CoSTAR
THE UK R&D NETWORK FOR CREATIVE TECHNOLOGY
ScreenLAB

CoSTAR Screen Lab Call Brief

5G Innovation in Screen Technologies

Led by CoSTAR Screen Lab

Supported by CoSTAR National Lab

TIMELINE:

- **Open Date for Applications:** Monday 31 March 2025
- **Closing Date for Applications:** Thursday 22 May 2025, 14.00 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 September 2025 and end no later than 30 November 2025.

SYNOPSIS

The CoSTAR Screen Lab is exploring how 5G is accelerating innovation in the screen and performance sectors including film, TV, gaming, and beyond. 5G offers faster speeds, lower latency, higher capacity, increased flexibility, and increased reliability, supporting a range of digital applications in the creative industries such as virtual production, broadcast, advertising, digital twinning, automation and generative AI, amongst others.

This call is designed to support innovative applications of 5G in the screen and performance sectors and will encourage proposals addressing a range of potential challenges including those in content production, multi-site collaboration, data access, distribution, consumption, net-zero and sustainability.

WHAT WE ARE LOOKING FOR

Advanced wireless networks, such as 5G, are key to driving economic growth and innovation across a range of industrial sectors including creative industries.

With ultra-low latency and high-speed data transfer, 5G enables more efficient and streamlined content production including real-time multi-site pre-visualisation, production and post-production. 5G-enabled real-time media storage provides rapid access to high-resolution footage, ensuring that data is captured,

stored, and retrieved more efficiently. 5G capability can also significantly enhance workflows in distribution and consumption of content. Crucially, 5G innovation in the screen technologies sector has the potential to address well-known issues around carbon footprint and the quest for net-zero. Recently, Studio Ulster led a DSIT-funded Belfast 5G Innovation Region project exploring application of 5G technologies in multi-site, real-time remote virtual production. This project investigated use of a mobile solution, '5G in a box' to facilitate remote control of robotic cameras on location from a central control studio, with real time capture and display on LED walls and collaborative editing capabilities on the fly. This proof of concept aimed to demonstrate how costs can be reduced, efficiencies increased and production workflows optimised. More details on this project and similar 5G enabled use-cases can be found here.

This call is designed to support innovative application and creative use cases for 5G across the screen and performance sectors and it encourages proposals covering a range of potential solutions that include but are not be limited to;

- Multi-site real time pre-visualisation, production and post-production
- Low latency data transfer in studio environments (LED wall focus)
- Camera tracking
- Automation of LED wall configuration
- High volume, real-time motion capture
- 3D and 4D scanning applications for real time
- Real time spatial audio automation
- Artificial Intelligence and Machine Learning applications in real time studio environments

We are seeking proposals from companies interested in exploring the opportunities and addressing the challenges of 5G applications in creative contexts from technological and/or creative perspectives.

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 Screen Lab's advanced infrastructure.

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

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 Screen Lab in order to further CoSTAR Network's public purposes. In addition, Successful Applicants have the option to use available Screen 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 Screen 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 Screen 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 £150k per project. For this specfic project up to two projects will be awarded cash funding of up to £35k per project.

Successful projects will have the opportunity to access:

- **Equipment and facilities:** up to two intensive one-week development sprints at CoSTAR Screen Lab. This includes on-boarding and orientation on the required equipment by our technical team. Please see Appendix A for a description of the Screen Lab facilities.
- **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 Screen Lab's research expertise.
- **Cash funding:** up to £35,000 is available to contribute to costs in undertaking the project. Please see section on Eligible Costs in the full Call Brief document.
- **Travel Budget:** if a project requires a period of residency (two or more days) at the Screen 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

CoSTAR
THE UK R&D NETWORK FOR CREATIVE TECHNOLOGY
ScreenLAB

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 22 May 2025, 14.00 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. 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 8 April 2025 from 12.00-13.30 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

Available facilities include:

- A state-of-the-art LED volume with floor and ceiling
- 5G Private Network at Studio Ulster, a portable 5G Private Network for remote connectivity and software facilitating multi-site collaboration (compatible with n77 band supported devices)
- 5G enabled devices including cameras, Lidar scanners and encoders
- Motion capture deck (access to be costed into bids)
- 3D and 4D scanning capability (access to be costed into bids)
- Fixed and mobile spatial audio kit, including Genelec 8040 monitoring (up to 8-channel spatial audio arrays, suitable for ambisonics), portable stereo monitoring via Genelec 8020, location sound microphones and recorders (Sound Devices MixPre10, Sennheiser MKH416) studio microphones (AKG414 matched pair, and a Coresound Octomic ambisonics microphone), a Pro Tools system with Carbon interface and S1 control surface.

Access to other Ulster University R&D infrastructure including:

- UViPrS Virtual Production Studio with LED volume and motion capture

- Advanced Wireless Technologies Lab for 5G tests and trials

APPENDIX B: RESEARCH EXPERTISE AVAILABLE

Applicants will have access to teams of academic co-investigators and a creative technologist with expertise in:

- Virtual production
- Motion capture
- Scanning
- Wireless technologies including 5G
- Artificial Intelligence and Machine Learning
- Spatial audio