

# ISCF Future Flight Research Director 2021

## Call specification

### Summary

UK Research and Innovation (UKRI), via the Economic and Social Research Council (ESRC), is pleased to invite applications for an [Industrial Strategy Challenge Fund \(ISCF\) Future Flight](#) Research Director. Their role will be to help identify areas where economic and social science research can make a significant contribution to the Future Flight Challenge and wider aviation sector. The Research Director will also support the creation of a multidisciplinary community, linking stakeholders, researchers and businesses to identify and tackle challenges associated with Future Flight. Economic and social research has a pivotal role to play in supporting the creation of an aviation system that will enable the UK to build, use and export new, greener ways of flying.

The Research Director will work with the Future Flight Challenge Director and team to identify how the economic and social science communities can most effectively support the Future Flight Challenge and the aviation sector to speed up the creation of safe systems for new classes of air vehicles. They will work practically to encourage different research organisations and businesses to share their knowledge and resources to work together. The Research Director will also be responsible for linking with the activities funded under Future Flight to understand their challenges and to identify new research and engagement opportunities.

The successful applicant will be expected to have an outstanding track record of research and impact leadership within areas relevant to future flight, and a broad understanding of the potential for different disciplines within and across the social sciences and humanities to contribute to this area.

Of the £125 million programme, £190,000 of funding is available for this call. UKRI, via ESRC, will support one successful research director over 12 months. These figures are presented at 100% fEC and ESRC will contribute 80% of fEC for most cost headings.

The funding for the Research Director post is expected to cover the Research Director's salary costs, support staff and leadership activities. A flexible fund is permitted to the Research Director to administer to award holders to meet the needs of investments in the wider Challenge portfolio and facilitate opportunities to enhance the evidence base.

The deadline for applications for the Future Flight Research Director is 16.00 on 22 April 2021. The successful applicant will be expected to start in July 2021.

## Background

Many organisations, in the UK and globally, are developing novel vehicle technologies covering drones, advanced air mobility vehicles and zero-carbon regional aircraft.

Every aspect of the wider aviation system needs to develop radically and quickly whilst maintaining high safety levels in order to benefit from these new markets in autonomous air logistics, air taxis in urban, rural and remote environments and distributed, sub-regional aviation. For example, air space management systems must evolve, new infrastructure concepts must be designed, cyber-secure / connected digital systems are required and new business models created. In addition, new regulations and standards in many areas must be developed by the UK Civil Aviation Authority and public concerns around noise, sustainability, intrusion and safety must be addressed.

The Industrial Strategy Challenge Fund (ISCF) Future Flight Challenge is bringing stakeholders together to create an integrated aviation system that will enable the UK to build, use and export new, greener ways of flying. Using new classes of air vehicles the challenge will transform how we connect people, deliver goods and provide services. It will speed up the acceptance of these innovative air vehicles into service safely and practically by encouraging different sectors to share their knowledge and resources to work together. It is anticipated that these new modes of travel will increase mobility, reduce road congestion, improve connectivity, increase UK manufacturing opportunities and help aviation to reduce its environmental impact around the world.

The overall intent of the Future Flight Challenge is to secure first mover advantage for the UK in creating this breadth of new aviation system demonstration. It will also inspire and accelerate the next generation of sustainable aviation to position the UK as a world leader in aviation products and markets. Doing this will enable the UK to build, use and export new, greener ways of flying that will enable new modes of transportation and new services.

The Future Flight ISCF Challenge will invest up to £125M and is delivered by InnovateUK and ESRC, on behalf of UKRI.

## Call details

### Call objectives

The Challenge has a number of specific objectives to which the Future Flight Research Director will be expected to contribute to directly:

- create and demonstrate the aviation system of the future that will enable the integration and safe operation of new classes of air vehicles with novel technologies
- increase mobility, improve connectivity in remote and rural environments and reduce congestion in urban areas for people across the UK
- accelerate the application and integration of hydrogen, electric and autonomous flight technologies to support the UK in reaching its net zero target
- drive technology investment to the UK by increasing UK manufacturing and service opportunities.

The Research Director will act as an integral part of the Future Flight Challenge and is expected to play a strategic role in bringing together relevant participants that cross disciplinary boundaries and stakeholder groups, including those from business, academia and industry.

### Scope

A key priority for the Research Director will be to help the Challenge identify the areas where economic and social sciences can make a significant contribution to the Future Flight Challenge and wider aviation sector.

Priority areas may include, but are not limited to:

- Understanding the impacts on different communities and how future flight initiatives might mitigate or increase social inequalities
- Understanding areas of risk (for example in terms of public perception and ground risk) and their mitigation
- Understanding how far these new technologies are compatible with existing policy agendas
- How to support UK businesses (for example, what skills are needed to develop and adopt these technologies effectively?)
- Understanding the public perceptions of future flight initiatives and their potential for social and/or environmental good. For example, what are the

levers for influencing public perceptions? Or what are the impacts of aviation noise on public acceptance?

- Business model innovation (for example, how can firms develop their business models around the opportunities afforded by new technologies?)

### Research Director – role

The Research Director will:

- Identify areas where economic and social research can make a significant contribution to the Future Flight Challenge and wider aviation sector to inform the direction of Future Flight research
- Be visible and a champion for economic and social research in the Future Flight Challenge, to both internal and external audiences. This may include providing guidance to the Challenge to ensure economic and social research is integrated into Future Flight
- Support the Future Flight Challenge Team to address both immediate and arising economic and social challenges associated with the Challenge, including those posed by society, and identify mechanisms to address these challenges
- Add value to funded activities under the Future Flight Challenge, for example by identifying opportunities for shared learning across projects. Also, to engage with all funded activities to understand their challenges and to identify new research opportunities and identify collaborations
- Work with the Future Flight Challenge Director, Challenge Team, and ESRC to play a strategic role in identifying and bringing together relevant participants that cross disciplinary boundaries and stakeholder groups, including those from business, academia and industry.

**Please note: these aspects of the role are not exhaustive and applicants to the Future Flight Research Director call are expected to present their vision of how they think they can add value within the Future Flight Challenge.**

Industry engagement will be critical, including SMEs, as will engagement with other key stakeholders including the UK Civil Aviation Authority, the Department for Business, Energy and Industrial Strategy and the Department of Transport.

It is expected that the Research Director will also draw upon existing UKRI investments including other ISCF activities, Research Council funded Centres and the [Knowledge Transfer Network](#) (KTN).

### Call Outcomes

- Economic and social research is more accessible to the Challenge Team and wider aviation sector
- Longer term relationships are developed between the economic social research community and companies/organisations in the aviation sectors
- The aviation community will be more informed and able to tackle a variety of challenges associated with Future Flight
- Increased R&D spend helping UK meet 2.4% target

### Research Director – person specification

The successful applicant must demonstrate:

- An outstanding track record of world-leading research and impact within areas relevant to Future Flight
- The ability to provide intellectual research and impact leadership
- A strong commitment to interdisciplinary and cross-sectoral approaches to research, with evidence of having previously drawn together a broad range of perspectives and approaches from across the economic and social sciences, engineering, digital technology and beyond
- Track record of engaging collaboratively and building effective inclusive relationships between academics and businesses
- An understanding of the needs and demands of the aviation sector in the UK. They will have a proven track record of engaging collaboratively with industry and academic partners and have strong networks in the aviation space
- Outstanding communication skills, suitable for engagement with a range of different audiences - specialist and non-specialist - within the academic community, business community, user community and beyond
- Experience of collaborative research and proven ability to engage and develop partnerships with people and organisations beyond the academic community, in particular with stakeholders at a senior level in government, industry and the private sector, particularly in a UK context
- Familiarity with UKRI's mission, and with the broader funding and policy landscape in the UK
- Familiarity with the UK Government's Industrial Strategy, and an understanding of how research will contribute to fulfilling ambitions

## Funding

The ESRC will be investing up to £190,000 at 100% full economic cost (fEC) for the Future Flight Research Director call. The ESRC's contribution for UK applicants for most costs headings is 80% of fEC.

Funding is available for 12 months for the Research Director role and is expected to cover the following costs:

- Research Director at ~0.4 FTE plus associated Estates and Indirect costs
- Support Staff up to a total of ~1.0 FTE across posts plus Estates and Indirect costs
- Directly Incurred costs e.g., leadership activities, travel and subsistence, arranging workshops and meetings
- A 'Flexible Fund' to administer to research award holders to support them to meet the needs of investments in the wider Future Flight Challenge portfolio and provide a mechanism for facilitating and utilising opportunities

Applicants are permitted a degree of flexibility in the funds that they request but should contact the ESRC Office using the contact details at the end of this document to discuss any significant deviations from the above.

The ESRC will contribute 100% of costs for the flexible fund. This might include distribution of funds for small pieces of responsive research or synthesis to respond to emerging research questions that arise across the Challenge activities.

Justification for this fund is not required in the Justification for Resources section of the application, however, the Case for Support should outline how the Research Director will work with ESRC and the Future Flight Challenge team to put in place a clear process for the governance and distribution of funds.

Costs will be supported in-line with standard ESRC funding rules. All applicants are strongly advised to consult their institutional finance/research offices regarding the financial aspects of their application. Indicative costings are requested at application stage and successful applicants will be expected to provide a full breakdown and justification of all costs at contracting. Costs at the contracting stage must not vary by +/-10% from costs at application and must not exceed the funding available for the call.

The Future Flight Research Director award will be expected to start from 1 July 2021.

## Working arrangements

The ESRC will oversee the work of the Research Director on behalf of UKRI. Therefore, the Research Director will be expected to maintain close contact with the

ESRC staff involved in the Future Flight Challenge and to meet at least a monthly basis to discuss progress and future plans. The Challenge Director is responsible for leading work on the Future Flight Challenge activity and the Research Director will be responsible for developing and supporting the creation of a new community with members from across the aviation industry and other sectors relevant to Future Flight. Although contact with the ESRC will primarily be via the nominated lead for the Future Flight Challenge, the Research Director will work closely with Challenge Team and will also develop links with relevant colleagues in other parts of UKRI (such as the ISCF delivery team, and wider UKRI colleagues), as well as specialist staff within ESRC. Wherever possible meeting dates will be co-ordinated to minimise travel or make use of telephone conferencing.

The successful Research Director will hold a grant from the ESRC and will be accountable directly to the Future Flight Challenge Director. They will be required to participate in Challenge-level governance, such as the Programme Board and will be expected to keep the UKRI ISCF Future Flight delivery team informed of key information and updates arising from interactions with the Challenge Director and Challenge-level governance.

### Eligibility

All applications to this call must be from a researcher based at an eligible UK Research Organisation (RO); see the UKRI website for a list of eligible organisations ([www.ukri.org/funding/how-to-apply/eligibility/](http://www.ukri.org/funding/how-to-apply/eligibility/)).

Applications will need to be submitted electronically via the Research Councils' Joint Electronic Submission (Je-S) system.

Joint applications (including job shares) for Co-Research Directors are welcome where a clear split of responsibility is given. For the purpose of the application the application form will require that one of the Co-Research Directors will be listed as PI, the other will need to be listed as Co-I.

### Multidisciplinary approach

Applicants for the Research Director will need to demonstrate a detailed understanding of the economic and social sciences as they apply to the aviation sector and the Future Flight Challenge. They will be able to demonstrate their commitment to interdisciplinary working, and their ability to build new collaborations between different social, economic and other disciplines including engineering, digital technology and beyond.

### IP issues

Publication and Intellectual Property Rights (IPR) will be handled in accordance with normal ESRC guidelines outlined in the Research Funding Guide ([www.esrc.ac.uk/rfg](http://www.esrc.ac.uk/rfg)). Further ESRC guidance on intellectual assets and intellectual property can be found at: <https://esrc.ukri.org/funding/guidance-for->

[applicants/intellectual-assets-and-intellectual-property/](#). All research findings should be made freely and openly available. UKRI policy statements on IPR, impact and knowledge exchange are available at [www.rcuk.ac.uk/ke/policies/](http://www.rcuk.ac.uk/ke/policies/)

### Research ethics

Applicants must ensure that the proposed activity will be carried out to a high ethical standard and must comply with the ESRC Framework for Research Ethics: [www.esrc.ukri.org/funding/guidance-for-applicants/research-ethics/](http://www.esrc.ukri.org/funding/guidance-for-applicants/research-ethics/) Successful applicants will be required to provide a statement on how any potential ethical and health and safety issues have been considered and will be addressed, and ensure that all necessary ethical approval is in place and all risks are minimised before the associated activity commences.

### **Impact**

In line with the UKRI Strategic Prospectus (<https://www.ukri.org/about-us/strategic-prospectus/>), we expect that our researchers will have considered the potential scientific, societal and economic impacts of their work.

Contributions to academic and particularly broader user impact are expected throughout the Research Director post. This could involve activities such as: organising seminars or briefings or other engagement activities to address key research issues; knowledge exchange at different stages of the research to relevant stakeholders; developing inclusive networks based around significant research issues involving academics and other stakeholders; to participate in any communities or networks created by the ISCF Future Flight team. Given the high profile nature of the debates around future flight we would also expect the Research Director to engage in public discussions as part of the role and to remain non-partisan.

Applicants should consider how their impacts can be maximised, developed and evidenced within their application. This will form part of the assessment process. It is important to set out how you intend to identify and actively engage relevant users of the research and stakeholders and include evidence of any existing engagement with relevant end users. Applicants should articulate a clear understanding of the context and needs of these users. The application should also outline how the legacy of proposed activity will be managed to engage beneficiaries and increase the likelihood of its impact in providing lasting value to participants, stakeholders and the wider social science community.

The Research Director will be expected to produce outputs that incorporate key research insights into the areas of business and/or policy debate and greatest stakeholder need. These should take the most appropriate form for the audience, given the diverse range of stakeholders in the field. Close co-ordination with UKRI and the Knowledge Transfer Network on communications or media related activities will be required.

The Research Director will be expected to provide those involved in the wider Future Flight Challenge with input and advice in a timely manner when requested, and to produce regular outputs relevant to their activities throughout the grant.

The Research Director is expected to inform ESRC of all events and publications planned as part of the role in advance and ensure that any programme of work is flexible enough to respond to changing needs.

To be effective, all communication, engagement and impact activities must be planned in detail and properly evidenced and resourced in the application.

The ESRC's **Impact Toolkit** provides detailed advice on how to achieve the maximum impact for your work. The toolkit includes information on developing an impact strategy, promoting knowledge exchange, public engagement and communicating effectively with your key stakeholders: <https://esrc.ukri.org/research/impact-toolkit/>.

### **COVID-19 Guidance for Applicants**

#### **Accounting for the unknown impacts of COVID-19**

UKRI acknowledges that it is a challenge for applicants to determine the future impacts of COVID-19 while the pandemic continues to evolve. Applications should be based on the information available at the point of submission and, if applicable, the known application specific impacts of COVID-19 should be accounted for. Where known impacts have occurred, these should be highlighted in the application, including the assumptions/information at the point of submission. There is no need to include contingency plans for the potential impacts of COVID-19. Requests for travel both domestically and internationally can be included in accordance to the relevant scheme guidelines, noting the above advice.

Reviewers will receive instructions to assume that changes that arise from the COVID-19 pandemic, post-submission, will be resolved and complications related to COVID-19 should not affect their scores.

Where an application is successful, any changes in circumstances that affect the application will be managed as a post-award issue.

#### **Assessment process**

Applications for the Future Flight Research Director role will be assessed and shortlisted by an independent panel comprising of academics, business representatives and other stakeholders in May 2021. Shortlisted candidates will then be invited to a final interview panel in June 2021. Further information on the format of the interview will be provided to shortlisted candidates. The successful applicant will be expected to start from 1 July 2021.

Applicants are asked to note that as part of our commitment to support the recommendations and principles set out by the San Francisco Declaration on Research Assessment (DORA; <https://sfdora.org/read/>), UKRI reviewers and panel members are advised not to use journal-based metrics, such as journal impact factors, as a surrogate measure of the quality of individual research articles, to assess an investigator's contributions, or to make funding decisions.

The content of a paper is more important than publication metrics, or the identity of the journal, in which it was published, especially for early-stage researchers. Peer review and panel members are encouraged to consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, other commercial activities, etc.) in addition to research publications. We advise our peer reviewers and panel members to consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

## Assessment Criteria

1. Fit to call scope - extent to which the proposed research aligns with the scope of the call, including how well the application:
  - a) Addresses the call objectives and the aims and objectives of the ISCF Future Flight Challenge
  - b) Is multidisciplinary and inclusive, drawing on a wide range of expertise, knowledge and experience across business and research stakeholders
  - c) Addresses the areas of knowledge exchange and impact
  - d) Ensures that planning for impact is embedded throughout the application, particularly within the Case for Support.
2. Appropriate expertise and resources for undertaking the work, stakeholder engagement, knowledge exchange, communications, project management and reporting.
3. Ability to work across disciplines and stakeholder groups
4. Ability to work closely with the ESRC Office, Challenge Director and wider UKRI colleagues
5. Quality and experience of the applicant in relation to Future Flight Research Director Person Specification (see above)

## How to apply

This call will open on **8 March 2021** and all associated call documentation will be visible. However, applicants will only be able to access the call form on JeS from

**29 March 2021.** Applicants are welcome to start preparing applications prior to this date.

Applications must be submitted via Je-S by the call deadline of **16.00 (UK time) on Thursday 22 April 2021**. Electronic acknowledgements will be sent to the principal investigator and submitting organisation. All applications must be submitted in English, costed in pounds sterling using the Research Councils Joint Electronic Submission (Je-S) system. Applications can only be accepted by electronic submission through the Je-S system: <https://je-s.rcuk.ac.uk/jeS2WebLoginSite/Login.aspx>

Applications should address the aims of the call as listed in the call details and should include:

- Case for Support, including a full description of the aims, methods and work packages (including proposed timings), as well as details of how the work will address the Programme aims as listed in the call details
- CVs for all named individuals
- Justification of Resources, including full costs associated with stakeholder engagement, project administration and travel and subsistence
- List of Publications
- Relevant final/interim reports
- Data Management Plan (max 3 A4 sides) – only mandatory if planning to generate data

Generic guidance on the completion of the structured boxes and sections of the form is available from the Je-S Help screens, which can be found at the top right-hand corner of each Je-S screen

The Je-S guidance for the call will provide details on the information that you will be required to submit as part of your application. All applicants are strongly advised to consult ESRC's research funding guide (<https://esrc.ukri.org/funding/guidance-forapplicants/researchfunding-guide/>), which sets out the rules and regulations governing its funding. Where call-specific guidance provided in these call documents differs from generic Je-S help, the call-specific guidance should always be followed. Care and attention must be given to completing the application correctly and complying with all technical requirements. Applications that are not completed correctly may be rejected by the ESRC office.

The final submission process is the responsibility of the host institution, and the ESRC cannot accept responsibility for any delays which may occur. It is recommended that applicants submit in good time before the call deadline at this stage. We strongly advise applicants to confirm with their relevant administrator that the application has been submitted successfully to the ESRC.

## Commissioning timetable

- Call launch – 8 March 2021
- Town Hall event – 17 March 2021
- Application form opens on Je-S – 29 March 2021
- Deadline for submitting applications – 22 April 2021
- Shortlisting Panel meeting – May 2021
- Interview Panel meeting – June 2021
- Research Director start date – 1 July 2021

## Contacts

Enquiries relating to ESRC research funding rules and proposal procedures should be addressed to:

- Email: [ISCF@esrc.ac.uk](mailto:ISCF@esrc.ac.uk)

Enquiries relating to technical aspects of the Je-S form should be addressed to:

- Je-S helpdesk

Email: [jeshelp@je-s.ukri.org](mailto:jeshelp@je-s.ukri.org)

Telephone: 01793 444164

Monday to Thursday 08.30 to 17.00

Friday 08.30 to 16.30 (UK time, excluding public and other holidays)