

Managing Research Contracts 2018



An international benchmarking study
September 2018

“Managing Research Contracts 2018 – An international benchmarking study”

Report authors:

Rob Johnson, Dan King, Andrea Chiarelli, Lennart Velten

www.research-consulting.com

Contact:

rob.johnson@research-consulting.com

Contributors:

Jan Davies, Mark Hochman, Lachlan Smith, Buddug Williams

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Executive Summary

Context Research contract management is a critical function for all research-active universities. Funders, external partners and businesses are seeking greater value from their university relationships. At the same time internal pressures driven by growth and complexity impact on management, investment and skills. This report is intended to provide an evidence-based assessment of current practice, to assist those managing research contracts functions and inform policymakers.

Benchmarking research contracts This report summarises the findings from a study examining and benchmarking research contract management at 30 universities in the UK and Australia.

19 UK universities and 11 Australian universities participated, completing a common assessment framework in early 2018. The research incomes of participants ranged from under £1m (A\$1.8m) to over £250m (A\$448m), and they have a combined research income of £1.6bn (A\$2.9bn).

Their research contracts functions involve over 220 contracts staff, in a range of leadership, officer and administrative roles. Collectively they oversaw the completion of more than 50,000 agreements in the three-year study period.

Areas of investigation The study looked at key areas of research contract management, including research income, contract volumes, the staff and system resources in place and the costs, structures and remits of the research contracts functions in the participating universities.

Purpose of this report This report is our final project output and is released as a public report to support further work and development in this area. The data related to individual universities is anonymised, but we draw out a number of comparisons and trends that may be helpful to those in strategic and operational leadership roles.

The number and range of participating institutions has allowed a number of comparisons to be drawn – by size (research income) and by territory (UK/Australia).

What the study shows – our overall findings

Research contract functions typically cost less than 1% of research income For the participating universities, their research contract functions typically cost less than 1% of their institution's research income. Research contract functions are generally located within 'research office' structures, though in around a fifth of cases they form part of a central legal services team.

A range of staff roles are utilised in research contract functions

Research contracts functions deploy a range of staff roles to support research contracts, from administrative through to legally qualified staff. Contracts managers/officers are the backbone of the service for most universities, accounting for over 60% of reported full-time equivalent staff members (FTEs).

A greater density of legally-qualified staff in universities with larger research income

Universities with higher levels of research income involve significantly more staff with professional legal qualifications (50%). In universities with lower levels of research income, 20% of staff report legal qualifications, despite research contracts being more likely to be delivered by central legal services in these institutions.

Participants report growing complexity

Participants report increased complexity across all types of agreements. In particular, multi-party collaboration agreements and European Commission agreements (UK only) are perceived to be increasing significantly in complexity. International collaborations and funding schemes account for some of these changes.

Systems limit reporting of metrics for management

A significant number of metrics cannot be reported from the current systems used by research contracts functions. Out of ten identified metrics, only two metrics were available and reported by at least half of the participating universities. Metrics that help manage workload (inactive contracts, contract turnaround by area/people/type), were unavailable to the majority, with under 20% reporting these.

International comparisons – similarities and differences

Approach to sign off authority

There are distinct differences in the ways UK and Australian institutions approach the process to sign off agreements. Within the UK, in general there is greater devolution of sign-off authority to less senior roles and completion of sign-off occurs within the research contracts function. In Australia, sign-off responsibility is more commonly held at the level of director or a member of the university senior management.

The average cost per contract is higher for Australian institutions

On average, preparing a contract is more expensive in Australia than in the UK (£510/A\$914 compared to £393/A\$686 for the UK). The relative difference in salary costs between UK and Australian staff is a factor.

Salaries in Australia appear materially higher than for UK counterparts

Australian participants reported a 33% higher cost per FTE and higher salary levels than institutions in the UK. Only a proportion of this difference is explained by the higher cost of living and salary levels in Australia, which are typically 10-30% higher than the UK.

Australian institutions experienced a stronger growth in contract numbers

Over recent years, the volume of contracts has increased more significantly for Australian participants (11% p.a.) than for UK participants (5% p.a.). However, on average, UK institutions were handling more contracts per year, with an average of 661 compared to 591 for Australia.

Differences in approach to governing law on international agreements	We observed differences in the approach to governing law on international agreements. Australian participants prefer to remain silent on governing law when interacting with partners from other countries that do not accept Australian jurisdiction. This is not the case for UK participants, who are more likely to accept the foreign jurisdiction or stipulate a mutually agreeable neutral jurisdiction.
The use of software to manage research contracts is more common in Australia	There appears to be greater adoption, or planned adoption, of dedicated software for contract management in Australia. Within the UK, participants reported frequent use of supplementary spreadsheets to augment information held in systems not primarily designed for research contracts management. The development and implementation of integrated research contract management software within the UK may change this in the future.

The scale of research income makes a difference

Differences in organisational structures are aligned to the overall scale of research income	Dedicated research contracts teams located within the research office function are typical for universities with larger research incomes. For those with smaller research incomes, research contracts are more likely to be managed by the legal services function of the university.
Large research incomes are associated with a more focussed research contracts team	Typically, universities with the largest research incomes reported a narrower remit for their research contracts function. This is no doubt influenced by scale, with separate technology transfer offices, consultancy units/managers and clinical trial units able to deal with certain types of agreement.
In Australia, the largest growth in contract volumes lies with the larger universities	In Australia, contract volumes reported have grown most significantly for the universities with the largest research incomes. For the largest universities growth was 17%, but for those with the smallest research incomes it was 8%.
In the UK, growth in contract volumes was greatest for the smallest universities	In the UK, reported contract numbers have grown most significantly for the universities with the smallest research incomes. For the largest universities average volumes decreased by 2%, but for those with the smallest research incomes growth was 20%.
Workloads - contracts per FTE is higher in smaller universities	Workload, measured through a “contracts per FTE” indicator, was highly variable between institutions, but, typically, smaller universities reported volumes per FTE 33% higher than the largest universities.
The % cost of the research contracts function falls as research income increases	Universities with large research incomes reported a smaller percentage of overall research income directed at research contract management, typically around 0.4%. For those with medium or smaller research incomes, the cost reported was typically 0.7% and 1.3%, respectively.

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1. Introduction

About this report Research contract management is a critical function for all research-active universities. The professional staff employed in delivering research contracts are highly skilled, but are dealing with ever-increasing complexity and volumes in their day-to-day roles.

External partners and businesses are seeking greater value from their university relationships. Governments and funding bodies are also placing increased expectations on institutions to deliver economic and societal impact. At the same time internal pressures driven by growth and increased complexity impact on management, investment and skills.

This report summarises the findings from a study examining and benchmarking research contract management at 30 universities in the UK and Australia. It is intended to provide an evidence-based assessment of current practice, to assist those managing research contracts functions and inform policymakers

1.1 Background

Why a 2018 research contracts benchmarking exercise?

This report builds on a **2013 benchmarking exercise**, which compared the research contracts functions of institutions in the Brunswick Group of UK Research-Intensive Universities. This was commissioned in response to the perceived growth in complexity and volume of research contracts managed by universities and the critical role they play in supporting effective relationships between universities and business.

We then revisited the topic of research contracts in our **2016 report** for HEFCE on Effective Practice in Knowledge Exchange. This demonstrated the availability of a number of reference materials to help institutions manage their contracts, particularly from ARMA and PraxisAuril.

In this new benchmarking exercise, we aimed to work with a broader range of universities and introduced an international dimension to the benchmarks, comparing UK and Australian universities. Our detailed findings have already been shared with the project participants, and this public report shares the high-level findings with the wider community.

The 2018 benchmarking project

Participation in the project entailed the following:

- a specialist benchmarking exercise consisting of an online questionnaire which addressed performance, productivity, structure, skills, remit and governance issues;
- a bespoke institutional performance report and supporting analysis;
- a 1-to-1 consultation with our team to discuss the institutional context and performance; and

- attendance at a good practice sharing event (UK participants only).

This report is our final project output and includes anonymised results drawn from our analysis of institutional performance reports.

Timeline Invitations to participate were issued from September 2017 and the data collection phase with confirmed participants commenced in January 2018. Bespoke institutional reports and supporting analysis were delivered in June 2018, followed by two good practice workshops (for the UK participants).

Our team To ensure a good coverage of all topics and issues at play in the international research contracts landscape, we built a multi-disciplinary team. This included:

- Research Consulting
 - Rob Johnson – Project lead, Director
 - Dr Dan King – Director
 - Dr Andrea Chiarelli – Consultant and project manager
 - Lennart Velten – Data analyst and researcher
- Associate Consultants
 - Buddug Williams – Legal expert
 - Jan Davies – Research management specialist
 - Lachlan Smith – Small and specialist institution expert
 - Dr Mark Hochman – Australasia expert

Further information on the consulting team is in Appendix A.

1.2 Terms of reference

Objectives of the project The overall objective of the study was to benchmark university research contracts functions and facilitate the sharing of good practice. The detailed objectives were to:

1. benchmark resourcing and staff qualifications for the contracts functions at participating institutions;
2. benchmark overall volume levels relating to contract activity and its complexity against the level of FTE resource deployed, allowing for size, shape and structure of the organisation where possible;
3. ascertain the workflows typically used to manage research contracts, including delegated authority and sign-off arrangements;
4. assess the roles and responsibilities of contracts management staff;
5. highlight areas of good practice and document case studies that can be drawn on by institutions seeking to improve the performance of their contracts functions;
6. review the interface between research, consultancy and legal/commercial service contracting to understand overall workload of the contracts function; and
7. facilitate networking and exchange of information between participating institutions.

**About the project
participants**

30 universities participated in the benchmarking exercise. This included 19 institutions in the UK and 11 in Australia. The participants are broadly representative of the landscape of universities in the UK and Australia.

Research incomes for the participating universities ranged from under £1m (A\$1.8m) to over £250m (A\$448m), and research contracts teams ranged from 1 FTE up to 12 FTEs.

The participants' research contracts functions involve over 220 contracts staff, in a range of leadership, officer and administrative roles. Collectively they oversaw the completion of more than 50,000 agreements in the three-year period studied.

Within this report we have anonymised the data relating to *individual* universities, but are able to confirm the names of participating universities:

United Kingdom
Bath Spa University
Edge Hill University
Lancaster University
Loughborough University
Open University
Royal Veterinary College
Sheffield Hallam University
SOAS University of London
University of Birmingham
University of Durham
University of East Anglia
University of Hull
University of Leicester
University of Manchester
University of Nottingham
University of Plymouth

University of Reading
University of Sussex
University of Ulster

Australia
Australian National University¹
Curtin University
Edith Cowan University
LaTrobe University
Swinburne University of
Technology
University of Melbourne
University of New England
University of South Australia
University of Technology Sydney
University of Western Australia
University of Wollongong

1.3 Methodology

Areas of investigation

The study looked at key areas of research contract management, including research income, contract volumes, the staff and system resources in place and the costs, structures and remits of the research contracts functions in the participating universities.

**Development of a
specialist survey**

Working with our associates and participating universities, Research Consulting developed a comprehensive online survey. This built upon and improved our 2013 approach and addressed issues currently of concern to research contracts managers.

¹ The ANU return and participation was not across the full institution: it covered two Colleges (Science and Health & Medicine).

The majority of questions were common to UK and Australian participants. However, some questions were specific to location, such as those around the use of sector template agreements (e.g. the Lambert agreements in the UK, or the ARC Multi-institutional agreement in Australia).

To support consistency in understanding and data capture, we held a webinar for project participants, addressing how survey questions should be interpreted.

We collected data on several quantitative and qualitative aspects of research contracts management, and the survey captured information on the following areas:

- Institutional contexts: research income and funding mix.
- The research contracts function: structure, governance, FTEs and delivery.
- Staffing levels and costs: roles, skills/qualifications and training.
- The role of the research contracts function: remit, services and activities / responsibilities undertaken.
- Contract activity levels: volume of research contracts by type and split by discipline.
- Governance: sign-off of agreements, contract complexity and risk management.
- Template agreements: the extent and nature of use.
- Management systems and reporting.

The participants completed the survey during February 2018.

The data looked at the three financial years starting in 2015, 2016 and 2017. It should be noted that a small offset exists between the timing of these in the UK and Australia:

- For the UK participants this meant the three financial years starting with August 2015 to July 2016 (referred to as “2015” in the report).
- For the Australian participants the first year of the study period year was January 2015 to December 2015, with equivalent data for the following two years (and referred to as “2015” in the report).

Reporting We prepared bespoke institutional reports for all project participants, including comparisons with their peers and insights arising from the calls or visits held with their representatives.

This report provides a summary of the main project findings, including insights from both Australian and UK institutions.

In addition, all monetary figures in this report are given both in GBP (£) and AUD (A\$). The exchange rate used is A\$1 = £0.558 (21st June 2018).

Anonymisation of the project data For the purposes of public dissemination, this report does not identify data associated with individual participating institutions.

To assist readers in interpreting the study findings, we have utilised two types of grouping within this report. These groupings are intended to allow readers

to more effectively interpret the report's conclusions and analysis and apply them to their own institutional contexts.

- A three-level grouping based on the scale of research income: A, B and C.
 - Group A are the largest six universities, with research incomes >£100m (>A\$179m) (the average for this group is £170m / A\$305m);
 - the 13 Group B institutions have research incomes of between £20m and £100m (A\$36m to A\$179m) and the average is £40m / A\$72m; and
 - Group C, comprising 11 universities, represents those institutions with the smallest research incomes (below £20m or A\$36m; average £10m/A\$18m).
- Grouping based on location: UK or Australia: it is helpful for some parts of the report to distinguish between the UK and Australian participants to illustrate differences or commonalities.

Certain charts and figures identify the individual institutions by Group and/or location. Charts are organised by scale, so the "first" institution listed will not necessarily represent the same project participant throughout this report (i.e. the report is fully anonymised as opposed to being simply pseudonymised).

Limitations and exclusions

While the project sought to obtain a balanced picture of institutions' approaches to the management of research contracts, the following limitations on the scope of work should be noted:

- The accuracy of the data submitted as part of the survey phase of the project remains the responsibility of the participating institutions. The project team worked with participating institutions to review and revise their data submissions to the extent reasonably possible. We have however not sought to audit these submissions and cannot accept responsibility for any errors in interpretation resulting from the submitted information.
- This exercise did not aim to investigate the *quality* of the service provided by the contracts functions under consideration. Therefore, analysis and conclusions around productivity cannot be used to assess the quality of the service provided to internal stakeholders (typically academic staff) or to third parties (such as industrial sponsors of research). An exercise to fully examine quality would need a different approach.
- Our analysis is based on the observations and comments from a self-selected group of project participants. Whilst the participating universities are broadly representative of the wider sector, care should be taken in interpretation or extrapolation of the findings contained within this report. The purpose of the exercise was primarily to inform the participating universities and not to establish representative sector-wide benchmarks.

1.4 Acknowledgements

Our thanks The support and assistance of contracts and research office staff at the participating institutions in the project has been invaluable in the preparation of this report. An additional thank you is extended to those universities and individuals who have supplied case studies for this report.

We also wish to thank the Associate Consultants who worked on this project with the Research Consulting team: Jan Davies, Mark Hochman, Lachlan Smith and Buddug Williams. Their input, support and advice throughout the project were key to deliver quality insights to all participants.

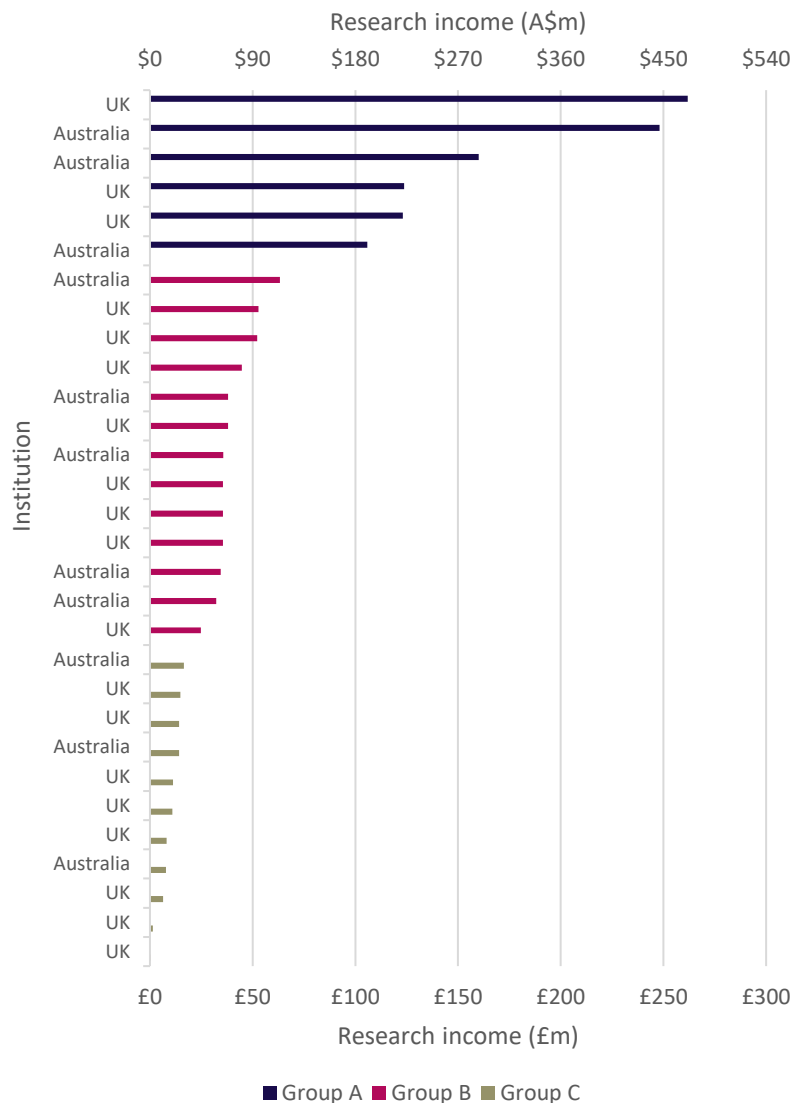
2. Findings of the exercise

2.1 The institutional context

This report represents a wide range of institutions

Participating institutions ranged from small and specialist institutions to large, research-intensive universities (see Figure 1). Research incomes ranged between under £1m (A\$1.8m) to over £250m (A\$448m). There was a bias towards larger institutions in the case of Australian participants. The range of participating institutions provides a representative view on research contract management in Higher Education Institutions (HEIs) in the UK and Australia.

Figure 1: Research income profile of the participating institutions



Size matters for organisational structures and positioning within the organisation

The survey explored how research contracts functions are structured and governed and the results were broadly similar for the UK and Australia, (Figure 2). The majority of HEIs reported a central, dedicated research contracts team managed within the wider research office function. However, about 20% reported that research contracts are managed by the university legal services team, which tends to be supported by a team within the research office.

What also emerges is that size matters. All Group A participants and the majority of Group B participants operate central research contracts functions within the research office (although the exact organisational structure does vary). For Group C participants, management is more likely to be aligned to wider legal services provision.

As research income grows, the scale of the research contracts support function grows – Group B universities typically report 4 or more FTEs: compared to 8-10 FTEs for Group A and 1-3 FTEs for Group C (see section 2.3).

Figure 2: Organisational structure



Universities with larger research incomes have more focussed research contracts teams

The survey examined the wider remit of research contracts functions, beyond the ‘core’ activities that are common to all participants (i.e. industrial research contracts, subcontracts and collaboration agreements).

Generally, research contracts functions in institutions with smaller research income tend to have a wider remit than those with larger research incomes. This is undoubtedly influenced by increased opportunity for specialisation in larger universities (Group A, and some in Group B) where dedicated technology transfer offices (dealing with licences, spin-out companies),

research governance/clinical trial support and (in some instances) consultancy management units are more common.

UK institutions tend to have research contracts functions with a broader remit than Australian institutions (it should, however, be noted that the Australian participants are biased towards larger research incomes).

Material transfer agreements, consultancy agreements and non-research services agreements are commonly within the remit of research contracts functions. IP and licensing agreements are commonly within the remit of research contracts functions in universities with smaller research incomes (Group C, some Group B).

Interfaces with pre-award, post-award and business development teams are high frequency and important

The exercise examined the frequency and importance of interactions with other departments and professional services (see Figure 3). This is an important consideration in structuring research contract functions within universities: ensuring effective interfaces with high frequency and high importance interactions. The most common interactions that contracts teams engage in are with pre- and post-award teams, and research business development/partnership teams. These teams are often, but not always, incorporated within the same departmental structure.

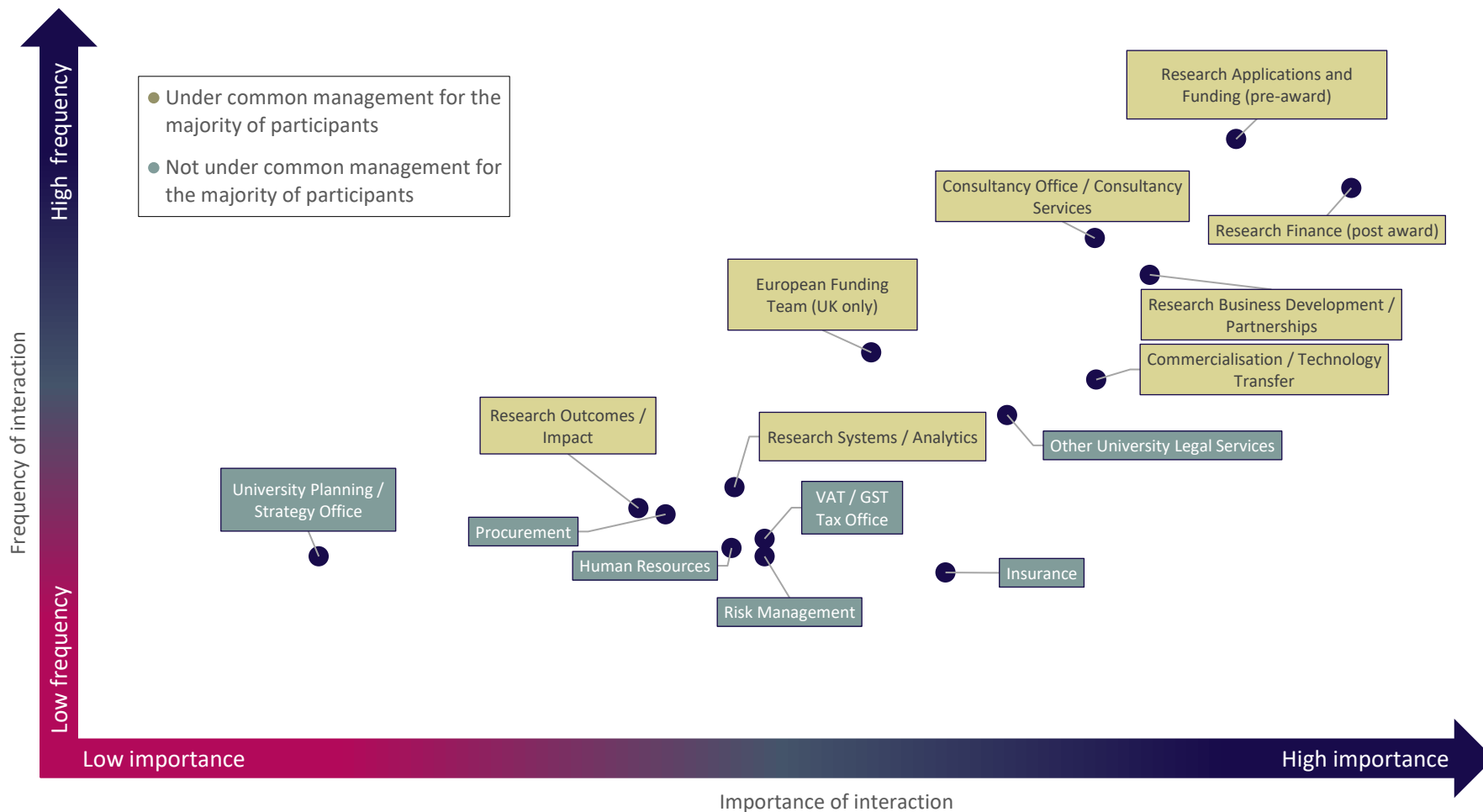


Figure 3: Research Contracts Functions and their interactions with other departments

Case Study 1 – Small and specialist institutions (UK)



Small and specialist institutions face particular challenges in managing and negotiating research contracts. Lachlan Smith, Director at Cloud Chamber, which specialises in supporting small and specialist institutions, explains that “these institutions are uniquely placed to respond to the growth in research contracts. Their size enables them to respond in agile and flexible ways, but this growth also presents challenges as the nature and complexity of research contracts grows.”

Most notably, these institutions in the UK have had a higher than average increase in research contract numbers over recent years, with significant growth at institutions including Edge Hill and SOAS University of London. Even though small and specialist institutions have small or university-wide contracts teams with wide remits, they have shown an ability to turn contracts around as quickly and efficiently as their larger counterparts. As the complexity of contracts increases, this may prove to be harder and harder to sustain.

To complement the contracts function, some small and specialist institutions have used outside legal support to advise on and progress contracts, but this has been scaled back over recent years as capacity has increased internally. Often the internal team's composition is different from larger institutions. For example, the staff responsible for negotiating and agreeing contracts tend to be qualified by experience and also often have wider remits, taking on other aspects of research support and development, over and above contracts.

Tracking of contracts remains one of the biggest challenges faced by these institutions. They tend not to have adopted tracking software which is often a reflection of their size and overall research capacity. Contracts tracking tends to take place through the use of spreadsheets with Excel commonly used. This results in a lack of quantifiable tracking data which makes meaningful comparisons year-on-year more challenging.

Smith observes that even with these challenges, especially the lack of staff resources available to support this function, these institutions still manage to adopt good practice: “It is encouraging that these institutions recognise the challenges they face and they are always looking to improve their systems and processes through adaptation and bespoke development. SOAS, for example, have brought their contracts function back in-house, have employed more staff and have started to more closely track the status of their research contracts as they come into the university. These changes, coupled with new risk assessment approaches, has resulted in overall efficiencies in their contract function over the last two years.”

Small and specialist institutions will face further challenges as they grow their research in the years ahead. One option they may have is to outsource specialist legal advice, but with an appetite growing for greater collaboration it may make strategic sense to pool resources or to share good practice through ARMA, CREST or other relevant networks. Research contracts is not necessarily an area of competition and is a function well placed for potential collaborations to ensure sustainability in the future.

2.2 Contract Volumes and Complexity

Contract volumes increased on average,

Participating universities reported on contract numbers in financial years starting in 2015, 2016 and 2017 (see section 1.3). Overall, the number of contracts reported per year increased by 6% per year over the period.

but trends by size and territory are distinctive

Australian participants reported a higher increase in average contracts per institution (average growth of 11%). In the UK, the average growth was 5%, however, individual figures varied widely. Group B and Group C institutions reported an increase in contract numbers (14% - 18% p.a.), whereas Group A institutions reported a smaller increase or even a decrease in contract numbers.

Table 1: Change in the volume of contracts 2015-2017

	Australia	UK	Average
Group A	+17%	-2%	+5%
Group B	+11%	+15%	+14%
Group C	+8%	+20%	+18%
Total	+11%	+5%	+6%

Contract complexity is increasing across the sector

The survey explored the views of research contracts managers on the complexity of research contracts, and how this is perceived to have changed. Respondents reported that complexity has increased across the board for all types of agreements (see Figure 4, below).

Identifying the most complex agreement types: spin-outs, clinical trials and collaboration agreements

Clinical Trial Agreements and Spinout Company Agreements are perceived as having the highest complexity. Collaboration Agreements and European Commission Agreements (UK only) are also perceived to be amongst the most complex agreements, and notably of “significantly increasing” complexity.

These agreements typically require input from senior members of staff, and, while templates may be used as a starting point for negotiation, bespoke changes are likely to be required to reflect individual project circumstances and the changing external environment. In contrast, Confidentiality Agreements or Consultancy Agreements are significantly less complex and not subject to the same rate of change. They can often be prepared by more junior staff using existing templates (see case study 2, below).

Compared to our 2013 benchmarking report, contract complexity is perceived to be increasing more rapidly in 2018, but the relative complexity of contract types is similar. The exception is for Spinout Company Agreements, which are perceived to be relatively more complex in 2018.

Participants highlighted some of the factors driving complexity: international collaboration (and sponsor compliance), industry negotiating expectations (e.g. around IP and publications) and multi-partner collaborations.

Contract complexity: international

International collaborations and risk management are currently of concern to research contract managers. Aspects of this include due diligence on

**collaborations driving
additional due diligence
and risk actions**

overseas organisations, language translation, sponsor compliance, and the practicalities of money transfer. In the UK, this was noted to be particularly acute as a result of the launch of the Global Challenges Research Fund² in 2015/16. An additional aspect here is that small collaborating organisations in developing countries often lack the capacity/expertise to engage with the research contract negotiation process.³

**Industry expectations
around IP and restricted
publication are
increasing**

Significant efforts across the sector, jointly with industry groups, have established various sets of template agreements to facilitate university-business collaboration. A number of contracts managers reported increasing expectations from industry funding or co-funding partners. This was particularly felt in certain areas, such as co-funded PhD studentships, where industry expectations and negotiating positions around IP ownership and restrictions of thesis publication are perceived to be driving more onerous negotiations and departing from “reasonable” templates.

**Bilateral research
contracts are the most
common type**

Participating universities identified the type of agreements within their portfolio by number of agreements. It should be noted that a number indicated that their systems provided very limited capability to extract this information. Accordingly, these figures should be seen as estimates and the number returned as “other” (20% overall) may be indicative of this. The remit of the research contracts function also influences this return – a research contracts function did not return data for agreement types outside its remit.

Table 2 shows the simplified results, and Appendix B contains a more detailed table.

Overall, bilateral research contracts are the dominating type of income generating agreement (21%). This is particularly so for Australian universities. Multi-lateral and EC collaboration agreements account for around 12% of agreements.

Commercial agreements, which include consultancy and services rendered work (inbound or outbound), account for 10% of agreements reported.

**Non-income bearing
agreements account for
around one fifth of all
agreement types**

A significant volume of non-income generating types (CDA, MTAs, MoUs) is also evident in Table 2 (22%, of which CDAs account for 12%). There is a notable difference between the UK and Australian reporting on NDA/CDAs. Across all size groups, UK universities report proportionally 2-3 times more CDAs/NDAs than Australian universities.

² GCRF supports research that addresses the challenges faced by developing countries, it forms part of the UK’s Official Development Assistance commitment, which is monitored by the Organisation for Economic Cooperation and Development.

³ Guidance on contracting with the developing world is available via the [Research Fairness Initiative](#) is available [here](#).

Case Study 2 – Observations on contract complexity (University of Western Australia, Australia)



Like other research institutions in Australia and similar jurisdictions, UWA has experienced an increase in complex transactions and the concomitant negative impact on productivity. Many of the causes are easily avoidable (for example restating legislation or complex legal clauses in low-risk government contracts). Others result from requirements imposed by government funding, for example requiring government funding terms to be included in subcontracts with collaborating international institutions when no funds are being transferred to those institutions. Negotiating such contracts can take up an extraordinary amount of time, as many international institutions are reluctant to agree to comply with these terms.

Some issues are a reflection of the complexities involved in large multidisciplinary research collaborations, whether with industry or otherwise. Multi-level contractual arrangements with government, industry and other research providers (often involving students) can be particularly complex to unravel and require much thought and attention from senior and skilled staff – all increasing the time investment required.

These agreements are very difficult to template and do not seem to follow any particular pattern, so have to be dealt with individually. This also increases the risk profile of the contractual arrangements and leads to a very lengthy negotiation process.

UWA manages research contracts through the Research Grants and Contracts office which has an informal triage system that allocates contracts for review according to level of complexity. Office staff are not legally qualified or trained, but most have many years of contract experience and understand when to escalate contracts to the Legal Services function. As the office is also responsible for grants and overall research governance, it has a good understanding of the overarching research environment in which universities operate. It is quite common for universities to take a pragmatic approach to accepting unfavourable terms or terms shifting risk unfairly and the Research Grants and Contracts function has to adopt this approach to be able to effectively process the increasing contractual load.

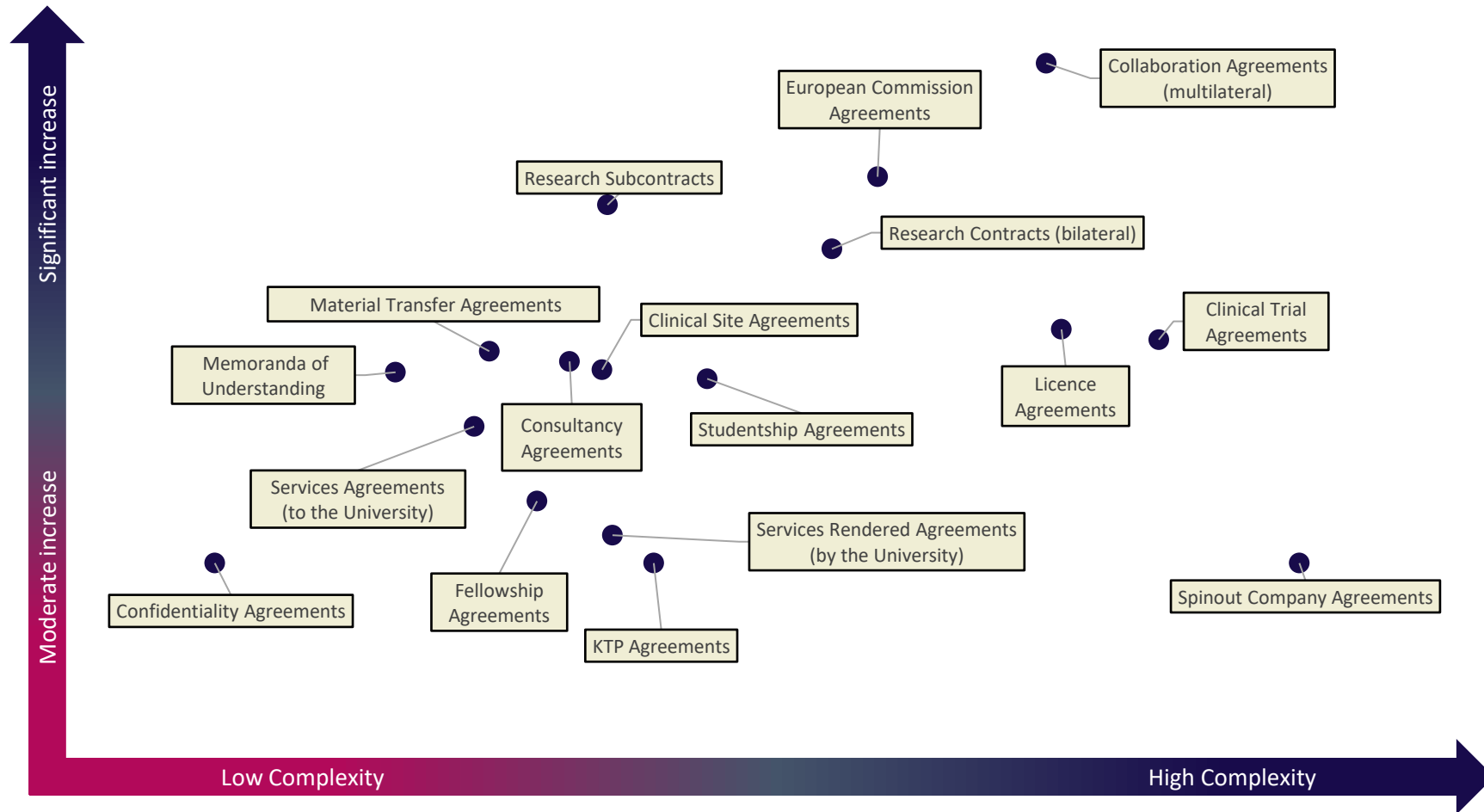


Figure 4: Reported change in contract complexity

Agreement Type	Total			
	Group A	Group B	Group C	Overall
Non-income bearing agreements				
Confidentiality Agreements (NDA/CDA)	14.5%	11.2%	8.0%	12.1%
Material Transfer Agreements	12.5%	5.7%	1.9%	7.9%
Memoranda of Understanding	1.5%	1.9%	4.2%	2.0%
Research agreements				
Research Contracts (bilateral, including KTP Agreements)	18.0%	24.6%	19.3%	21.3%
International Research Project Agreements	0.0%	3.3%	2.5%	1.9%
European Commission Agreements	0.9%	1.0%	2.4%	1.1%
Collaboration Agreements (multilateral)	9.4%	10.3%	14.7%	10.5%
Research Subcontracts	5.6%	4.4%	6.9%	5.2%
Studentship Agreements	6.2%	4.0%	4.3%	4.9%
Fellowships				
Fellowship Agreements	0.0%	0.4%	0.9%	0.3%
Specialist agreements				
Clinical Site/Trial Agreements	1.2%	1.2%	2.3%	1.4%
Licence Agreements (incl. spinout agreements)	0.1%	1.0%	3.6%	1.0%
Commercial and services rendered				
Consultancy Agreements	1.8%	8.0%	5.1%	5.2%
Services Rendered Agreements	3.5%	3.1%	3.9%	3.4%
Services Agreements	1.4%	1.0%	3.0%	1.4%
Other				
Other	23.6%	19.0%	16.0%	20.4%
Totals - All Agreements	18934	22174	6593	47701

Table 2: Agreement types and reported incidence (over the three years)

2.3 Resourcing levels

Clear correlation between FTE resources and research income

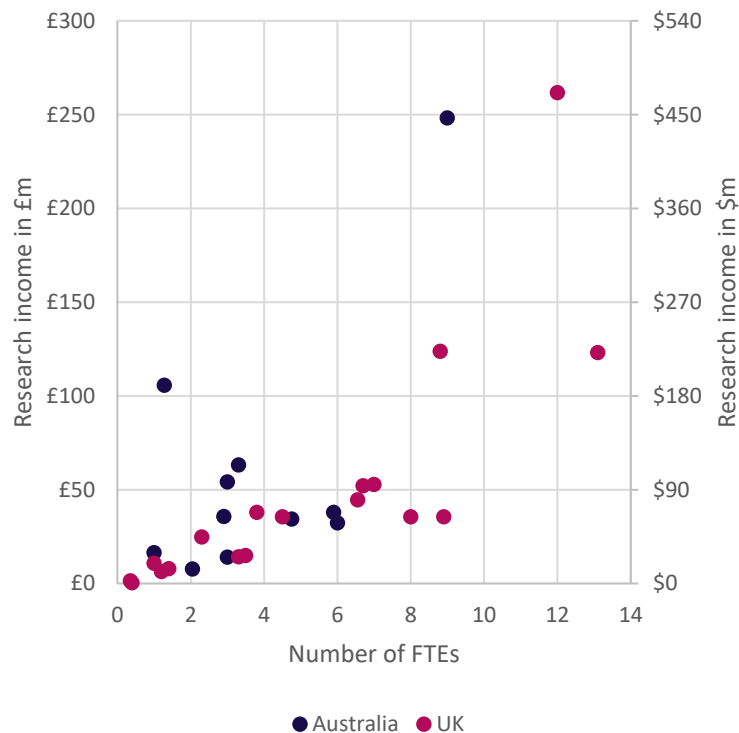
The study looked at resourcing levels and throughput in research contract functions. Participating universities have research contract functions that range in size from less than 1 FTE to over 12 FTEs. Larger research contracts functions are more likely to employ a range of roles, the range including heads of section through to contracts administrators.

Although there are outlying exceptions, and remits need to be considered, the FTE resources deployed into research contracts correlate with the level of research income. This is particularly clear for the UK universities, Figure 5.

Contracts functions tend to be larger (around 0.2 FTE per £1m/\$1.8m research income) in the UK compared to Australia (around 0.1 FTE per £1m/\$1.8m research income).

In the following analysis and charts, the volume of contracts (number of contracts) is examined against the cost of the contracts function (i.e. the cost of all staff resources) and the number of FTE roles (i.e. the FTE count for that research contracts function) to assess overall productivity.

Figure 5 Correlation between research income and staff (FTE)



Significant variation in 'contracts per FTE' - smaller institutions tend to process more

The average volume of agreements handled per FTE annually was found to be 169 including administrative staff and assistants (see Figure 6). However,

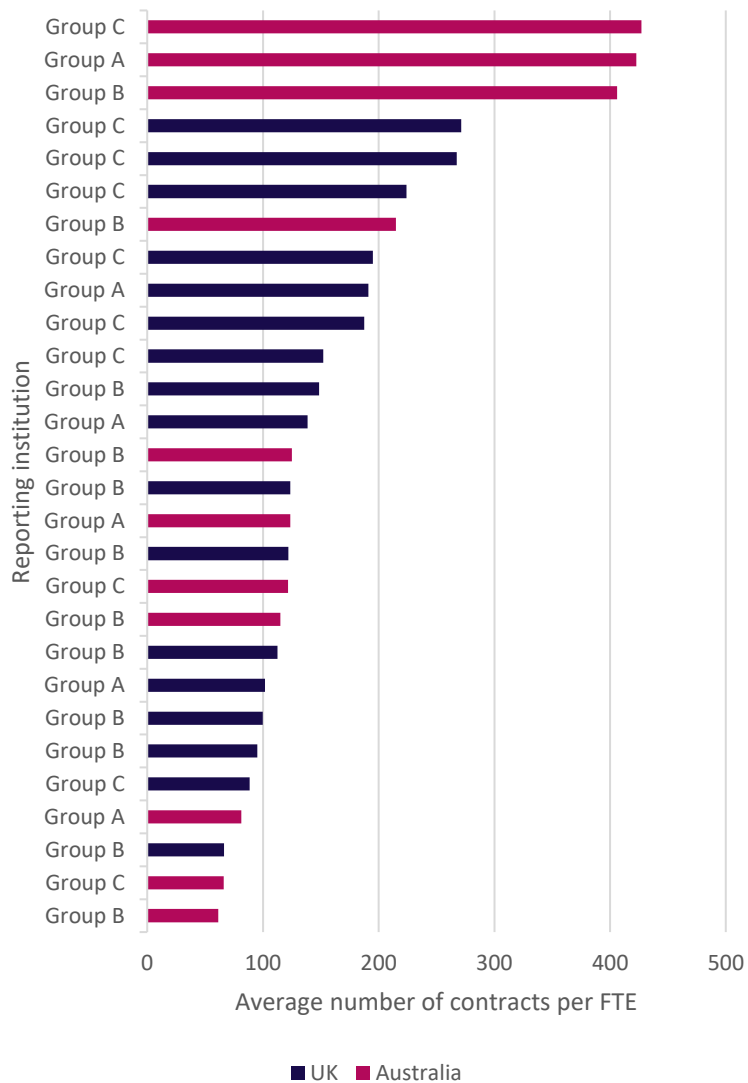
contracts per FTE resource

significant variability was reported, and this figure ranged from 60 to over 400.

Three Australian universities reported very high contracts per FTE (>400) – interestingly, these institutions were spread across all three size groups. The next three highest contracts per FTE scores were all from UK universities in Group C. Typically, Group C universities (who have the smallest research incomes) tended to report average higher workloads per FTE (200) than Group A (177) or B (145) equivalents.

This metric does not aim to explain the number of contracts handled by an individual contracts officer but tries to normalise the workload across the overall contracts function. Therefore, the calculation includes managerial input and administrative support.

Figure 6: Average number of contracts per FTE



**Participants take
diverse approaches to
manage workload
between disciplines**

The study examined how workload was spread across discipline types and how resources within a research contract function were allocated to these areas. We considered four areas: Medicine & Health Science; Science; Engineering and Technology; and Arts, Humanities and Social Sciences.

The results were mixed – some universities demonstrated a balanced workload across staff and contract volume in different disciplines. In other cases, significant discrepancies were evident. Generally, staff working on research contracts in Science or Medicine and Health Sciences tended to have the highest workload.

**Management
approaches to workload
distribution vary**

Various management approaches are used to monitor and allocate work. This is also dependent on the structures adopted by the research contracts function – a number of institutions link team members to faculties or schools (see case studies 2 and 4). While this improves knowledge and academic engagement, it can limit the flexibility to address dynamic changes in contracts volume, impacting on resilience of the service. Other institutions spread the workload according to capacity of team members which is assessed in regular meetings. In other cases, contracts are directed to people depending on complexity/risk and experience of the contracts officer.

This issue is linked to evidence of the limited use, and availability, of software systems dedicated to research contract management – and hence reporting to support workload management decisions (section 2.6).

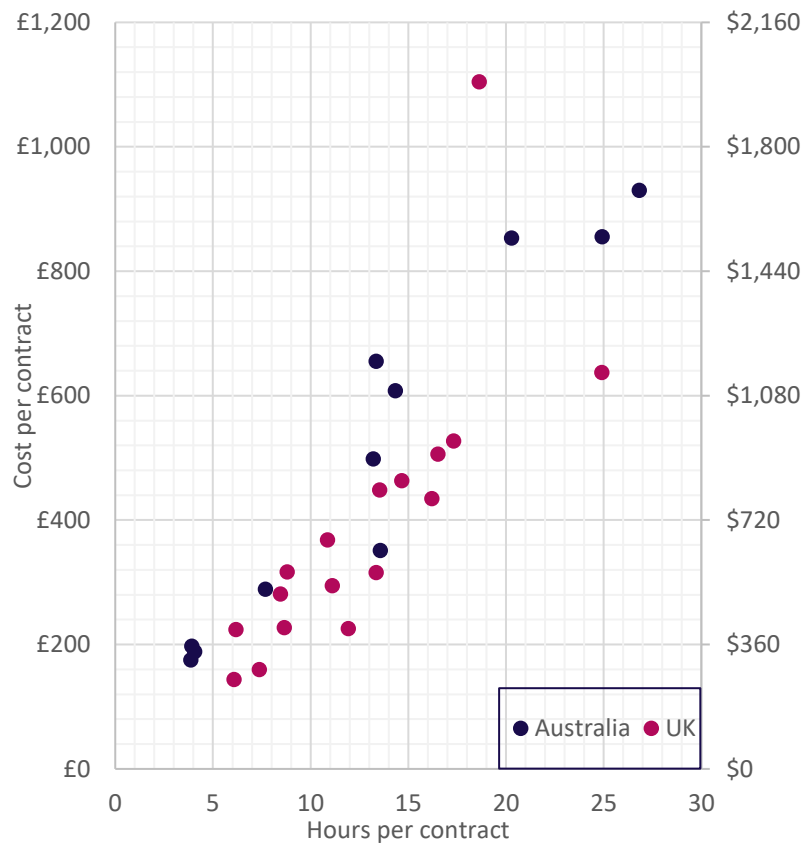
**The cost and time per
contract is highly
variable across
institutions**

The volume of research contracts was set against the cost of delivering the service (i.e. total cost of staff resource in the research contracts function) to generate a “cost per contract” figure. This was set against “time per contract”, established from the volume of contracts in that year and annual FTE resources. Figure 7 is the resulting chart for 2017. The averages were £438 (A\$785) and 13 hours per contract. However, we observed significant variability across individual universities.

Most UK participants reported data that indicated between 6 and 18 hours per contract, with a cost per contract of between £130 (A\$233) and £530 (A\$950). This is a surprisingly large range and relevant factors may include:

- the extent to which pre-award and/or business development staff pre-filter contract arrangements;
- approaches to sign off and briefing notes;
- the remit of the research contracts function (e.g. if complex agreements like spin-out companies are outside the remit); and
- the types of agreements and relative extent of these (e.g. more extensive use of CDAs, a high level of bilateral research contracts in Australian universities).

Figure 7: Cost per contract / Hours per contract



Case Study 3 – Developing contracts management through growth (University of Birmingham, UK)



The University of Birmingham is a broad-based, research-intensive university, and one of the largest institutions participating in this study.

The University has seen an increase of 35% in the volume of contracts handled in the last three years, with the team now dealing with over 1,800 contract negotiations per year. Demonstrating this growth in demand has resulted in additional investment in the number of Contracts Officers in the team. The expansion allowed a new approach to be adopted – creating dedicated research contracts teams for the University’s two largest Colleges.

This structure has enabled Contracts Officers to develop specialist knowledge in their discipline area, for example an in-depth understanding of the complex contractual issues related to clinical trials, while retaining the flexibility to allocate work among Contacts Officers to balance workload and respond better to peaks in demand for the service.

The investment also allowed new flexible roles to be created. The Senior Contracts Assistant role is able to combine administrative tasks and responding to generic queries from academic staff with a responsibility for managing low-complexity contracts; this reduces the burden on Contracts Officers, enabling their expertise and time to be focused on specialist work, and also ensures that agreements such as CDAs and variations can be turned around more promptly for the service users, without delaying work on more complex contracts.

2.4 Expenditure on the Contracts Function

Research contract functions typically cost less than 1% of research income

The cost of the research contracts function as a percentage of research income was considered. For the participating universities, research contract functions typically cost less than 1% of their university's research income. The overall average is 0.9%, but most universities participating in the study achieve less than 1%. See Table 3.

Table 3: Cost of the contracts function as % of research income

Group	Australia	UK	Total
Group A	0.5%	0.3%	0.4%
Group B	0.8%	0.6%	0.7%
Group C	0.7%	1.5%	1.3%
Total	0.8%	0.9%	0.9%

The % cost of the research contracts function falls as research income increases

In this analysis, the effects of size (research income) are more evident and the study found strong evidence of a relationship between institutional size and overall expenditure on contracts, with larger institutions generally able to spend a significantly lower proportion of their research income on the contracts function.

Universities with the largest research incomes (Group A) achieved a much smaller percentage of overall research income directed at research contract management, typically around 0.4%. For those with medium or smaller research incomes, Groups B and C, the cost reported was typically 0.7% and 1.3%, respectively, Table 3.

For one Group C university, the cost was significantly above the norm at ~5% of research income. This has had an impact on the overall average for Group C: excluding this university brings the average for Group C (UK) (and also the Group C overall total) to 1%.

In interpreting this analysis, it should be borne in mind that larger universities are more likely to demonstrate features that would contribute to this outcome, including:

- the narrower remit of the research contracts functions in Group A universities, who are more likely to have (for instance) separate and dedicated technology transfer units or consultancy management;
- economies of scale that can be achieved as research contracts team grow, for example the use of junior and administrative staff; and
- a greater occurrence of major research projects (£1m+ , A\$1.8m+) which increase research income more significantly than contract volume.

On this final point, and recognising that not all research income derives from contracts, we can consider the income value per contract reported – derived from the total number of agreements against the overall research income.

This analysis indicates an income of £231k (A\$414k) per contract for Group A, with the equivalent results for Groups B and C being £72k (A\$130k) and £44k (A\$79k), respectively.

Some evidence of a real terms difference in salary levels between UK and Australia

The study examined average salaries of research contracts staff at different levels of seniority and function, Table 4. The analysis provided project participants with a baseline of current salary costs for key roles in research contract management.

We have identified that Contracts Officer / Manager roles are the most frequently occurring job role in research contracts functions. In the UK participants reported these roles have normal salary ranges £31 to £47k, with officer roles £31-38k. In Australia the equivalent roles are £43k to £57k (A\$77k to A\$102k).

Heads of Section roles start from £50k in the UK and £73k (A\$131k) in Australia.

No evidence of difference by institution size was found, but geographical differences were observed:

- Australian participants reported 40% higher salaries on average (comparing the minimum salary for each position, at the exchange rate stated earlier in the report); and
- A London-weighting effect was found for participants in the UK where the cost per FTE was higher closer to London than further north.

Comparing the higher salaries of Australian research contracts functions with differences in average salaries and cost of living between the UK and Australia, does suggest that real terms salaries in Australia are higher than the UK.

Average salaries and costs of living in Australia are typically 10-30% higher than in the UK, accounting for the relevant cities and locations of participating universities (London is an exception for instance). This infers that only *part* of the difference in salaries is a result of cost of living differences between the UK and Australia.

Table 4: Salary levels

Role	Australia (000s)	UK (000s)
Head of Section	£73 - £82 (A\$130 - A\$147)	£50 - £57 (A\$90 - A\$102)
Senior Contracts Manager	£63 - £67 (A\$113 - A\$121)	£44 - £61 (A\$79 - A\$109)
Contracts Manager	£48 - £57 (A\$86 - A\$102)	£39 - £47 (A\$70 - A\$84)
Contracts Officer	£43 - £49 (A\$77 - A\$88)	£31 - £38 (A\$56 - A\$68)
Contracts Assistant	£37 - £42 (A\$66 - A\$75)	£27 - £36 (A\$48 - A\$65)
Contracts Administrator	£35 - £40 (A\$63 - A\$72)	£23 - £28 (A\$41 - A\$50)

Case Study 4 – Managing expectations (Loughborough University, UK)



If IP ownership and restricted dissemination are the negotiating priorities for a company, is a PhD studentship really the right approach for the project?

At Loughborough, the Research Office has been developing approaches to improve the clarity and understanding between the University and (company) sponsor about PhD studentship projects. Underpinning this is a growing concern that on occasion issues arising within PhD studentships are often founded on mis-matches around expectations and the agreements used: factors include the ownership of results, publication requirements/restrictions, the role of the studentship and cost/price considerations.

The first thing the University's new approach targets is whether a studentship is the right method of interaction with University. Consultancy, services rendered or contract research are other options.

A standardised agreement is used alongside a structured guide to price and IP ownership. This approach sets out a sliding scale of IP benefits and price, whilst allowing some degree of flexibility. What this seeks to do is balance and agree expectations at the outset.

The drive towards a PhD studentship may be based on price, academic desire or misconception. There have been past experiences of companies 'being promised' ownership of results when they are committed only to make a small contribution to the costs of a studentship. The new approach also seeks to avoid PhD studentships being seen as a cheaper option for R&D collaboration that should be undertaken through other mechanisms.

Where research is closer to market (higher Technology Readiness Level), with market sensitivities that drive the negotiating priorities for the company around IP ownership and embargoes of publication, then a PhD studentship *may* not be the right vehicle. If that is the case then consultancy or contract research may well deliver better outcomes for all in the end.

2.5 Staff and Professional Development

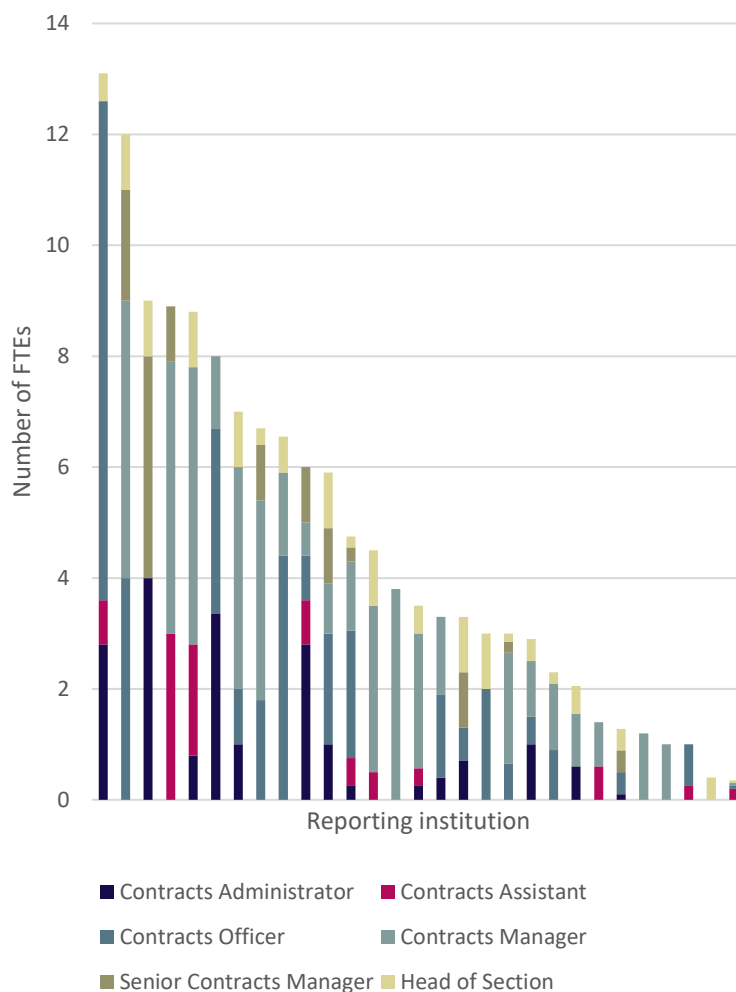
Contracts Manager / Officer roles are the backbone of service delivery

Contracts Manager/Officer roles are the backbone of the service in most institutions, and account for 61% of the reported FTEs (see Figure 8). Senior Contracts Managers and Contracts Administrators/Assistants are utilised in some universities.

Contracts functions tend to be larger (around 0.2 FTE per £1m research income) in the UK compared to Australia (around 0.1 FTE per £1m research income).

The participants reported relatively little staff turnover in recent years and staff changes most frequently occurred to cover maternity leave.

Figure 8: Contracts function staffing by role



A quarter of research contracts staff have a legal qualification

Contracts staff are most often qualified by experience (48% of the total headcount across all participants), followed by Professional Legal qualification (25%), Postgraduate Research Degree (14%) and, lastly, a Law Degree (13%).

With scale (larger research income, larger research contracts function) comes opportunity to increase the range of staff skills and responsibilities: Group A institutions involve significantly more staff with a professional legal qualification (50%) than Group B (8%) or Group C institutions (20%).

Group A institutions utilize administrative support staff more frequently than other participants. There are no significant differences between Australia and the UK, other than the fact UK institutions tend to involve slightly more staff holding a professional legal qualification.

Compared to our 2013 report, we had anticipated seeing a higher occurrence of staff with legal qualifications. In some universities large scale restructuring has enabled this to occur, but it remains the exception rather than the rule. The rate of change may be affected by the relatively low turnover of staff reported by some participants.

Training through national sector groups (PraxisAuril, ARMA, ARMS) is highly valued

Universities in the UK and Australia make a range of training pathways available to staff, including externally available provision (paid for) and internally developed training. Training courses provided through national sector groups (e.g. PraxisAuril, ARMA (in the UK) or ARMS (Australia)) are the most significant reported pathways to relevant training.

Support provided to get professional qualifications is less commonly made available in the UK – only a third of UK universities indicated that this was made available. In Australia it was reported by around half of the participants. This may have a bearing in time on the previous discussion around the extent of staff with legal qualifications.

Internal training courses by in-house teams are most common among participants, followed by courses delivered by external providers. Group A institutions are less likely to involve external people or organisations in training (except where delivery is pro bono, where there is little difference).

However, it seems that legal training (e.g. Association of University Legal Practitioners in the UK) is not commonly available to contracts officers. There is a question as to the extent to which it is relevant to research contracts staff. For smaller institutions, finding the time to take a day out of the office is often an issue and 'bite-sized' training sessions are preferred.

Case Study 5 – Project Officers (University of East Anglia, UK)



The study has shown that research contracts are typically handled by dedicated staff, often within the research office of the university, but sometimes as part of the wider legal services function. At UEA a very different approach means that negotiating research contracts is handled by “Project Officers” whose remit is a cradle-to-grave approach focused on Faculties.

The Project Officer role brings together a number of support responsibilities, more typically seen in distinct roles. These include supporting the academic from first idea through the application preparation and costing process to approval and submission, and then from successful notification to contract negotiation (where relevant); contract/grant approval and post award administration including the appointment of research and other staff on the project; the issuing of further agreements (e.g. collaboration MTAs, DPAs and Site Agreements); supporting ethics approval, budget discussions, staff change/transition queries, extensions and supplements.

The Project Officers each have dedicated administrative support who provide basic costings, general administration and lead on HR function support.

The Project Officers are themselves supported in aspects of contract negotiation by experienced Contracts Managers within the research office who are responsible for the strategic overview and development of policies for contracts and awards.

For UEA the Project Officer approach brings a number of advantages, in particular that academics have a clear single point of contact for all research issues, and individuals in these roles have responsibilities and engagement across the lifetime of a research project.

2.6 Systems and processes

Software dedicated to supporting research contract management is largely absent in the UK

Dedicated systems to effectively support research contracts management are largely absent in the UK (see Figure 9). In Australia some participants report the use of dedicated research contracts modules within a commercial research information management system. In most cases, research contracts functions work with existing systems (e.g. finance systems), supplemented by spreadsheets to capture context-specific needs. Only one example of the use of professional legal practice software was reported (where the research contracts function was part of the legal services team).

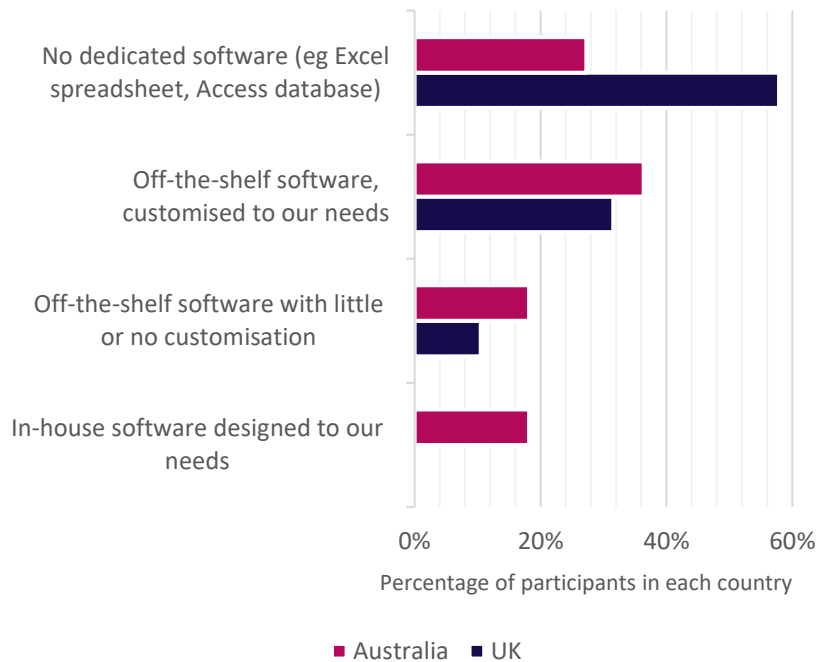
This was also evident in the data collection process, which was challenging for some participants.

Whilst most participants can currently report overall performance metrics, systems that support more detailed metrics and reporting to enhance effective management of the team are largely absent.

Within the UK, certain universities in the study are implementing dedicated research contracts management software as part of a holistic research management system. This is also the case in Australia with a number reporting use of, or implementation plans for, a contracts management

system (as part of a commercial research management suite). How this impacts on reporting and team management will be interesting to observe. The reported software products are from two different commercial providers who do not currently operate in both territories: Worktribe (UK) and Research Manager (Australia and NZ).

Figure 9: Software used to track contract activity



Limited availability and reporting capabilities for relevant metrics

The survey asked research contract managers about reporting metrics, their availability and the extent to which they were regularly reported (see Figure 10). Regular (i.e. at least quarterly) reporting of these metrics is uncommon.

Only one metric is available and reported (regularly and ad hoc) for more than 50% of the participants - total contract throughput. Throughput by contract type, faculty/school and person are generally available and reported (on at least an ad hoc basis) by slightly under half of the participants.

A significant number of metrics cannot be reported from the current systems used by research contracts functions.

We infer from this relatively low use of metrics within research contracts functions for performance/delivery management and improvement reasons. For example, few institutions reported use of metrics on inactive/slow-moving contracts.

Some participants reported an increased desire from the university senior management team for Service Level Agreements (SLAs) incorporating performance KPIs. Contracts Managers and Heads of Teams indicated a reluctance to adopt SLA-type service targets in the absence of greater clarity on how to balance these with quality and risk considerations.

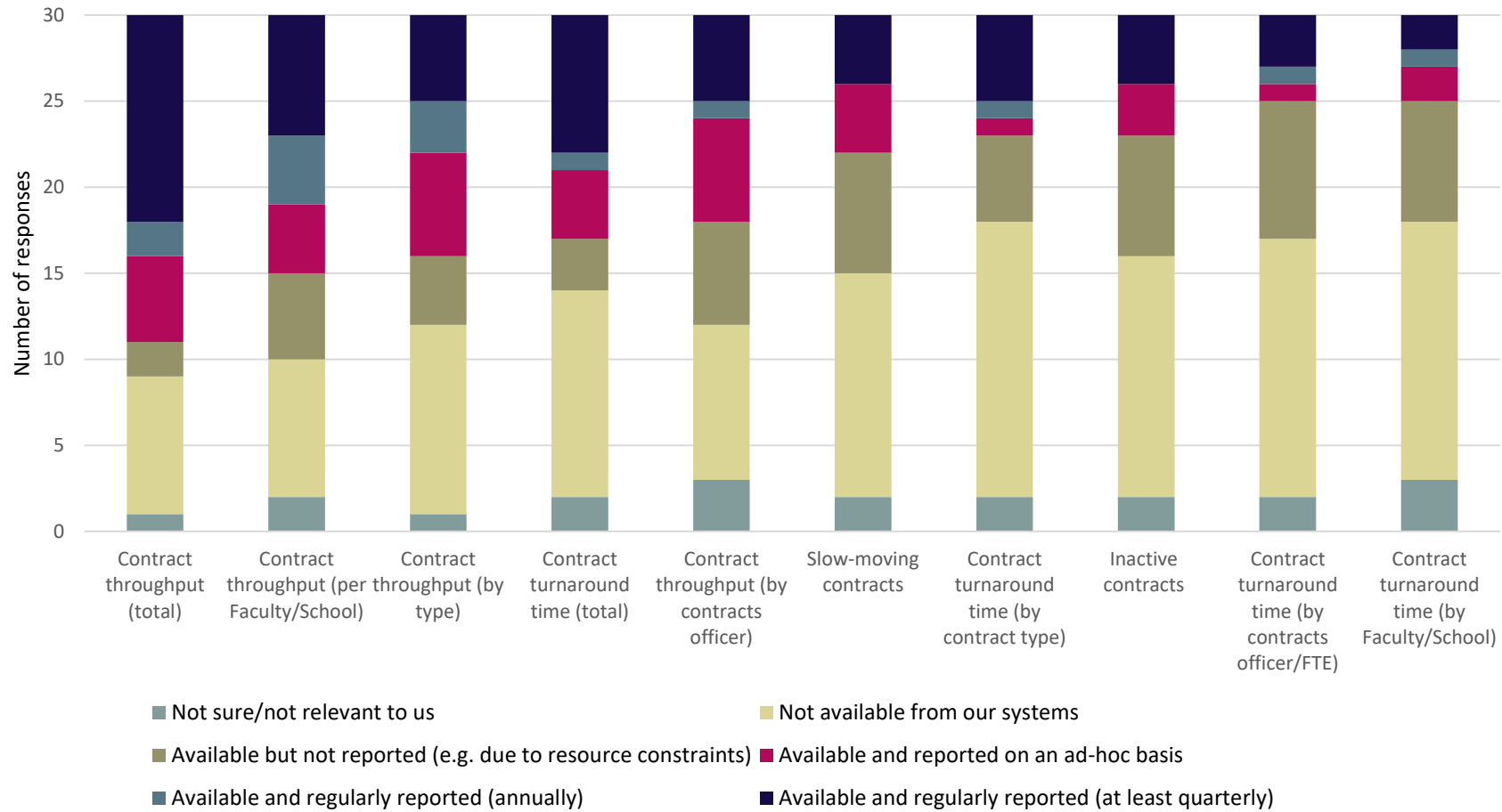


Figure 10: Reporting metrics for contracts activity: availability and frequency of use

Case Study 6 – The power of reviewing your processes (Edith Cowan University, Australia)



Over time the requirement and original rationale for processes can change and new requirements can emerge. Equally, processes that were once important may no longer be so. ECU introduced an online Research Management System (RMS) in 2011, but a number of manual processes remained. This case study looks at how ECU have changed and improved three processes alongside their RMS and other related systems to improve efficiency and workflow.

In 2010 a long-running legal case around IP ownership by an academic in an Australian university concluded and led to the need for researchers to sign IP assignment deeds for each research project in which they were involved, an onerous task. The ECU contracts team liaised with Legal and Risk Offices to review this process. The agreed outcome was one IP assignment deed for each staff member to sign that is stored on their Personnel file. The RMS is updated so that, whenever the researcher's name is entered into a project, the system advises whether the deed has been signed. This has significantly reduced (i) the time to open a project and follow up on outstanding deeds, as ECU are now not waiting on these being returned and (ii) the handling costs of the associated hard copy documents.

Like many other Research Contracts functions, ECU used a checklist to ensure that all actions required before an agreement is signed are in place. The practice was for this to be signed by the Director and then filed in hard copy. On review the value of the checklist was confirmed, but the need for the Director to sign the checklist was found to be unnecessary. Removing this signature step reduced a significant administration load.

ECU recently investigated the use of automated workflows to connect systems that do not talk to each other and require a high extent of manual input. One example is setting up soft and hard copy files: previously, once a project was entered into the RMS, a separate email was also then sent to the Records Office to set up the project files. ECU are now trialling a system where the act of entering a project into the RMS triggers an automated message to the Records Office and the necessary files are created.

2.7 Institutional attitudes to risk

Due diligence is becoming an increasingly significant workload

Most research contracts functions undertake a degree of due diligence as part of their remit. A number identified that additional due diligence work is often channelled through the research contracts function in the absence of other professional services units capable of dealing with it.

The workshops with UK participants identified that research contracts managers are experiencing a growing challenge in this area, driven by factors such as international collaborations, new sponsor compliance and audit requirements and wider institutional recognition of risk associated with external collaborations. Approaches to make due diligence more efficient across the sector would be welcomed, including the possibility of shared intelligence. The use of external due diligence providers is an area worthy of further investigation.

Case Study 7 – International collaboration and due diligence (University of Technology Sydney, Australia)



International collaborations and the associated due diligence bring a number of challenges for research contracts teams. UTS has a higher standard of due diligence for collaborators from higher risk countries. A “Higher Risk” country is any country with a score of less than 50 on Transparency International’s Corruptions Perceptions Index.

Once “higher risk” collaborators are identified, there is a further categorisation into government and university collaborators and industry collaborators. For industry collaborators the approach is to secure a third party due diligence search commissioned before any proposal is submitted. This approach can flag a variety of issues, and examples of this include:

- the existence and strength of relationships or close ties to other companies, which a university may not wish to do business with;
- the extent of legal proceedings past and current and other business conduct issues; and
- the extent of links into areas of ethical concern, for example, contracts or people connections with the armed forces in that territory.

Initial due diligence is not always clear, and in some ‘grey’ cases UTS has implemented a monitoring regime to ensure that the risk does not increase over time. Actions that UTS has employed in this regard include annual updates on due diligence reports and the drafting of research agreements to ensure ‘no reason’ break points are included.

A need to better assess which research contracts are ‘high risk’

The study explored university attitudes to risk and management of risk, in research contract management contexts. Anecdotal evidence indicates varied and emerging practices across universities. Issues cited include a lack of clarity about acceptable risk to the university, and who is responsible for taking decisions on risk-based issues. Most initial risk judgements are based on the financial value of the agreement. Some universities deem all “international” agreements to be higher risk. Neither are felt to fully address the issues emerging in this area.

**Sign-off arrangements
are different between
the UK and Australia**

The survey explored arrangements for signing authority for agreements and the delegation of this authority. In this case, there were marked differences between approaches in the UK and Australia. In the UK, it is common practice for agreements to be signed off within the research contracts function. For Australian participants, this approach was never used – Directors of Professional Services were the lowest level of signatory reported, with Senior University Managers (e.g. PVC, Registrar) frequently signing off contracts.⁴

Most research contract functions report that the process of securing signatures, once substantive negotiations have concluded, is onerous. Some report the use of administrative staff to chase through fulfilment of sign-off by internal and external signatories.

Despite this, proactive use of electronic signature technologies (e.g. DocuSign, AdobeSign) by universities and research contracts functions currently remains low, although some have concluded agreements electronically in response to external partner requests. Common barriers cited include cost and assurance requirements.

**Case Study 8 – Delegated authority and agreement sign off
(University of Leicester, UK)**

At the University of Leicester, a long-standing approach to delegated powers of signature within their Financial Regulations means that the majority of research contracts are signed off by individuals within the Contracts team of the Research and Enterprise Division. Like most Universities, Leicester has a schedule of delegated authority, and whilst agreements over £1,000,000 are escalated to the Registrar, contracts up to £1,000,000 are signed off within the Contracts team (by the Head of Section if >£500,000 and by individual contracts managers up to £500,000). Whilst reviewing and negotiating agreements, team members consider and discuss any complexities with more experienced and senior colleagues. A number of measures are in place to manage the signature process and to mitigate risk, these include:

- higher value and riskier contracts are handled by more senior members of the team, drawing in less senior members for valuable training opportunities;
- sign off sheets are used to highlight any particular risks, circumstances or unusual clauses which are considered prior to signature of each agreement; and
- new members of staff and/or those on probation are not given delegated signatory powers until they are fully trained and they are supported by senior staff to do so.

Thus far the arrangements have avoided time-consuming “signature chasing”, whilst maintaining appropriate levels of governance and review.

“Our approach brings a number of efficiency advantages in completing agreement sign off and undoubtedly the Contracts team take this responsibility very seriously, and one of the benefits is the empowerment of individuals within the team” - Rachel Machado, Heads of Contracts at Leicester

⁴ It is understood that at least one Australian university has subsequently devolved agreement sign-off to the roles of Head of the Research Contracts function, Faculty Deans and Associate Deans for Research.

**Template agreements
are commonly used and
accepted**

The use and acceptance of established template agreements is high: most contracts are at least based on a template agreement. Standard agreements from templates are commonly used (Brunswick / Lambert for the UK and ARC / NHMRC agreements for Australia) among participants. However, UK institutions reported that they are more likely to make amendments to them than Australian institutions.

In addition to these standard agreements, most institutions have developed or use other templates for various agreement types. Templates are most often used for EC Agreements (UK), Confidentiality Agreements and Clinical Site Agreements and are least common for Licence Agreements and Fellowship Agreements. Institutions report little potential to increase template usage, with the highest potential for clinical site agreements or research contracts (bilateral).

**International
collaborations driving
complexity**

International collaborations are critical for successful research endeavours, become increasingly significant in workflows for research contracts teams. Within the UK new funding schemes linked to developing countries are driving work of additional complexity. A number of issues were cited by participants, including:

- Negotiating with international partners who may not have the same understanding of issues in the context of UK/Australian legal/ethical frameworks;
- Meeting new sponsor compliance obligations;
- Dealing with countries under international sanctions;
- Securing adequate due diligence on small organisations in developing countries; and
- Understanding the level of risk, including money transfer.

**Approaches to
international law and
jurisdictions vary for
country and partner**

The survey explored attitudes and approaches to acceptance of foreign jurisdictions (including mutually acceptable neutral jurisdictions), and dispute resolution. The survey considered differences in approach based on the territories commonly involved - EU, North America, and Asia.

When the partners are not willing to accept the partner's jurisdiction, the approaches differ between Australia and the UK. Australian universities reported the same favoured approach for all partner territories: remain silent on governing law.

This approach is relatively uncommon amongst UK institutions, where the most common approach tends to be either accepting the foreign jurisdiction (except for North America) or stipulating a mutually agreeable neutral jurisdiction. One institution noted that remaining silent may be a legitimate strategy for the development of more equitable partnerships, particularly for collaborations with partners in low and middle income countries. For North America, UK universities are much less willing to

accept foreign jurisdiction and prefer neutral jurisdictions, remaining silent or stipulating the jurisdiction of the defending party. It should be noted that this may vary depending on the US State.

Briefing documents to inform the agreement signatory are normal practice

The use of briefing documents to support sign off processes is common. Typically these are formal or semi-formal briefings provided to the approving authority as part of the sign off process.

The use of formal briefing notes is more common in Australia (over 70% report *very frequent* use of this approach), and this should be considered alongside the more distant sign off authority which prevails in Australia (i.e. the need for briefings may be greater in consequence).

In the UK, informal briefing notes are reported to be used more frequently than in Australia. Again, this should be seen in the context of greater sign off by research contracts teams in the UK.

Case Study 9 explores a further development of this – extending the advice into the project delivery teams (academics and researchers) to better support ongoing contract compliance.

Contract compliance using an aide-memoire (Edge Hill University, UK)



A lot of co-operative effort can go into preparing a research funding agreement. Contracts teams on both sides, academics and others often work hard to reach agreement. Once the document has been signed contracts officers need to move on to the next agreement and the academic project leader is keen to get on with the project itself.

Once signed, there is a risk that the provisions of the contract will fade from memory as the final document is filed. There is also a risk that lines of responsibility for post-award contract compliance can become blurred. These risks can be managed through clear handover procedures and open communication. To assist with contract compliance, Edge Hill have trialled the use of contract compliance sheets – effectively aide memoire documents – that can be used by the lead academic and/or their post-award administrators.

The contract compliance sheet is intended to be pinned up (in A4 or A3 size) on the office walls or noticeboards of the key members of the project team. The contents of the compliance sheet will change according to the nature of the project itself but it will typically contain:

- A project directory, listing the names, roles and contact details of people involved in the project (internally but also at the funder and collaborating institutions);
- Internal and external project references, including project job codes to be used;
- A link to the contract document itself, and a record of variation history;
- A summary of the funded budget and the budget flexibility given in the agreement;
- Change control procedures e.g. how and when to request changes to budgets or project end dates;
- A summary of key project risks, previously agreed at the handover stage;

- Financial and project reporting schedules;
- Rules on publicity and announcements;
- Rules on publications and confidentiality; and
- Summary statements about foreground and background IP, where these are the source of risk.

The contract compliance sheets created to date have been well-received. The University has used them only on more complex projects.

“The compliance sheet is no substitute for consulting the contract. It can’t always convey the full detail or subtlety of meaning contained within a contract. The compliance sheet is proving to be helpful in ensuring that the contract document is always treated as a live project document, and so far our experience is that it is a helpful addition to the toolkit for more complex projects” - Chris Hughes, Head of Research Support, Edge Hill University.

3. Future considerations

For future consideration or actions	The report has highlighted a number of areas where further actions or work may be warranted. These are summarised here.
Dedicated software for research contract management	We note in the report a relative lack of “in use” systems dedicated to the needs of research contract functions in the UK. A number of the Australian participants report the use of such systems and it would appear that commercial software solutions in Australia are more mature than in the UK. Some of the participating universities (UK and Australia) are implementing new holistic research information management systems, which incorporate dedicated research contracts modules. Future exploration of the work flows and improvements this enables is an area of common interest.
Electronic document signature systems and adoption	The use of electronic document signature systems may bring a number of benefits to the sector. We saw little evidence to suggest proactive use of these systems being adopted, although examples of reactive use of systems (e.g. where partners require it) was evident. An examination of the potential advantages and barriers to more extensive uptake should be considered.
Service collaboration and outsourcing in universities with lower research incomes	The report identifies a number of benefits that arise for research contract management as the scale of research income grows. For those universities with smaller research incomes, realising the same level of expertise or experience across all areas of potential activity may need a different approach including collaboration or outsourcing.
Negotiating within the university sector	We are not able to quantify the extent, but a significant volume of research contracts are dealing with “in country, university-to-university” collaborations. Identifying ways to minimise the cost/time of such negotiations and to further increase use of templates that require little or no bespokeing is likely to have benefits to the sector as a whole.
How to define “quality” for research contract management?	The assessment and definition of <i>quality</i> in research contract management is notably difficult. Metrics to measure volumes, throughput and time are only meaningful if agreements are delivered to the right <i>quality</i> considerations. Defining these for the modern research contract function is not straightforward, and needs to consider a variety of factors – stakeholder perceptions, risk, speed, the negotiating “red lines” and compliance with sponsor obligations.
Due diligence and risk management on international collaborations	Due diligence and risk management (financial and reputational) was a recurring theme throughout the study and workshops. Further examination of practice and approaches on a collaborative basis is worth considering. Issues include: undertaking international due diligence, sponsor compliance, and internal protocols to understand risk characteristics and support decisions.

Glossary

- Contract volume** Participants reported the number of contracts (agreements) completed in each year examined by the study. This is not the same as the number of “projects” as some projects may have more than one agreement.
- FTE** Full time equivalent staff
- HEI** Higher Education Institution
- Legal Services** The term legal services is used within the report as a generic description of this common university function. Typically these are central functions providing a wide range of legal advice on issues relating to HR, students, commercial and business matters, and this can include research contract responsibilities.
- Research income** Participants reported the total research grants and contracts income of the university, including income not supported by the research contracts function. The research grants and contracts income is the income meeting the funding income categories for HESA (UK) and HERDC (Australia).
- Research Office** The term research office is used within the report as a generic description of this common university function. A research office will typically have responsibility for pre and post award management and approval of funding applications. It may also be responsible for research contracts, consultancy and other services rendered income activities, partnerships with industry, technology transfer, research business development, impact and research policy.
- Agreement and Contract types** The survey sought information on a range of agreement/contract types. A number of these are referenced in the report. The types, definitions and associated acronyms are listed below.
- Clinical Site Agreements* Agreements for specific sites within a clinical trial. These specify at the site level the roles and responsibilities of the Chief investigator, particularly if they are delegated sponsor tasks.
- Clinical Trial Agreements* Agreements related to the conduct and management of a clinical trial, including the relevant standards applicable to the trial (e.g. for Clinical Trials of Investigational Medicinal Product (CTIMPs) this would include the Clinical Trials Regulations).
- Collaboration Agreements (multilateral)* Agreements detailing the arrangements for multiparty collaborations, which may include a range of university, industry, public and end user organisations. Some may be entirely comprised of university partners.

<i>Consultancy Agreements</i>	Agreements related to the delivery of consultancy services, typically research-related and part of a university's commercial offer.
<i>Confidentiality Agreements</i>	Agreements covering non-disclosure or confidentiality, commonly abbreviated to CDA or NDA.
<i>International Research Project Agreements</i>	Agreements relating to research projects with an international partnership dimension, typically where sponsoring organisations are based overseas, or a project has collaborating partners in overseas territories. Legal jurisdictions and enhanced risks are additional elements to consider in these cases.
<i>European Commission Agreements</i>	UK only. Agreements relating to collaborations funded through the EU R&D programmes, typically via Horizon 2020 and collaborations involving universities, business and other research users.
<i>Fellowship Agreements</i>	Agreements relating to the award and funding of fellowships.
<i>KTP Agreements</i>	UK only. Agreements relating to the national "Knowledge Transfer Partnership" scheme, typically bilateral agreements between the university and co-funding company, but recognising the terms of the grant offer letter from the sponsor (Innovate UK).
<i>Licence Agreements (software or non-software)</i>	Agreements relating to the exploitation of IP arising from university research, the agreement allows the university to grant a licence to the external organisation, typically a business. The licence is a consent by the owner to the use of IP in exchange for money or something else of value. ⁵
<i>Material Transfer Agreements</i>	A contract that governs the transfer of tangible research materials between two organisations, when the recipient intends to use it for his or her own research purposes. The MTA defines the rights of the provider and the recipient with respect to the materials and any derivatives.
<i>Memoranda of Understanding</i>	MoUs are a type of agreement typically between two parties. They express a convergence of will between the parties, indicating an intended common line of action. It is often used in cases where parties either do not imply a legal commitment or in situations where the parties cannot create a legally enforceable agreement. They are common in international partnerships, particularly in relation to China.
<i>Research Contracts (bilateral)</i>	Bilateral research contracts relating to the funding of specific projects.

⁵ The 2015 WIPO "Successful Technology Licensing" guide is a useful resource.

- Research Subcontracts** Agreements relating to the delivery of elements (e.g. analytical, specific work packages) of university research by third parties.
- Services Rendered Agreements** Agreements relating to non-research services provided by the university to external organisations. These may relate to a variety of activities, for example routine testing or analysis or the use of facilities or equipment.
- Services Agreements** Agreements relating to services required from 3rd parties and delivered to the university (distinct from *research subcontracts*).
- Spinout company agreements** Agreements relating to the formation of a spin-out company, typically a number of agreements are required. They cover a range of issues, including: shareholding and ownership, the involvement of university staff in the spin-out, investment and funding into the company, the arrangements for the company accessing university facilities, IP licences and agreements around future IP (from university research).
- Studentship Agreements** Agreements relating to the sponsorship of PhD studentships, typically by industry or other research users. Funding may be for the whole studentship or to co-fund part of the studentship costs.

Appendix A – The consulting team

The project required assembly of a consultancy team that brought together a range of skills and experiences in the UK and Australia. This section provides some further background on the consulting team and their expertise.

- Rob Johnson, Research Consulting** Rob is Founder and Director of Research Consulting, a mission-driven business working to improve the effectiveness and impact of research and scholarly communication. Rob was the lead consultant for this project.
- Dr Dan King, Research Consulting** Dan is a Director at Research Consulting, he joined in 2018, after 20 years working in research and knowledge exchange management in various universities, latterly as Director of Partnerships, Local Engagement and Commercial Services at Nottingham Trent University.
- Dr Andrea Chiarelli, Research Consulting** Andrea is a Consultant at Research Consulting, leading the project management, survey design/management and data analysis work.
- Lennart Velten, Research Consulting** Lennart was the Research Consulting analyst and researcher for the study, developing the interpretive charts and analysis.
- Buddug Williams, Be Your Lawyer Ltd.** Buddug is the legal expert and a lawyer. Since 2014 she has been delivering an interim legal service, prior to that she held positions with Wragge and Co., Melrose plc (Head of Legal) and Talis Ltd (various roles including Chief Legal Officer).
- Jan Davies, Sker Interim & Consultancy Ltd.** A research management specialist, Jan is Founder and Director of a consultancy company providing consultancy and interim research support to universities. She is a senior research management professional, with 25 years' experience in the HE sector, latterly as Director of Research Support at Leicester University.
- Lachlan Smith, Cloud Chamber Ltd.** Lachlan is Director at Cloud Chamber and leads their Research Development practice. He brings a particular expertise in small and specialist institutions.
- Dr Mark Hochman, Research Management Resources Pty Ltd** Mark is Director at Research Management Resources Pty Ltd. Based in Tasmania, Mark is the team's Australasia expert and lead and has 20 years experience as a senior manager in research administration. Mark is a past President (2007/8) of the Australasian Research Management Society (ARMS).

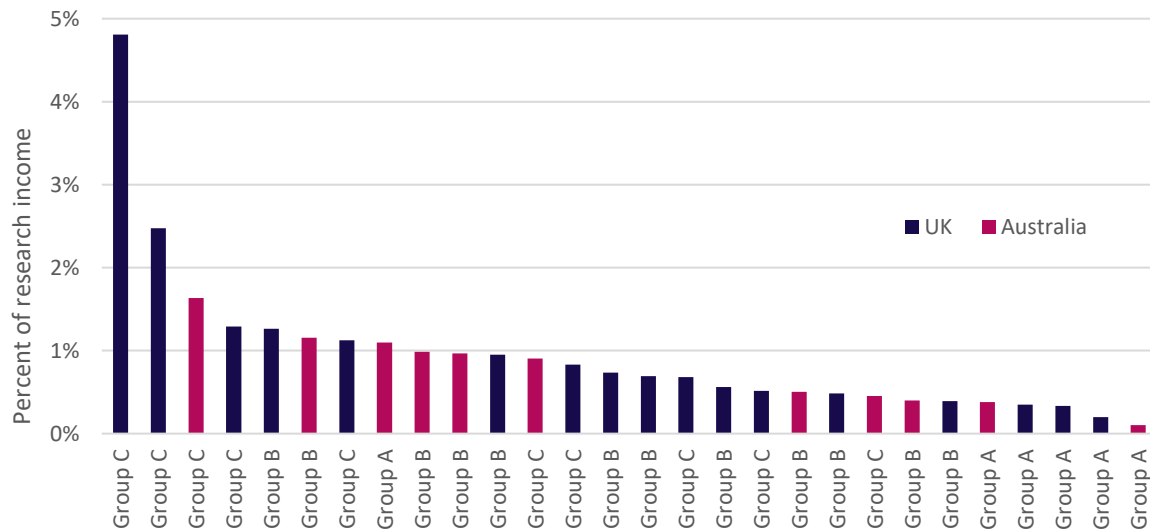
Appendix B – Supplementary data and charts

Appendix B contains additional information and tables that are not directly referenced in the main report, but which are anticipated to provide additional useful information for the reader.

The following are included:

- A1 – Cost of Research Contracts Functions as a percentage of research income
- A2 – Remit of research contracts functions - agreements
- A3 – Remit of research contracts functions – wider activities associated with research contracts functions
- A4 – Agreement and contract types – frequency of occurrence, by group and territory.
- A5 – Training used and available to research contracts functions
- A6 – Sign off authority and responsibilities



A1 – Cost of Research Contracts Functions as a percentage of research income



A2 – Remit of research contracts functions - agreements

This table outlines the broader remits of the participating research contract functions. The study assumes that certain activities, like bilateral research contracts, are common to all research contract functions. Hence this chart explores the extent to which a wider range of agreement types are within the remit of participating research contract functions.


The boxes and letters indicate the nature of responsibility against the agreement type, as follows: P (dark green) = primary; S (light green) = shared responsibility; A (beige) = ad hoc responsibility and N (pink) = no responsibility. Institutions are grouped to indicate the effects of scale and territory on remits.

	Contracts team remit	Material Transfer Agreements	Consultancy agreements	Non-research services agreements	IP and licensing agreements	Spinout company agreements	Staff secondment agreements	Capital and equipment agreements
Institution								
UK - Group C		P	P	P	P	P	P	P
UK - Group C		P	P	P	P	P	S	P
UK - Group C		P	P	P	P	P	N	A
Australia - Group C		P	P	P	P	S	P	S
UK - Group B		P	S	S	P	P	P	S
UK - Group B		P	P	P	S	P	S	N
UK - Group C		P	P	A	N	N	P	P
UK - Group C		P	P	P	P	S	N/A	A
UK - Group C		P	P	A	P	P	A	A
UK - Group B		P	P	P	S	A	S	A
UK - Group C		P	P	S	P	N	A	S
UK - Group B		P	P	P	A	N	S	A
UK - Group C		P	P	P	N	N	A	A
Australia - Group B		P	P	S	P	N	S	S
UK - Group C		S	P	S	S	S	P	A
UK - Group B		P	P	A	S	N	A	A
UK - Group C		P	P	S	S	N	S	N
UK - Group A		S	P	P	A	N	S	S
Australia - Group B		P	P	S	S	A	S	S
Australia - Group B		P	S	N	P	N	N	N
Australia - Group B	P	P	A	A	N	N	A	
UK - Group B	S	A	P	A	A	S	S	
UK - Group A	P	S	S	A	N	A	S	
Australia - Group B	P	S	A	S	N	S	N	
Australia - Group A	P	S	N	S	N	N	N	
UK - Group B	S	S	S	S	S	S	S	
Australia - Group A	A	S	A	A	A	S	S	
Australia - Group B	S	A	A	A	N	N	A	
Australia - Group A	A	S	A	N	N	A	S	
Australia - Group A	A	S	N	S	N	A	N	

A3 – Remit of research contracts functions – wider activities associated with research contracts functions

This table outlines the broader remits of the participating research contract functions focusing on supporting actions and activities.

The boxes and letters indicate the nature of responsibility against the agreement type, following the same approach as in A2.

Contracts team remit	Maintain web-based guidance	Monitor funders' terms and condns.	Advice on costing and pricing	Delivery of training	Project management of new bids	Advice on Property law	Project management of Clinical Trials	Advice on Employment law	Other
Institution									
Australia - Group A	A	P	P	A	A	N	N/A	N	N/A
Australia - Group A	P	S	S	S	A	N	N	N	N/A
Australia - Group A	P	S	S	S	S	N	N	N	N/A
UK - Group A	S	A	S	S	N	N	N	N	P
UK - Group A	S	P	N	A	N	A	N	A	N
Australia - Group A	S	A	A	A	S	N	A	N	N/A
Australia - Group B	P	P	P	P	P	N	N	A	N/A
UK - Group B	P	P	S	P	S	N	S	N	P
UK - Group B	P	P	P	P	S	N	N	N	N/A
UK - Group B	P	P	S	P	P	N	A	N	N/A
UK - Group B	P	S	N	P	A	N	A	N	P
UK - Group B	S	P	P	A	S	N	S	N	P
UK - Group B	P	N	N	P	N	N	N	N	P
Australia - Group B	A	P	A	S	S	A	S	A	P
Australia - Group B	P	P	A	A	A	N	A	N	N
Australia - Group B	P	A	S	A	S	N	A	N	P
Australia - Group B	S	P	P	A	S	N	N	N	N/A
UK - Group B	P	S	N	S	N	N	N	N	N/A
Australia - Group B	A	P	A	A	A	N	N	N	S
UK - Group C	P	P	P	P	P	N	N	A	N/A
UK - Group C	P	S	N	P	N	P	A	P	P
UK - Group C	P	P	P	S	S	A	S	A	N/A
UK - Group C	S	P	P	A	P	N	N	N	A
UK - Group C	N	N	N	A	N	P	P	N	N/A
UK - Group C	P	N	N	S	A	A	N	A	P
Australia - Group C	P	A	N	N	A	N	N	N	P
UK - Group C	N	P	P	N	S	N	S	N	N/A
UK - Group C	P	S	N	S	N	N	N	N	N
UK - Group C	S	S	N	S	N	N	N	N	N/A
UK - Group C	A	A	N	A	N	N	N	N	N/A

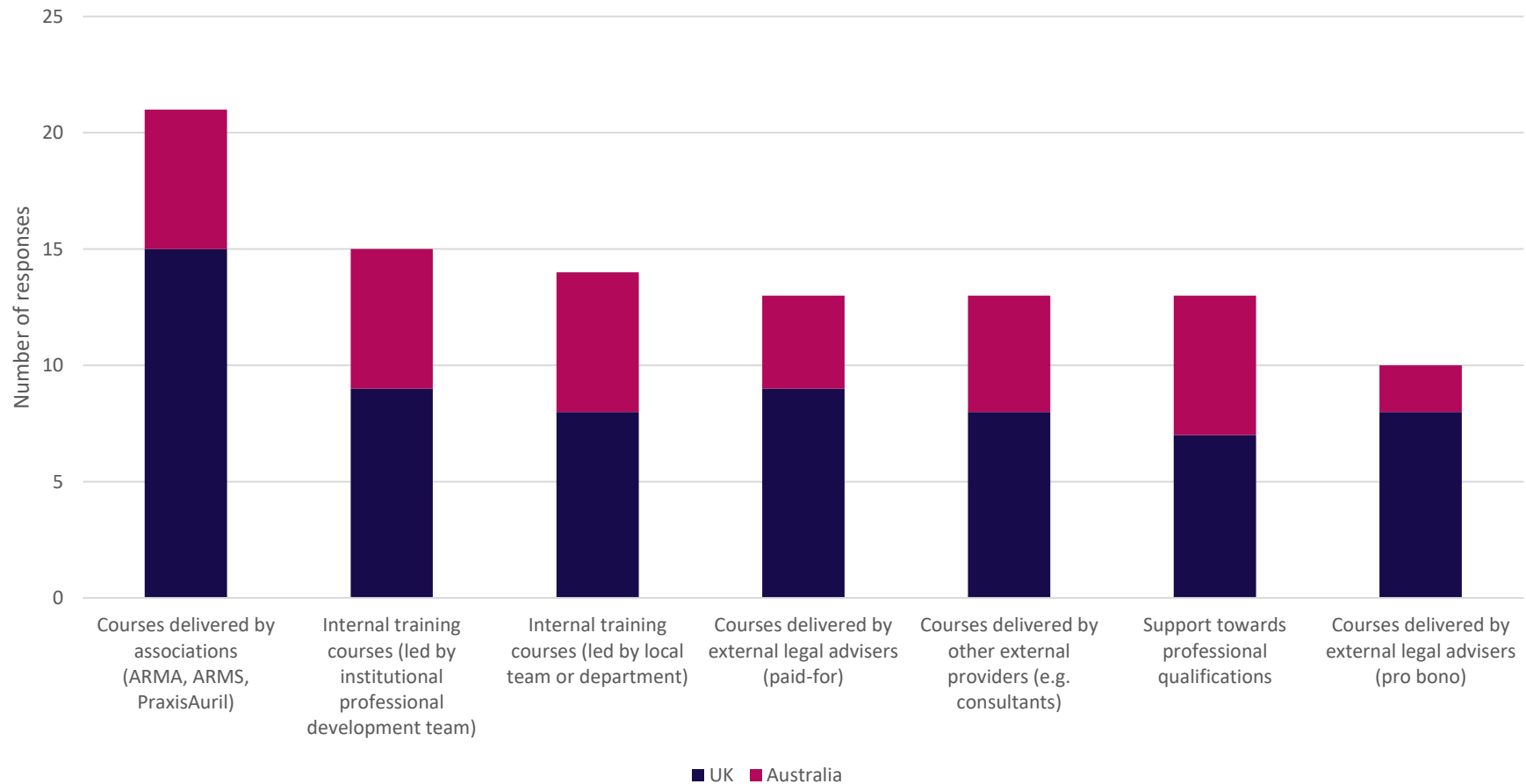
A4 – Agreement and contract types – frequency of occurrence, by group and territory

This table shows the reported frequency of agreement and contracts by type. The data is grouped by size (Groups, A, B and C) and also by territory. The final column presents the overall study percentages, across the three reporting years.

Agreement Type	Group A		Group B		Group C		Total			Overall
	Australia	UK	Australia	UK	Australia	UK	Group A	Group B	Group C	
Clinical Site/Trial Agreements	0.4%	1.4%	1.0%	1.4%	0.3%	3.6%	1.2%	1.2%	2.3%	1.4%
Collaboration Agreements (multilateral)	14.4%	8.3%	6.2%	13.9%	4.6%	21.9%	9.4%	10.3%	14.7%	10.5%
Confidentiality Agreements (NDA/CDA)	5.3%	16.4%	8.3%	13.9%	3.4%	11.2%	14.5%	11.2%	8.0%	12.1%
Consultancy Agreements	6.5%	0.8%	4.4%	11.2%	1.7%	7.5%	1.8%	8.0%	5.1%	5.2%
International Research Project Agreements	0.0%	N/A	6.9%	N/A	6.0%	N/A	0.0%	3.3%	2.5%	1.9%
European Commission Agreements	N/A	1.0%	N/A	1.9%	N/A	4.1%	0.9%	1.0%	2.4%	1.1%
Fellowship Agreements	0.0%	0.0%	0.4%	0.5%	1.7%	0.3%	0.0%	0.4%	0.9%	0.3%
Licence Agreements (incl. spinout agreements)	0.4%	0.0%	1.1%	0.9%	5.4%	2.3%	0.1%	1.0%	3.6%	1.0%
Material Transfer Agreements	18.2%	11.3%	4.2%	7.0%	0.6%	2.8%	12.5%	5.7%	1.9%	7.9%
Memoranda of Understanding	2.1%	1.3%	2.7%	1.1%	6.5%	2.7%	1.5%	1.9%	4.2%	2.0%
Research Contracts (bilateral, inc. KTP Agreements)	35.4%	14.3%	26.4%	23.0%	38.7%	7.4%	18.0%	24.6%	19.3%	21.3%
Research Subcontracts	6.9%	5.3%	4.6%	4.3%	12.5%	3.0%	5.6%	4.4%	6.9%	5.2%
Services Rendered Agreements	0.9%	4.1%	0.0%	5.8%	3.9%	3.9%	3.5%	3.1%	3.9%	3.4%
Services Agreements	0.6%	1.5%	1.3%	0.7%	5.9%	1.0%	1.4%	1.0%	3.0%	1.4%
Studentship Agreements	3.3%	6.8%	3.0%	4.8%	6.3%	2.8%	6.2%	4.0%	4.3%	4.9%
Other	5.5%	27.3%	29.5%	9.7%	2.5%	25.6%	23.6%	19.0%	16.0%	20.4%
Totals - All Agreements	3268	10455	2728	15666	11719	3865	18934	22174	6593	47701
	13723		18394		15584		47701			

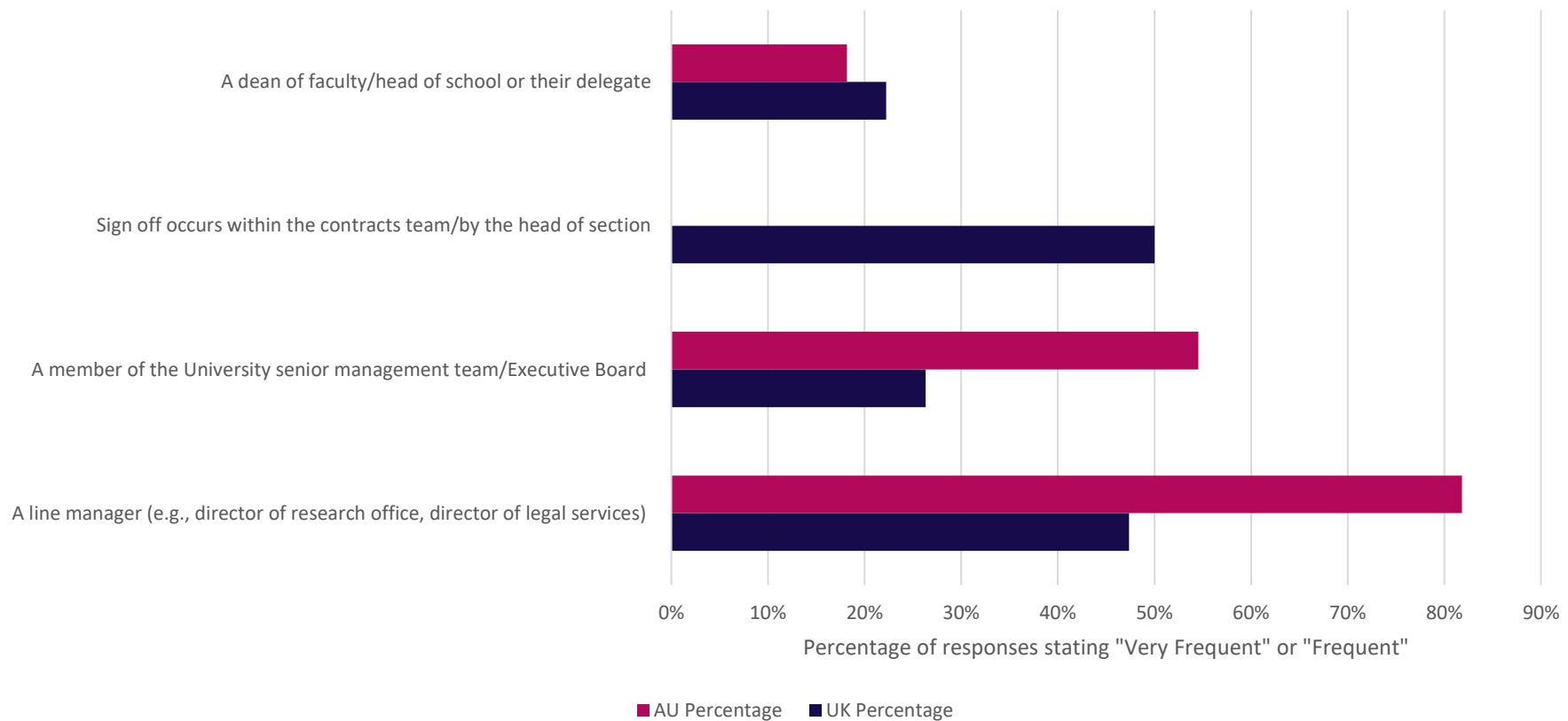
A5 – Training used and available to research contracts functions

This chart summarises the reported training availability for staff in research contract functions.

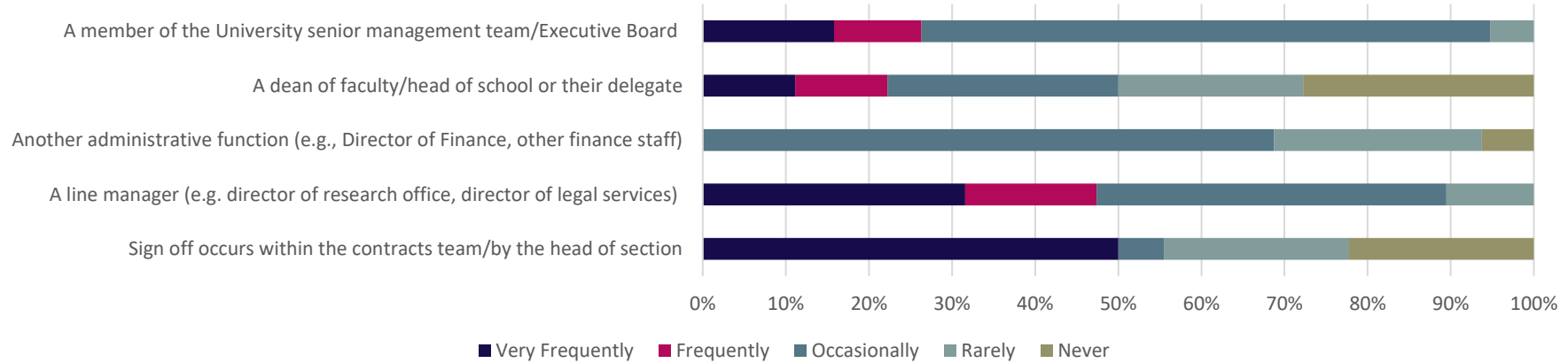


A6 – Sign off authority and responsibilities

The following charts outline the reported arrangements for contract and agreement sign off. The first chart indicates the percentage of responses stating “very frequently” or “frequently” against the sign off authority for agreements. The second two charts identify the full range of responses in the UK and Australia. The charts indicate different approaches to agreement sign off between Australia and the UK – particularly in terms of the sign off by, or within, .research contract functions



Sign Off Authority - UK



Sign Off Authority - Australia

