

CoSTAR National Lab Call Brief

Advanced Production Technology

Led by the CoSTAR National Lab

TIMELINE:

- Opening Date for Applications: Tuesday 4 November 2025, 12.00 GMT
- Closing Date for Applications: Monday 15 December 2025, 12.00 GMT
- **Application Outcome:** You will be informed in writing of the outcome within 10 weeks of the closing date unless notified otherwise.
- **Project Start and Duration:** Projects can be up to 4 months in duration and must begin after 1 March 2026 and end no later than 31 July 2026.

SYNOPSIS

The CoSTAR National Lab is exploring emergent forms of advanced production that can deliver efficiencies or enhance production workflows in support of impactful audience facing experiences.

This call is looking for a variety of UK-based creative or technology focussed companies working on technical innovations within production pipelines. Potential use cases may be found within film, TV, games, live performance or other forms of digital content production. We are also particularly interested in projects that can demonstrate how the technology or proposed innovation could be applied across more than one type of creative output or creative industries subsector – thus creating efficiencies within a forward thinking, converged production process.

The CoSTAR National Lab offers access to studio facilities, AI compute facilities, research expertise, and cash funding to support R&D projects. A total of £140,000 of cash funding is



available to support between 3-5 projects. The maximum awarded to any single project will be £40k, however, we expect to fund a range of projects at different funding levels.

WHAT WE ARE LOOKING FOR

The CoSTAR National Lab is looking for applications from UK-based creative or technology focussed companies from across the creative industries. This might include those working in film and TV development, animation, visual effects, games, digital content creation, live performance production, as well as those working in new forms of media and emerging technology.

In particular, this call looks to explore the potential for new workflows and production tools, including (but not limited to) innovations in:

- 2D and 3D capture or asset production
- motion capture or motion extraction techniques
- AI-powered production pipelines
- Democratised production, where innovations significantly lower the barrier to entry, or increase accessibility to technology use
- Converged production, whereby use of common assets, tools and production workflows can enable efficient and effective translation of IP across different forms of creative output

Applicants need to be able to demonstrate a clear rationale for how their R&D projects could lead to commercial opportunities for their business (for example, through generation of technical or creative IP, or helping to unlock new markets). Applicants must also demonstrate why the CoSTAR support package on offer is needed to unlock these opportunities.

These projects will also help the CoSTAR Network 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 the CoSTAR National Lab's advanced infrastructure.

Projects can be up to 4 months in duration and must begin after 1 March 2026 and end no later than 31 July 2026.



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. Successful Applicants have the option to use available CoSTAR National 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 CoSTAR National 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 CoSTAR National 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 cash funding to support project costs. The total value of this support package is valued at over £130,000 per project. This call will support between 3-5 projects.

Successful projects will have the opportunity to access:

- Studio equipment and facilities: a one week sprint at the CoSTAR National Lab
 Futures Studio, Egham, Surrey. This includes on-boarding and orientation on the
 required equipment by our technical team. Please see Appendix A for a description
 of the Futures Studio facilities.
- Al compute facilities: Companies taking part in this programme would be given
 priority access to one node of 8x HP200 GPUs for up to 200 hrs, which is part of the
 CoSTAR National Lab infrastructure. Please see Appendix B for a description of our
 compute facilities and the 'pilot cluster' which is available for this call.
- Research Expertise: staff and researchers will guide and collaborate with you during the tenancy, and will also be able to provide up to 10 days total of ad-hoc support outside of the sprint window over the project's total duration. Please see description of this research expertise below.
- Cash funding: a total of £140,000 of cash funding is available to support between 3-5 projects. The maximum awarded to any single project will be £40k, however, we expect to fund a range of projects at different funding levels. Funding 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 the CoSTAR National 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.



Research and Prototyping Expertise

The CoSTAR National Lab conducts applied research and prototyping activity into a variety of areas relevant to advanced production technology. Areas of focus to date have included using Gaussian Splat technology for object and scene capture within a production pipeline, exploring markerless motion capture solutions, and using generative AI for enhancing live performances. We have also conducted work exploring bespoke AI video workflow and tooling focused on training digital likenesses, driving motion of AI characters from live actor performances and dressing characters using AI supported costume design techniques. More information on this work can be found here. The CoSTAR National Lab also has expertise narrative and games design, virtual worlds and real-time visual effects, motion and volumetric capture, user testing and audience research, multi-sensory perception, business modelling, live performance, and event production. If you feel your work would benefit from collaboration and access to expertise in any of these areas, please note this in your application form.

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
 - O No profit element and no mark up of staff / labour
 - O A maximum of 20% management of staff overhead on the lead beneficiary [not on the overall budget]
 - O Subcontractors can be paid at 100%
- Subcontracting:
 - O You may use up to 75% of the funding to pay subcontractors and/or freelancer(s).
 - O If your project necessitates a spend of over 75% on subcontractors and/or freelancers, approval would need to be sought.
 - O Subcontractors and freelancers can be from anywhere in the UK.
 - O Details of subcontractors and/or freelancer(s) required for completion of the project should be provided within your application as far as possible.
- Where the applicant can evidence need for essential hardware not available within CoSTAR required for projects in exceptional cases.



•	Reimbursement	of	costs
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- O Large Organisations 50% of eligible costs
- O 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 be 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 <u>online application form</u> on the Submittable platform by the deadline on Monday 15 December, 2025, 12.00 GMT. You will be informed in writing of the outcome within 10 weeks of the closing date unless notified otherwise. In the event of very high volume of applications, this timeframe may be extended.

The application form contains 10 questions, each with a limit of 500 words. These questions relate to the assessment criteria outlined below. In advance of applying, please ensure you have also read the Summary of Key Terms and FAQs which are available on the call page on our website.

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 Tuesday 25 November 2025 at 12.30 GMT. Please see full details on the website.

SUPPORT FOR APPLICATIONS

CoSTAR is committed to equity, diversity, inclusion, and reducing barriers to access. Our goal is to ensure that applying and participating in our programmes is easy and accessible for all.

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

CoSTAR also provides Access Support Bursaries, based on a disability, health condition, or access need, to support those making applications to, or participating in, our Industry Access Programmes. For more information on the Access Support Bursaries and how to apply please click here. For any other queries about access needs or reasonable adjustments, 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

We will take a portfolio approach to the final selection of companies to ensure a diverse range of different innovative projects and companies are supported by this call.

APPENDIX A: FUTURES STUDIO FACILITIES AVAILABLE

The Futures Studio is located at Royal Holloway, University of London, Egham, Surrey

Virtual Production Studio

(Full height of main area is circa 4m. main area is 230 m² - comparable size to stages suitable for medium sized productions such as TV shows, music videos and advertising shoots.)

- LED Virtual Production wall (10.5m x 3.5m with 2.5mm pixel pitch)
- LED Wild Wall (1.2m x 2.4m with a 5mm pixel pitch)
- 2x Brompton LED processors
- Mo-sys camera tracking
- Unreal Engine Virtual Production workflow & Control System (PC's)
- Disguise Servers (RX3, VX4+)
- Disguise Designer and Renderstream
- Lighting package of KinoFlo Mimiks x4, Arri Orbiter x3, Arri L5-C x4, Arri S60-C x4,
 Arri S360-C x2, KinoFlo FreeStyle T24 x2, Avolites Quartz lighting desk
- Arri Alexa LF camera package, Prime and zoom lenses
- Egripment camera dolly and jib arm.



Next Generation Audio capability

- 7.1.4 multichannel audio playback and up to 16.2.5.4
- 27-channel immersive Genelec loudspeaker system
- Multichannel Audio reproduction Currently up to 27, but extensible
- 16 x Line Audio CM4 microphones
- Acoustically treated studio
- AES67 (Dante/Ravenna) Audio networking

Connectivity

- Inside the Studio: 48 port 100M/1G edge switch with capacity for 4 SFP+ up to 10G each.
- To/From Studio: dedicated single mode fibre link at 10Gb via Janet link to the outside world (contended 10Gb).

Additional

VR/AR Headsets, Cameras, Screens, LiDAR Scanners.

The studio is fully equipped to respond and contribute to the growing demand for this changing technical landscape and includes a 10.5 m LED volume and 'wild wall', virtual production tools and workflows for seamless virtual production, and an advanced IP-networked audio recording and playback system to enable users to work with 'Next-Generation Audio' formats such as object-based media, which forms the foundation of Dolby Atmos.



APPENDIX B: AI COMPUTE FACILITIES AVAILABLE

The CoSTAR National Lab is developing a state-of-the-art AI compute facility to drive innovation in creative technology and beyond.

In 2026 we will be opening our full scale cluster. However, our pilot cluster is already operational and available for this call, offering:

- 3 high-performance servers, each hosting 4 or 8 GPUs and up to 2TB of system memory
- 20 NVIDIA H200 GPUs, each with 141GB of next-generation high-bandwidth memory
- Ultra-fast NVMe storage, optimised for AI workloads

This infrastructure is purpose-built to support training and prototyping of advanced AI systems—such as multimodal generative models for the creative industries—while also enabling research and development across academia, industry partners and companies taking part in our Industry Access Programmes. Companies taking part in this programme would be given priority access to one node of 8x HP200 GPUs for up to 200 hrs.