Research Equipment and Infrastructure Capital Expenditure Policy

Operational Owner:	Director, Research & Innovation Services (RIS)
Executive Owner:	Vice-Provost, Research and Innovation (VPRI)
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Related documents:	Code on Good Research Practice Public Contract Regulations Purchasing Policy Research Grants and Contracts Approvals Policy Value for Money

Approval History

Version	Reviewed by	Date
1.4	Director, Research & Innovation Services (RIS)	2 September 2019
1.5	Vice-Provost, Research and Innovation	3 September 2019
Final	Capital Planning Committee sign off	13 September 2019
Final	R&I CapEx Research Equipment and Infrastructure Committee	11 November 2020

1   Introduction

1.1   Purpose

1.1.1   Overview

The purpose of this policy is to set out the principles and procedures to be followed to identify, prioritise and fund research equipment and infrastructure, ensuring efficient and transparent decisions on capital expenditure.

Decisions on spending priorities will be guided overall by the University's Research and Innovation Strategy, and its associated annual implementation plan, supported by subsidiary strategies and plans at Faculty, School, Department, Institute and Centre levels.

The University of Surrey's Research & Innovation Strategy (2019-2022) highlights the critical role of cutting-edge facilities and infrastructure in providing research opportunities and attracting research talent. The strategy specifies the intent to invest in research equipment and infrastructure with emphasis on targeting capital funding schemes, and funding equipment in research areas most likely to produce internationally leading research. Adhering to this policy and the related guidance will enable achievement of university strategic goals and support the needs of researchers.

1.1.2   Background

Historically, capital expenditure practices considered teaching and research as a combined requirement, identifying and funding new and replacement equipment needs annually through the Capital Planning process and managed by the Capital Planning Committee (CPC). CPC also allocated funds to the VPRI Office to financially support external grant applications requiring or benefitting from University matched funding.

In addition to the strategic imperative, several factors drive the need to realign the historical practices. Externally, the funding landscape is changing, with funders increasing requirements for universities to contribute to equipment costs, while simultaneously reducing schemes that focus on or allow equipment to be included in the project budget. Further, short-notice and complex funding opportunities require an agile, responsive service, with clear and visible processes for accessing, allocating and monitoring capital expenditure.

This new *Research Equipment and Infrastructure Capital Expenditure Programme* establishes the governance, priorities, processes and services to meet the external and internal demands. The programme aims to provide a coherent comprehensive strategy-centric plan to effectively and efficiently manage and monitor research equipment and infrastructure funding. This policy provides the framework for the programme.

1.2   Scope

This policy applies to:

- All staff requesting funding for research equipment and infrastructure;
- Facility managers responsible for managing research equipment;
- Department, School and Faculty leadership responsible for prioritising and approving equipment funding and purchases; and
- Professional Services responsible for coordinating grant applications and financial management and monitoring.

1.3   Definitions

Capital Expenditure (CapEx): All items of expenditure for the purchase, upgrade or construction of physical or intangible assets, where the item has a life of over 12 months and the value exceeds £10k (incl. VAT). Where an asset comprises two or more relatable components that are purchased separately, the cost of those components can be less than £10k provided the combined cost of all the components is greater than £10k.

Research Equipment & Infrastructure: Facilities, resources and services that are primarily used for the conduct of research and to foster related innovation. Research equipment and infrastructure includes: major scientific equipment (or sets of instruments); knowledge-based resources, such as collections, archives and scientific data; e-infrastructures, such as data and computing, and "well founded laboratory equipment". Research equipment and infrastructure does not include: equipment and infrastructure with a primarily teaching focus; minor equipment; refurbishment of existing buildings; and long-term maintenance.

Minor Equipment: Equipment items with total cost of less than £10k. Such equipment is deemed not to be capital expenditure but is budgeted and accounted for as operating expenditure.

External Funds: Financial support from an external sponsor to supplement the cost of a research project, specific to this programme for equipment and infrastructure.

Internal Matched Funds: Financial support from Schools/Department, Faculty and/or University cost centres to prioritise and demonstrate commitment to a research project, specific to this programme for research equipment and infrastructure.

VPRI Board: The VPRI Board consists of: Associate Deans, Research and Innovation (ADRIs), Director of Research Strategy, Director of Innovation Strategy, Director of Doctoral College, and Director of Research & Innovation Services (RIS).

2   Policy Principles

This policy establishes the principles, financial and administrative mechanisms for managing, distributing and approving capital expenditure for research equipment and infrastructure. It details the programme schemes, presents the process for allocating University capex funds, clarifies the approval authorities for investing in research equipment and infrastructure, as well as articulates the offices responsible for monitoring the research equipment and infrastructure capex budget.

2.1   Research Equipment and Infrastructure Funding Schemes

The Research Equipment and Infrastructure Programme consists of three funding schemes to accommodate and respond to the annual budget planning round as well as to research funding opportunities and needs, as they arise. The three schemes (Large, Small-to-Mid-Scale, and Responsive), are presented below as an overview in Figure 1, described in further detail, and summarised in Table 1. The £ values given in the figure are indicative, and will be expected to vary from year to year. A core principle of the scheme is to maintain flexibility within the scheme to ensure both maximising opportunity as well as ensure complete spend of the allocation. The overall envelope of the allocation to Faculties will be determined by 15 September each year.
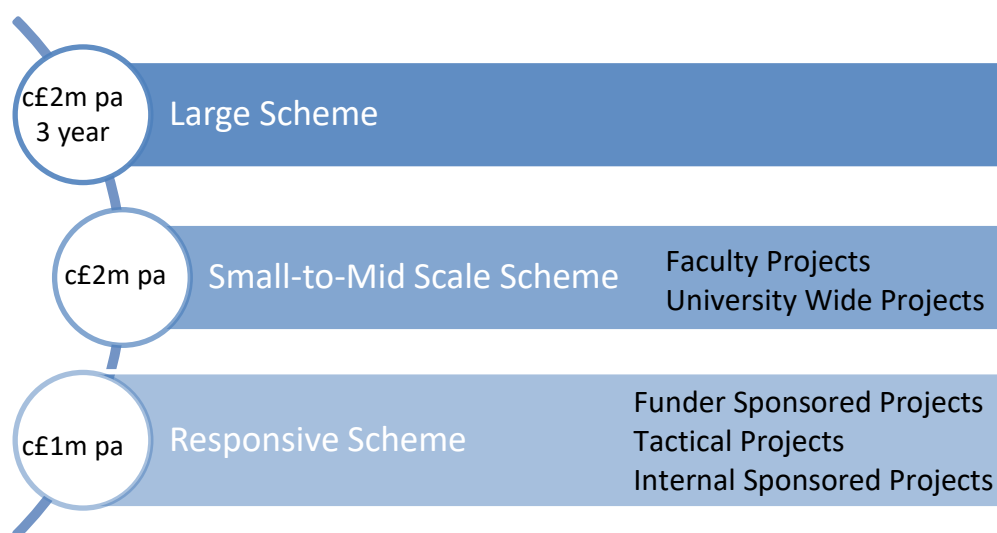
c£2m pa 3 year	Large Scheme	
c£2m pa	Small-to-Mid Scale Scheme	Faculty Projects University Wide Projects
c£1m pa	Responsive Scheme	Funder Sponsored Projects Tactical Projects Internal Sponsored Projects

Figure 1 Overview of Research Equipment and Infrastructure funding schemes, with indicative funding levels, which may be varied from year to year.

2.1.1 Large Scheme

The purpose of the *Large Equipment and Infrastructure Scheme* is to elicit proposals for and support the procurement of cutting-edge (usually iconic) equipment and infrastructure, to provide unique selling propositions for Surrey in the visibility and capability of its research and innovation. The aim of this investment is to catalyse groups of researchers locally, and act as a national and international magnet to attract leading and early career researchers. Distinctive equipment and/or facilities will differentiate the University, fostering collaboration and compelling superior interdisciplinary research. This fund seeks to give action to Overarching Strategic Goal 2 in the 2019-2022 Research & Innovation Strategic Plan.

It is anticipated that one strategic project, with equipment and infrastructure valued in the range £2m to £5m, will be funded annually through this scheme. Although full funding is available through the VPRI budget, strong preference will be given when used as leverage for external funds, including competitive grant funds and gifts.

2.1.2 Small-to-Mid-Scale Scheme

The purpose of the *Small-to-Mid-Scale Research Equipment and Infrastructure Scheme* is to identify and purchase new and replacement moderate-value equipment and infrastructure that supports critical research. This core research equipment will be typically accessed by multiple researchers, supported externally funded research and considered essential to the discipline. There are two components to this scheme. The first will be predictable and distributed to the faculties based on their research income. The second component will be prioritised University-wide and distributed according to merit, as described at 2.2.2.

New and replacement projects which need equipment and infrastructure will be prioritised and budgeted one to five years in advance, in line with other CapeEx processes. Funded annually via allocation to the faculty budgets, preference will be given to those projects which have external and internal matched funds, to offset expenses, maximise limited funds, and demonstrate school or department priorities.

2.1.3 Responsive Scheme

The *Responsive Research Equipment and Infrastructure Scheme* provides a dynamic mechanism to meet the changing and unpredictable opportunities presented by funding agencies and researchers. This scheme includes 'Funder Sponsored', 'Tactical' and 'Internal Sponsored' projects to accommodate external research grant applications, internal out-of-annual financial planning

equipment needs and ad hoc equipment opportunities to support future research, respectively.

Funding agencies often mandate that institutions applying for research funds co-finance equipment costs. Additionally, grant applications often experience improved success rates when supported by a University equipment contribution, demonstrating value to the institution and commitment to the project. Therefore, the University, through the schools/departments, faculty and VPRI budgets, will support funder sponsored projects by providing matching funds in response to the external Sponsor's requirements, or to increase the likelihood of award.

The expectation for co-contributions to funder-sponsored projects will be financial support shared between (Department/School/Centre/Institute); Faculty; and VPRI Office in the ratio of 1:1:2. Faculties have the flexibility to match-fund at a ratio of 1:2 (Faculty:VPRI), though demonstration of department-level commitment is encouraged.

Finally, the VPRI Office will maintain a small discretionary fund for supporting capex-related pilot or pump-priming projects, without requirement for external or internally matched funds.

Scheme	Purpose	Typical Project Value	External Funds	Internally Matched Funds
Large	High-value/ high-value-add cutting-edge equipment and infrastructure, providing major capability and USP	£2m - £5m	Optional	Optional
Small-Mid-Scale - Faculty Projects	School/Department and Faculty prioritised equipment and infrastructure, aligned with Faculty and University Research & Innovation Strategy and Themes	£10k - £500k	Optional	Optional
Small-Mid-Scale - University Wide Projects	Competitive, cross-faculty equipment and infrastructure, aligned with University Research & Innovation Strategy and Themes	£50k - £500k	Optional	Required
Responsive - Funder Sponsored Projects *(Matched funding)*	External equipment and infrastructure funding opportunity, requiring or benefiting from University matched funds to meet costing or leverage requirements	< £500k	Required	Required
Responsive - Tactical Projects *(Outside planning cycle)*	School/Department and Faculty out-of-cycle equipment needs, aligned with University Research Strategy and Themes	£10k - £500k	Optional	Required
Responsive - Internal Sponsored Projects *(PI-led)*	PI-identified equipment needed to support planned research	£10k - £500k	Optional	Optional

Table 1 Summary of Research Equipment and Infrastructure funding schemes

2.2 Funding Application & Decision Process[1]

2.2.1 Large Scheme

The Large Scheme will be applied on an ad hoc basis, as it supports the creation of major new capabilities and unique selling propositions (USPs) at Surrey, including supporting the capex needs of the Strategic Hires campaign. This scheme will be managed on a three-year rolling basis, since high-value projects may require accumulation of, or spend in anticipation, several years' budgeted funds. An internal competition may be held to determine how such funds may be spent. Criteria for selection may evolve, but core requirements include: uniqueness of the cutting-edge capability, importance to a current or planned strategic research theme, and attractiveness to potential partners. Expenditure under the Large Scheme would require Executive Board (EB) approval.

2.2.2 Small-to-Mid-Scale Scheme

As a faculty driven initiative, Directors of Faculty Operations (DFOs) are responsible for identifying and compiling a list of their faculty's essential new and replacement equipment needs. The Faculty Finance Managers (FFMs) request a financial business case for equipment costs over £50k or where the equipment will deliver a new research capability. A business case is not required for replacement of existing equipment. The complete list, with each item identified across four Tiers of priority, and associated business cases as relevant, will be submitted to the VPRI Office annually (January), prior to the start of the financial planning round.

Each faculty will prioritise projects costed at less than £50k, with a threshold established to only include funding project costs not exceeding the annual scheme budget. In addition, each faculty will review and prioritise all projects costed at over £50k, and forward recommendations to the VPRI Office annually (January). Through a competitive process, the VPRI Board will select projects for approval as applicable.

The criteria for selection may evolve, but core requirements regardless of costs include: the extent the equipment is core to the area of research, the number of externally funded researchers and planned usage time, and the non-availability of the equipment either at the University or with partners. In addition, the VPRI Board will give greater consideration for equipment supporting cross-faculty, interdisciplinary research. Faculties will be notified of funding decisions by 15 September.

2.2.3 Responsive Scheme

The Responsive Scheme is driven by researchers responding to dynamic situations which require internal matching funding. The *Internal Matched Funding Process Guidance*, soon to be available on the RIS website (and currently provided directly to researchers when they indicate a need for internal matching funds), details the match funding process. The requisite coversheet, summarising equipment, cost and business case information, must be submitted at least two weeks prior to an application submission deadline, or four days in advance of a request for an associated letter of support.

The research community is encouraged to target capital funding schemes and the VPRI Office will provide matched funding to ensure the University submits competitive applications. Requests for VPRI matching funds, which also have the appropriate school/department and faculty financial commitment demonstrating the perceived value of the project, will be approved. Similarly, tactical projects requiring *ad hoc* matching funds must be reviewed and match funded by the school/department and/or faculty, in order to receive VPRI financial commitment.

A summary of each scheme's application deadlines and decision process is presented in Table 2 below.

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[1] Sections 2.2 to 2.5 describe the processes associated with the implementation of this Policy, and as such may evolve over time. They have been included for purposes of illustration since this is a new Policy.

Scheme	Application Deadline	Decision Process	Decision Notification
Large	Ad hoc	▪ VPRI Board decision meeting	▪ Two months following
Small-Mid Scale	January (to input into planning round)	▪ Faculty prioritisation meeting to approve projects valued at <£50k ▪ VPRI Board reviews prioritisation recommendations and approves projects valued >£50k	▪ By 15 September (post budget confirmations)
Responsive – Funder Sponsored Projects *(Matched funding)*	Two weeks prior to funder call deadline, or Four days prior to request for associated letter of support	▪ Review *Request for Internal Match Funding Coversheet* and ▪ HoS/HoD and/or ADRI documented funding commitment ▪ VPRI and Dir RF&P review and approval	▪ 10 Working Days from submitted request
Responsive - Tactical Projects *(Outside planning cycle)*	Rolling	▪ Review *Request for Internal Match Funding Coversheet,* ▪ HoS/HoD and/or ADRI documented funding commitment ▪ VPRI and Dir RF&P review and approval	▪ 10 Working days from submitted request
Responsive - Internal Sponsored Projects *(PI-led)*	Ad hoc as budget accommodates	▪ Internal Competition	▪ Per Announcement

Table 2 Summary of funding scheme application deadlines and decision process

2.3   Funding Allocation

2.3.1   CPC Delegation to the VPRI Office

Capital expenditure can only be undertaken under the direct or delegated authority of the Vice-Chancellor, the Executive Board (EB) or its delegated authority conveyed by the Executive Board to the Capital Planning Committee (CPC). In practice, the University controls capital expenditure through an annual investment prioritisation process, which includes a rigorous evaluation of competing priorities. Through this process an annual budget is approved and authority delegated to the VPRI Office for managing and monitoring the academic year's research and innovation equipment and infrastructure budget.

CPC and EB approval is still required for items over £250k and £500k, respectively. Expenditures over £5m and £10m require authorisation by Finance Committee and Council, respectively.

2.3.2   VPRI Allocation to Faculties

The VPRI retains up to 70 percent of the research equipment and infrastructure budget to fund the strategic and high valued projects, and allocates a budget for the faculties to manage and monitor. The budget distribution is based on the faculty's historical spending and success rates, with the intent to provide autonomy to faculty and schools/department leaders to prioritise and support

projects, while the VPRI maintains oversight and awareness. The target budget allocations are detailed below and summarised in Table 3. The business cases developed for each of the programme's three schemes provide the justification for the VPRI budget at CPC and frames the allocation of funds to the faculties.

Scheme	Total	Retain	Allocate		
		VPRI	FASS	FHMS	FEPS
Large	35%	100%	0%	0%	0%
Small-Mid Scale	40%	25%	5%	20%	75%
Responsive	20%	67%	22%	24%	54%
Reserve	5%	100%	0%	0%	0%
Total	100%	63%	3%	8%	26%

Table 3 Target Research Equipment & Infrastructure Budget Allocation

2.3.3.1 Large Scheme

The VPRI is responsible for funding Large Equipment and Infrastructure projects. Therefore, 100% of the budget designated for the Large Scheme will remain with the VPRI Office.

2.3.3.2 Small-to-Mid-Scale Scheme

The Faculty component of the Small-Mid-Scale Scheme is driven by faculty identified requirements. Each year, the proportion of the total allocation to this line item will be coordinated during the annual planning process. Within this envelope, budget allocation to the faculties is based on historical equipment spend rates, with a slight adjustment to balance future opportunities across faculties and accommodate the inclusion of infrastructure to the programme. The historical teaching and research spend distributions for new and replacement equipment by faculty are summarised at Table 4. Based on the adjusted three-year average, the percentage distribution of the scheme's budget (rounded to the nearest 5%) is: 5% to FASS, 20% to FHMS and 75% to FEPS. This three-year average will be reassessed annually.

Academic Year	FASS	FHMS	FEPS
2015/16	1%	26%	73%
2016/17	3%	28%	68%
2017/18	5%	6%	89%
Average	3%	20%	77%

Table 4 Analysis of Faculty distribution of teaching & research equipment expenditure

2.3.3.3 Responsive Scheme

The Responsive Scheme requires internally matched funds, ordinarily on the basis of a Dept: Faculty: VPRI ratio of 1:1:2. To provide Faculties with a budget for their matched component, one-third of the VPRI responsive budget will be allocated to the faculties. Within this envelope, budget allocation to faculties is based on prior success criteria, including value of previous awards, REF output (3* and above) and number of PhD completions. The distribution of each faculty's successes are summarised in Table 5. Based on this, the percentage distribution of the scheme's budget is: 22% to FASS, 24% to FHMS and 54% to FEPS, and will be reassessed annually, adjusted on a three-year rolling average. Table 6 provides an example to illustrate the expected matching funds provision.

Criteria	FASS	FHMS	FEPS
Award Value	12%	23%	65%
REF Output	40%	19%	45%
PhDs	18%	30%	52%
Average	22%	24%	54%

Table 5 Faculty distribution based on 2015 - 2018 success factors

Criteria	School/Department	Faculty	VPRI
Approval	HoS/HoD	ADRI	VPRI
Percent	25%	25%	50%
Ratio	1	1	2
e.g., £500K equipment requiring 50% matching or £250k internal funds	£62.5k	£62.5k	£125k

Table 6 Example of Matched funding commitment

2.4   Research Equipment and Infrastructure CapEx Project Approval Limits

Approval authority of capital expenditure projects is stipulated by CPC and driven by the funding value (See Table 7). All University planned research equipment and infrastructure expenditures must be approved prior to procurement. All Responsive Scheme planned expenditures, including funder sponsored, must be approved prior to application submission.

Value	Criteria	Approval	From Budget
< £50k	Within VPRI Annual Allocated Budget	Relevant Faculty ADRI	Faculty
£50k - £250k	Within VPRI Retained Annual Budget	VPRI Board	VPRI
£250k - £500k	Within VPRI Retained Annual Budget	CPC	VPRI
£500k - £5m	Within VPRI Retained Annual Budget	EB	VPRI
£5m - £10m	Exceeds VPRI Annual Budget	Finance Committee	
£10m +	Exceeds VPRI Annual Budget	Council	

Table 7 Research Equipment and Infrastructure CapEx approval limits

2.5   Monitoring VPRI Research Equipment and Infrastructure CapEx Budget

RIS will be responsible for monitoring and managing the research equipment and infrastructure budget, as well as responding to mid-year spend reviews. The Director of RIS will provide administrative support to include maintaining up-to-date records of VPRI and faculty budget commitments and expenditures, to inform VPRI prioritisation and funding approval decisions.

The Directors of Faculty Operations (DFOs) are responsible for maintaining records of faculty budget commitment and expenditures. They will provide periodic (monthly) budget reports, including funding commitments, to the Director of RIS. The DFOs will also ensure synchronisation of commitment and award/reject status of Responsive Funder Sponsored Project applications with the Director of RIS and the Research Management Accountant.

Finance will maintain the research equipment and infrastructure capex budget, with the Senior Finance CapEx Analyst responsible for maintaining a record of the VPRI and ADRI Large and Small-Mid-Scale Schemes' budgets as well as providing spend authorisation codes to DFOs and finance

status reports to CPC. The Research Management Accountant is responsible for tracking the Responsive scheme budget and will provide information to the Director of Research Finance to support grant application financial approval decisions.

The Director of RIS will be responsible for post-funding reporting, coordinating annual internal reporting requirements and post-implementation review for projects exceeding £250k and conducting funded business case assessment of project objectives.

3 Governance Requirements

3.1 Implementation / Communication Plan

The policy will be communicated to Academic colleagues through the Directors of Faculty Operations and Associate Deans, Research and Innovation. The Director of RIS and Finance will share the policy with their professional service teams.

This Policy will be published on the University's web site along with the associated Guidelines with links from RIS webpages.

3.2 Exceptions to this Policy

Exceptions to this Policy will be decided on a case-by-case basis, with the decision authority in accordance with Table 7 (Approval limits). The onus for explaining non-compliance lies with the University's Principal Investigator (PI). Records of policy exceptions will be maintained the VPRI Office. No exceptions will be tolerated that violate Good Research Practices.

3.4 Review and Change Requests

The policy will be reviewed annually until 2022 and then every three years. Any minor changes will be made by Director of RIS, with anything other than clarifications to be agreed by VPRI and the initial signatories. Major changes will be submitted via CPC and the Executive Board. Associated processes (as documented within sections 2.2 to 2.5) are expected to evolve over time and will be subject to review as required.

3.5 Legislative context

N/A

3.6 Stakeholder Statements

3.6.1 Stakeholders General: This Policy has been reviewed by the Director of Research Finance & Partnering, Directors of Faculty Operations, Executive Deans of Faculty, some Heads of Schools/ Departments, Associate Deans of Research & Innovation, and Head of Financial Accounting.

3.6.2 Equality: The University is strongly committed to equality of opportunity and the promotion of diversity for the benefit of all members of the University community. The University's approach is to promote equality across the full range of its activities, in employment, teaching and learning and as a partner working with and within local, national and international communities. Equality Analysis is a process which examines how the impact of the policy has been considered on the diverse characteristics and needs of everyone it affects. This policy has been reviewed and no negative impact on equality has been identified.

3.6.3 Health & Safety: Health and safety implications arising from new and or replacement equipment are considered as part of the business case review process and incorporated within due diligence. This Policy is subordinate to the overarching requirements of the University Health and Safety Policy.

3.6.4 Procurement: The procurement department must be consulted for all spend over £25,000. The procurement department uses its professional expertise to apply techniques which will help manage the expenditure and lower any risks whilst ensuring value for money is obtained for the life time of the equipment. Procurement professionals will ensure adherence to University of Surrey Purchasing Policy, Public Contract Regulations, and policy on Value for Money.