

InGAME

Innovation for Games
and Media Enterprise

Nesta X InGAME

Cluster of the Future

Virtual Healthy Neighbourhoods

Challenge Call

1: What is a Cluster of the Future Challenge?

InGAME's Cluster of the Future (CotF) Challenges are ambitious competitions to jumpstart high-risk, high-reward collaborations. Our calls are designed to harness and apply the awesome potential of videogames to provoke breakthrough solutions to known but difficult challenges, inventing new futures and driving positive change.

Our Challenge Calls are co-productions with respected Challenge Sponsors from across the globe. Together we co-design and co-fund the challenge, then we catalyse the amazing creativity and innovation potential of Scotland's games industry in response.

CotF Challenge Calls:

- respond to a clear user need, commercial opportunity or social challenge
- catalyse novel and innovative *applied games* 'proof of concepts'
- demonstrate innovative use cases and test them with live audiences
- develop exploitable IP with generalisable and scalable potential
- de-risk follow-on funding/investment of applied games solutions and innovations
- drive the diversification and growth of the Scottish games sector.

2: The Nesta Healthy Life Challenge

Background

This Challenge Call is a co-production between InGAME and our Challenge Sponsor: Nesta – the UK’s innovation agency for social good. It provides a unique opportunity for Scottish gamemakers to power Nesta toward one of its core innovation goals: ensuring a healthy life for all. Specifically, this challenge asks Scottish gamemakers to apply their amazing creativity and the innovation potential of games to the challenge of healthy living and promoting healthy food choices.

The goal of Nesta’s healthy life mission is to add two years of healthy life expectancy for approximately 10 million people in the UK by halving the number of people who experience obesity. We know that what surrounds us shapes our opportunity to be healthy - the places and spaces in which we live, work and play – and the food options available to us.

InGAME and Nesta have identified the possible value of applying game engine technologies and game design techniques to better understand how [food environments](#) affect our access to healthy and more affordable food options. That understanding can then be used to provoke, imagine and de-risk systems-level interventions that shift the dynamics within food environments to ensure healthy and appealing food options are accessible and affordable for everyone, wherever they live.

Synthetic Sandboxes

The concept of the ‘sandbox’ as a place to experiment and test new ideas is well known. Children play with ideas and build imaginary worlds within the confines of a sandbox. Software developers build sandboxes to experiment with untested code while avoiding damage to mission-critical systems. Innovation sandboxes provide a collaborative space to invent and build the future. And as Web3 and its metaverses further blur the lines between physical and virtual environments, the same is happening to the sandbox.

Synthetic sandbox environments – powered by real-time 3D game engines – are increasingly utilised to create simulations of unparalleled scale, complexity and fidelity. These synthetic sandboxes enable us to understand and map complex challenges, formulate responses, rapidly test interventions and understand their systems-level

consequences in a virtual world before implementing them in the real one. Synthetic sandboxes are currently being used for everything from [optimising car factories](#) to ensuring [better passenger flow at airports](#) to [mitigating threats to national security](#). They help safely innovate and de-risk decision and policy making by limiting unintended consequences in the real world. As a result, the potential of synthetic sandboxes to help us improve lives, drive positive social change and build a better future is almost limitless.

3: Challenge Mission: Nesta Playbox

InGAME and Nesta invite Scottish gamemakers and developers to harness and validate the potential of synthetic sandboxes to build a better, more healthy future.

The challenge mission is to work with InGAME and Nesta to conceptualise and prove the **Nesta Playbox**. This will involve proving both the concept of a synthetic sandbox and its value to achieving Nesta's healthy life goal of halving the number of people who experience obesity. Our vision for Nesta Playbox is to provide an malleable, evolving, data-rich game technology-based environment that enables Nesta to better map and understand the systemic challenge of obesity. In addition, it should also harness game design techniques to engage users, observe existing behaviours and playfully incentivise new ones, empowering radical experiments and rapidly de-risking interventions. The Playbox should be reusable, generalisable and scalable – a place to ask provocative 'what if?' questions that drive positive change.

Challenge Respondents will need to provide Proof of Concept to internal and external stakeholders at Nesta. This should be small, focused and testable, able to demonstrate the potential and power of the Nesta Playbox to solve complex mission-based innovation challenges and drive positive outcomes. The ultimate objective will be to unlock follow-on opportunities for full-scale development and implementation.

4: Challenge Objectives

The Proof of Concept should:

1. Prove Nesta Playbox can provide a playful, entertaining and engaging experience while generating:

- a. an accurate understanding of how food environments shape access to healthy and affordable food options
 - b. an accurate representation of the role individuals play in consumption decisions
2. Prove Nesta Playbox can generate and capture meaningful, defensible and actionable data that helps Nesta better understand how food environments shape consumption decisions
3. Prove Nesta Playbox can represent a specific food environment – with local relevance to Dundee – then accurately map its key variables
4. Prove Nesta Playbox can provide an inclusive, ethical and safe environment to innovate and test radical new ideas and interventions
5. Prove the value of Nesta Playbox to capture insights that might otherwise be missed by other approaches
6. Prove the potential of applying game design technologies and techniques to a ‘wicked’ systems level problem, including and beyond obesity.

5: Challenge Outputs

The final outputs from the Challenge should be:

- Nesta Playbox Proof of Concept Demonstrator
- Nesta Playbox Showcase Pilot (delivered with support of InGAME)
- Nesta Playbox Learning Report (authored with support of InGAME)
- InGAME Insights ‘postmortem’ presentation (developed with support of InGAME)
- Next Steps document (authored with support of Nesta and InGAME).

6: What Makes a Challenge Respondent?

We’re looking for superstar, high-performing, multi-disciplinary teams with advanced game design, game engine programming and data analytics core competencies. We welcome game development SMEs, professional game development teams from established studios, freelance and unincorporated game development teams, plus SMEs and teams from adjacent media entertainment sectors that have the required core competencies.

Other desirable team superpowers include:

- Adaptability
- Agility
- Ambition
- Collaboration
- Communication
- Curiosity
- Professionalism
- Project Management
- Resilience
- Storytelling
- Strategy

7: Eligibility

The challenge is open to:

- SMEs and teams from **Scotland only**. Only organizations or teams based in Scotland are eligible to apply. This means your main place of business and/or operational activity must be within Scotland.
- We welcome applicants from across the games sector and adjacent media enterprise industries – e.g. advertising and digital agencies, design studios, animation studios or other screen and media industries.
- All applicants will need to evidence the core competencies and superpowers outlined in Section 6.
- Applicants must be available to participate in all required briefings and other challenge related workshops or events detailed in the Timeline below or scheduled as the Challenge progresses.
- Applicants are not required to be incorporated as a business to apply or participate but all will be expected to demonstrate the credibility and capability to undertake and complete the challenge.

8: Timeline and How to Apply

This Challenge is a four stage process. The first two stages make up the application process and are consequently unpaid. The latter two stages are paid R&D sprints where teams respond to the challenge.

Stage 1 – Initial Application - launch 18 October 2021

- Please check you meet the eligibility criteria
- Please read the [Summary Heads of Terms](#)
- Complete the simple application form
- Submit your Pitchdeck. This will be scored against the following criteria:
 - Compatibility with Challenge mission and purpose
 - Credibility to innovatively respond to the Challenge
 - Capacity to undertake the work required by the Challenge.
 - Evidence of required core competencies and superpowers.
- Deadline for applications: **9:00 Monday 8 November 2021**

Stage 2 – Shortlist and Briefing

- Each team is scored against the criteria by Nesta and InGAME. A shortlist is created of no more than 10 teams.
- Successful teams are invited to attend the Playbox Briefing Day. All successful teams will be notified by **14:00 Friday 19 November**.
- Playbox Briefing Day is where you discover more about the Challenge and Challenge Sponsor, then we discover more about you. It's made up of two parts:
 - Request for Playbox Briefing by Nesta w/ Q&A
 - Lightning Talk by applicant teams w/ Q&A
- Briefing Day will be held **w/c 22 November**
- Following Briefing Day, Nesta and InGAME will select no more than **three** teams to progress to Stage 3. All teams will be notified by **15:00 Friday 26 November**.

Stage 3 – Discover and Design

- Stage 3 begins **Monday 29 November** and runs for two weeks. Each selected team is awarded £5K for the duration.
- During Stage 3 selected teams:
 - Respond to Nesta's Request for Playbox by discovering and developing concepts then designing their Playbox Pitch
 - Pull additional insights, knowledge, data and support from Nesta via Office Hours.

- Teams submit their Playbox Pitch by **11:00 Friday 10 December**.
- Pitches will be reviewed then 1:1 interviews conducted by Nesta and InGAME on **Wednesday 15 December** with the teams. At the end of this process, **one** team will be selected to progress to Stage 4. All teams will be notified no later than **15:00 Friday 17 December**.

Stage 4 – Prototype

- The successful team is awarded £45K for the duration of Stage 4. This begins on **Monday 10 January 2022** and runs for **eight weeks**.
- The team prototypes and pilots a 'proof of concept' Playbox supported by Nesta and InGAME support, resources and expertise.
- The team develops all other required Challenge Outputs.
- All Challenge Outputs must be submitted by **Midnight Friday 4 March 2022**.

9: About Nesta, our Challenge Sponsor

Nesta is the UK's innovation agency for social good. We design, test and scale solutions to society's biggest problems. Our three missions are to give every child a fair start, help people live healthy lives, and create a sustainable future where the economy works for both people and the planet.

For over 20 years, we have worked to support, encourage and inspire innovation. We work in three roles: as an innovation partner working with frontline organisations to design and test new solutions, as a venture builder supporting new and early stage businesses, and as a system shaper creating the conditions for innovation.

Harnessing the rigour of science and the creativity of design, we work relentlessly to change millions of lives for the better. Find out more at [nesta.org.uk](https://www.nesta.org.uk)

10: About InGAME

InGAME is the AHRC centre for research and innovation in games and immersive technologies. Its purpose is to drive growth and innovation within the Dundee videogames

cluster through experimental research and innovative models of collaborative R&D between industry and academia.

InGAME believes applying game design techniques, tools and technologies to real-world problems and challenges has amazing potential to drive positive change. Game design techniques, tools and technologies are transforming the world. Games are the sandbox for our near future. Game experiences and technologies are powering Web3 and its Metaverses. Game technologies provide synthetic environments for improving health and wellbeing, reducing environmental impact, boosting productivity, de-risking policy interventions and empowering radical innovation. And game design techniques can not only entertain us but motivate us to be happier, healthier and more productive by playfully designing meaningful incentives into non-game experiences.

Funded by the AHRC's [Creative Industries Clusters Programme](#) as part of the Industrial Strategy Challenge Fund, InGAME is embedded in Dundee's vibrant and thriving videogames cluster. Led by Abertay University, in collaboration with the Universities of Dundee and St Andrews, InGAME's industry partnership network includes Sony Interactive Entertainment, Microsoft, Roblox, Outplay Entertainment, 4J Studios, the BBC, Innovate UK, Creative Dundee, Creative Scotland, Dundee City Council Scottish Enterprise, V&A Dundee, Ukie and Women in Games

11: FAQs

- **Who owns the IP?**

- InGAME and Nesta take no equity or ownership of IP.
- Challenge Sponsors retain background IP (knowledge, networks, assets and data they bring to the project).
 - Background IP is leveraged by the Challenge Responder solely for the purposes of the project.
- Challenge Responder owns all Foreground IP created during the project, including the right to commercialise it.
 - Challenge Responders required to provide a royalty-free license of outputs completed under this funding to the Challenge Sponsor for a fixed period of 24 months.

- No obligation on either party to negotiate terms on development, production and/or future exploitation of Foreground IP.
 - Alternative IP arrangements to be considered where appropriate.
- **Is there a technical specification?**
 - Not yet. This will be discussed during the Discover and Design phase where applicants work in collaboration with Nesta to co-design Playbox Pitches.
 - However, we envisage Nesta Playbox will leverage 3D game engine technology supported by Live Ops style data analytics.
- **We're not a game development team. Can we apply?**
 - Yes! If you are from an adjacent media entertainment sector – eg software development, advertising and marketing, film and television, design and architecture, etc – you can apply if:
 - You are located in Scotland
 - Note: InGAME's remit is to support growth in the Tay Cities Region (TCR). Priority will be given to applications able to demonstrate a willingness to add value to the local cluster. Examples of such value include business located in the TCR, hiring cluster-based subcontractors and/or freelancers, actively disseminating learning within the cluster or demonstrating another clear value-add to the economic, social or cultural vibrancy of the area.
 - You can prove you have the core competencies required.
- **When do we get paid?**
 - Teams selected for Stage 3 will receive £5,000 for the duration of that phase. The monies will be released in two parts:
 - After signing the contract agreement after selection
 - On submission of the Playbox Pitch.
 - The winning team selected for Stage 4 will receive £45,000 for the duration of that phase. Monies will be released in stages from the beginning of Stage 4, matched to milestones and deliverables.

- **Are the dates for Stage 4 flexible?**
 - No. Stage 4 must finish by 4 March 2022. Teams will need to commit to the eight week timebox and agree to the deadline in the contract before receiving any payments.