sustainability)

* denotes criteria that will receive double weighting during the assessment process

APPENDIX A: TECHNICAL FACILITIES AVAILABLE

Our labs are designed to help you develop new technologies, frameworks, and toolkits that address the practical challenges faced by content creators, performers, and audiences.

Our technical facilities include:

- Two fully acoustically isolated and networked immersive production studios with 16 channel audio, high resolution video, full marker-based motion capture, and machine vision capability
- A flexible User Experience laboratory with hardware to measure biometric data, such as heart-rate, skin conductance and EEG, with 16 channel immersive audio, high resolution video, full Vicon marker-based motion capture and machine vision
- A main stage area with 32-channel L-Acoustics live sound reinforcement system, Vicon marker and marker-less motion capture, stage lighting, LED and projection-based video display, configurable staging and trussing, and machine-vision capability
- High performance compute and high bandwidth network infrastructure for real-time data processing
- A BT private 5G network infrastructure across the labs

Additionally, projects can cost in the Virtual Production stage facilities and large arena studios, Studio 001 and Studio 005 at a reduced rate of 50% of the commercial day rate.

APPENDIX 2: RESEARCH EXPERTISE AVAILABLE

This call will provide opportunities for collaboration with our academic research team who can help advance your innovations and support the delivery of meaningful impact within the UK's creative industries.

Our research expertise includes;

- Virtual production workflows
- Unreal engine
- Motion capture
- Networked music performance
- Audience-based Human Computer Interaction
- User Experience
- AI and machine learning for creative industry workflows
- Acoustics
- Image processing
- Performance science
- Immersive and interactive audio

Our researchers have a diverse R&D portfolio of applications areas across the live performance spectrum, ranging from high-end productions and touring through to networked live productions in virtual reality, and e-Sports events.