



Funding Technical Staff in Research


Technician **Commitment**





Technicians are essential to research and innovation (R&I) and it is vital that they are recognised, valued and supported to realise their potential. The way that technicians are funded is an important part of this.

The recently published UK Government's R&D People and Culture Strategy estimates conservatively that the R&D sector will need at least an additional 150,000 people by 2030 to sustain the UK's target of 2.4% GDP research and development intensity. Technicians are a key part of this and the strategy's ambition to achieve dynamic, variable and sustainable career paths for people working in R&I.

This explainer will act as a basis for wider discussions across the research and innovation community on how we can ensure that technicians are funded in a way that supports their visibility, recognition, career development and sustainability. 

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Introduction

Technicians are a crucial part of the research and innovation system and there is a huge diversity of technical roles that contribute right across the sector. Due to this diversity, technical roles, especially in higher education, are resourced in a range of ways. Here we provide a brief explainer on how technical roles can be resourced across funding mechanisms in higher education, research and innovation.

This note will be of interest to those working in and supporting R&I in the UK higher education and research sector including technicians, researchers, research managers and administrators, finance managers, research funders and policy organisations.

But first, **what do we mean by the term technician?** For the purposes of this explainer, we consider the term technician very broadly. Technicians encompass a range of roles and career stages, from apprentices to infrastructure and facility leads; those with regulatory and compliance roles; those with world-leading skills in their technical specialty and those responsible for running, maintaining and supporting research and innovation facilities and resources¹.

¹RCUK Statement of expectations for technology/skills specialists for more detail on technical roles (<https://www.ukri.org/wp-content/uploads/2020/10/UKRI-071020-StatementOfExpectationsTechnologySkillsSpecialists.pdf>)



What evidence have we considered on the funding of technical roles in higher education and research?

This explainer is based on work carried out as part of the Research England funded Midlands Innovation TALENT project² which is leading and influencing change to advance status and opportunity for technical skills, roles and careers in UK higher education and research. It draws from quantitative and qualitative data including Higher Education Statistics Agency (HESA), national surveys, interviews and focus groups.

What routes are there for funding technical roles?

Through the work of the TALENT policy commission on technicians, we have looked at four common ways technicians are resourced in UKRI funding applications. These differ by the type of research project and the type of technical role in question. These approaches are:

▪ Directly Allocated (DA) staff costs

Staff resources which are costed onto a research project, usually for a portion of their time, and are shared with other activities. This approach is common for investigators on grants and can be used where a technician is the grant lead, but also for costing pooled technical staff.

▪ Directly Incurred (DI) staff costs

Staff resources which are costed directly onto a research project as the actual costs to be incurred and evidenced by an audit trail, such as time sheets. This can include full time staff for the project, such as researchers and technicians who have all or part of their working time dedicated to the project.

▪ Facility charges

DA or DI costs on a project proposal required to fund the services of a research facility or resource. These facilities can, but do not always, operate under a costing model known as TRAC³. Facilities can be (but are not limited to) physical infrastructure, such as microscopy facilities or animal facilities; and knowledge infrastructure, such as research software engineers and bioinformaticians. Facility charges may include both the resource needed for technical staff in the facility and the resource needed to run and maintain any equipment. This will often be charged on a “per unit” basis, for example, per hour.

▪ Estates and indirect costs

This can also include infrastructure technician rates where the institution calculates these separately from estate rates. Often referred to as “overheads”, referring to the resource required to support the research organisation and provide estates support, infrastructure and administration. These costs frequently support technical roles working in, for example, estates, procurement, logistics, operations and IT.

Alongside these grant mechanisms, Higher Education Institutions (HEIs) also make use of the UK’s dual support funding system. Many HEIs receive additional Quality Related research (QR) funding to support research activity, administered by their national higher education funding body⁴. This serves as a block grant for HEIs to support their individual research priorities, which in many cases supports “core funded” technicians.

²TALENT (<https://midlandsinnovation.org.uk/Talent>)

³Transparent Approach to Costing

⁴The Department for the Economy Northern Ireland (DfENI), the Higher Education Funding Council for Wales (HEFCW), Research England (RE), and the Scottish Funding Council (SFC).



What is the balance between funding mechanisms?

Analysis of the 2018/2019 staff data provided by the Higher Education Statistics Agency (HESA) for the TALENT policy commission suggests:

- 83% of technical staff were wholly generally financed by their higher education provider
- 4% of technicians were funded from multiple sources
- 3% from UKRI grants
- 3% from charitable foundations

What influences how technicians are funded in higher education and research?

Research organisations decide how technicians within their organisations are resourced based on a range of factors including their cost recovery models, TRAC methodologies and funder guidelines. A variety of roles including principal investigators, research and finance managers/administrators and technicians themselves can be involved in costing a research grant application. A survey, interviews and focus groups conducted for the TALENT policy commission found that:

- **There is a lack of clear guidance on how technicians should be costed onto different research projects** with the majority (>60%) of respondents across all role types responding 'no' to the question 'does your organisation have clear guidance on how technicians should be costed for different research projects?'
- **Perceptions of funder expectations on the cost of research projects and of HEI expectations on research income can discourage appropriate costing of technicians.** Focus group discussions highlighted a perceived 'cap' on UKRI funding applications, creating working practice where principal investigators reduce the costs included on their proposals to bring them under this perceived limit. Often technician costs were the first to be cut. There were also reports of active discouragement from including technicians on research grants in favour of research assistants, as the latter attracted overheads for the research organisation.

What's on the horizon?

The UK Government has recently published its Innovation Strategy and People and Culture Strategy, both highly relevant to the technical community. Following the publication of these strategies, the Department for Business, Energy and Industrial Strategy (BEIS) and UKRI will build on current financial sustainability work. This will include a review of TRAC, research bureaucracy and the impact of the funding approach on the overall cost of research projects.

It is essential that the technical community and the wider sector engage with this work to ensure that technicians are resourced sustainably and in a way that both recognises their contributions to R&I and supports them to reach their potential.