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# **Electronic Research Administration**

**Reflections on Research Management and Administration (RMA)  
in UK universities and in particular on Electronic Research  
Administration (ERA) and its perceived effect on the quality and  
quantity of research**

**Simon Richard Kerridge**

**A portfolio of evidence submitted in partial fulfilment  
of the requirements of the University of Sunderland  
for the degree of Professional Doctorate**

**VOLUME 2 of 2**

**April 2012**

## PORTFOLIO OVERVIEW

A professional doctorate consists of a doctoral report and an associated portfolio. The latter is referenced in the former in order to provide evidence for assertions made. This portfolio (in two volumes) contains the portfolio items for the doctoral report of Simon Kerridge on Electronic Research Administration, subtitled “Reflections on Research Management and Administration (RMA) in UK universities and in particular on Electronic Research Administration (ERA) and its perceived effect on the quality and quantity of research”.

There a total of 148 portfolio items included which stretch to over 500 pages which unfortunately requires that the portfolio itself has had to split into two volumes. The items in the portfolio have been grouped into seven broad areas and have a unique Area and Number reference. Within the doctoral report (and indeed the portfolio itself), portfolio items are referenced using the following notation: (Area99). Where ‘Area’ is the broad group and ‘99’ is a two digit number, for example the poster that I gave on Sunderland’s electronic research administration systems (ERA22) at the INORMS conference in 2010 refers to item number 22 in the ERA area of portfolio.

There are seven portfolio areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- **ERA Questionnaire (ERAQ)**
- **Esteem (Est)**
- **Focus Group (FG)**
- **Historical Items (Hist)**
- **Profession (Prof)**

This first two areas (ARMA and ERA) are contained within the first volume and the latter five (ERAQ, Est, FG, Hist and Prof) are here in this the second volume of the portfolio.



At the start of each section an index table is provided which describes each item and its significance in terms of the doctoral work. This information can also be found in the final chapter of doctoral report itself.

## Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner
- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of these seven learning outcomes, in most cases the claims are restricted to just those outcomes which are the main foci of the item, normally two or three learning outcomes at the most.

Where portfolio items have confidential sections that have been redacted; these are indicated in the tables in the following sections with a red background for the reference. Similarly some items are not reproduced in full in the portfolio; these abridged items are indicated in the table with an orange background for the reference. Most of the actual portfolios items have yellow highlighting on them to help indicate my involvement or input.

The following table shows the distribution of doctoral learning outcomes by portfolio area:

Table 1: Distribution of Doctoral Learning Outcomes by Portfolio Area

Portfolio Area	K1	K2	S1	S2	S3	S4	S5	Items
ARMA	37%	0%	36%	0%	15%	12%	0%	32
ERA	25%	7%	26%	10%	11%	17%	5%	56
ERA Questionnaire	11%	0%	33%	39%	0%	11%	6%	8
Esteem	28%	8%	23%	7%	28%	5%	0%	23
Focus Group	0%	0%	0%	50%	25%	25%	0%	4
Historical	9%	9%	0%	36%	9%	0%	36%	4
Profession	37%	4%	33%	0%	11%	13%	2%	21

Whereas this second table shows the number of portfolio items that address each learning outcome with the distribution amongst the portfolio areas.

Table 2: Distributions of Portfolio Area items by Doctoral Learning Outcomes

Portfolio Area	K1	K2	S1	S2	S3	S4	S5
ARMA	25%	0%	24%	0%	19%	17%	0%
ERA	38%	58%	40%	46%	33%	55%	54%
ERA Questionnaire	2%	0%	6%	20%	0%	4%	8%
Esteem	17%	26%	14%	11%	33%	6%	0%
Focus Group	0%	0%	0%	11%	4%	4%	0%
Historical	1%	5%	0%	11%	2%	0%	31%
Profession	17%	11%	15%	0%	10%	13%	8%
Items	100	19	99	35	52	47	13

The following sections contain, for each portfolio area, a short context of the area, the list of the portfolio items and then the portfolio items themselves.

The ERA Questionnaire (ERAQ), Esteem (Est), Focus Group (FG), Historical (Hist) and Profession (Prof) portfolio areas are in this volume (in sections 3 to 7) below; whereas the ARMA (ARMA) and Electronic Research Administration (ERA) areas can be found in sections 1 and 2 which are in the first volume of the portfolio.

Table 3: Index of Portfolio Items in Volume 2

Portfolio Index - Volume 2					
Item	Pages	Item	Pages	Item	Pages
ERAQ Items		Esteem Items		Prof Items	
ERAQ01	9-12	Est16	96-97	Prof01	161-165
ERAQ02	13-19	Est17	98-99	Prof02	166-167
ERAQ03	20-21	Est18	100-100	Prof04	168-175
ERAQ04	22-38	Est19	101-101	Prof06	176-180
ERAQ05	39-41	Est20	102-102	Prof07	181-181
ERAQ06	42-65	Est21	103-104	Prof08	182-183
ERAQ07	66-68	Est22	105-105	Prof10	184-191
ERAQ08	69-69	Est23	106-106	Prof11	192-192
		Est24	107-114	Prof12	193-193
		Est25	115-115	Prof13	194-194
Esteem Items		FG Items		Prof14	195-197
Est01	77-77	FG01	120-124	Prof15	198-199
Est02	78-78	FG02	125-126	Prof17	200-200
Est03	79-80	FG03	127-131	Prof18	201-202
Est04	81-81	FG05	132-134	Prof19	203-205
Est05	82-82			Prof20	206-207
Est08	83-86	Hist Items		Prof21	208-215
Est09	87-87	Hist01	138-147	Prof22	216-216
Est10	88-90	Hist02	148-151	Prof23	217-219
Est11	91-91	Hist03	152-152	Prof24	220-220
Est12	92-92	Hist04	153-153	Prof25	221-225
Est13	93-93				
Est14	94-94				
Est15	95-95				

The table above shows the page numbers where portfolio items can be found in this volume.

### 3 ERA QUESTIONNAIRE PORTFOLIO ITEMS

Portfolio items are grouped into these seven areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- **ERA Questionnaire (ERAQ)**
- Esteem (Est)
- Focus Group (FG)
- Historical Items (Hist)
- Profession (Prof)

This section contains the items pertaining to the **ERAQ** area.

#### 3.1 Electronic Research Administration Questionnaire (ERAQ)

As part of the doctoral work I undertook a series of questionnaires looking at perceptions to Electronic Research Administration (ERA); two national and one locally at Sunderland, see chapter 6 of the doctoral report.

After this introduction there is an index table of items in this section (an example is shown below), and the portfolio items themselves follow the index table.

Table 4: Sample Portfolio Index Table (ERAQ)

Ref	Type	Description	Outcome(s)
ERAQxx	<type>	<title>	Kx, Sx
A short description of item ERAQxx with its relevance and importance in order to demonstrate the learning outcomes Kx & Sx that they address (K1-2; S1-5, see below for explanations of the learning outcomes). <type> is the type of the item, for example: report, email or presentation. <title> is the title of the item, for example: Invitation to join Steering Group. ERAQxx is the unique identifier for the portfolio item (xx is a two digit number) which is used to reference it in the doctoral report, or indeed from another portfolio item.			

Each item is described in the table, with two rows of information. The first row of the pair has the portfolio reference, type of document, short description and learning outcome(s) claimed. The second row describes the context and importance of the item, in order to substantiate the claim towards the learning outcomes listed in the first row. The actual portfolio items follow after the index table.

### 3.2 Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner
- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of the seven learning outcomes above, in most cases the listings are restricted to just those outcomes which are the main foci of the item, normally 2 or 3 learning outcomes at the most.

### 3.3 ERAQ Portfolio Index

Table 5: Portfolio Index Table for ERA Questionnaire (ERAQ) Items

Ref	Type	Description	Outcome(s)
ERAQ01	Report	The Questionnaire used for the ARMA ERA survey	S2
A pdf version of the on-line questionnaire used for the ARMA survey into Electronic Research Administration, see section6.2. It is also available (to ARMA members) on-line at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/Survey_13054873-(ERAMainSurvey).pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/Survey_13054873-(ERAMainSurvey).pdf</a> , accessed 25th April 2011, login required.			
ERAQ02	Report	The Questionnaire used for the UK HEI ERA survey	S2
A pdf version of the on-line UK HEI questionnaire used for the follow-up survey on Electronic Research Administration designed to compare academic staff perceptions with those of research managers and administrators, see section6.3.			
ERAQ03	Report	From the initial conference workshop in 2009	S1, S2
The feedback analysis report from workshop session 305 of the June 2009 ARMA conference, see (ERA18 and ERA19) where I conducted the workshop questionnaire, see (ERAQ08). Even though the sample size is small (22 of the 70 or so delegates completed the questionnaire) the results clearly indicate that the RMAs believe that certain aspects ERA can have a positive impact on research quality and quantity. It is available online at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/Summary_of_305_Pilot_Questionnaire.pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/Summary_of_305_Pilot_Questionnaire.pdf</a> , accessed 25 <sup>th</sup> April 2011, login required.			
ERAQ04	Report	Detailed analysis of the ARMA ERA Questionnaire	S1, S2, S4, S5
A major (34pp) piece of work analysing the 624 responses to the ARMA ERA Questionnaire (ERAQ01). The results clearly indicate, with statistical significance, that RMAs believe that ERA can increase both the quality and quantity of research undertaken. If the imperative is to increase research quality then it is perceived that the most fruitful area to look at is Costing & Pricing; and then Pre-Award and Post-Award. If increasing research quantity is paramount then Pre-Award and Costing & Pricing are perceived to be the most fertile areas for investment; and then Post Award. The report is available online at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback.pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback.pdf</a> , accessed 25 <sup>th</sup> April 2011, login required.			
ERAQ05	Report	Summary analysis of the ARMA ERA Questionnaire	S1, S2
The executive summary (5pp) of the detailed analysis (ERAQ04) of the large scale (624 responses) survey that I undertook in 2010 into the perceptions of RMAs to the effect that ERA has on the quality and quantity of research undertaken. It is available online at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback-executive-summary.pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback-executive-summary.pdf</a> , accessed 25 <sup>th</sup> April 2011, login required.			

ERAQ06	Report	Detailed analysis of the UK HEI ERA Questionnaire	K1, S1, S2
<p>A major (47pp) piece of work analysing the 191 responses to the UK HEI ERA Questionnaire (ERAQ02) designed to elicit responses from both RMAs and academic staff as to their perceptions of ERA. The results clearly indicate that both groups believe that ERA can increase both the quality and quantity of research undertaken. Unsurprisingly RMAs are in general more positive than their academic colleagues.</p> <p>If the imperative is to increase research quality then it is perceived that the most fruitful areas to look at are, Peer Review, Costing and Pricing and Proposal Submission.</p> <p>If increasing research quantity is paramount then Funding Opportunities, Costing and Pricing and Proposal Submission could be considered. The report is available online at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAAcademicSurvey-feedback.pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAAcademicSurvey-feedback.pdf</a>, accessed 29<sup>th</sup> April 2011, login required.</p> <p>These results are broadly in line with those from the earlier ARMA survey of RMAs only (ERAQ04), but are not directly comparable as the sub-area definitions were refined.</p>			
ERAQ07	Report	Summary analysis of the UK HEI ERA Questionnaire	K1, S1, S2
<p>The executive summary (5pp) of the detailed analysis (ERAQ06) of the (191 response) survey that I undertook in 2010/11 into the perceptions of academic members of staff and research managers and administrators to the effect that ERA has on the quality and quantity of research undertaken. It is available online at: <a href="https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAAcademicSurvey-summary.pdf">https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAAcademicSurvey-summary.pdf</a>, accessed 29<sup>th</sup> April 2011, login required.</p>			
ERAQ08	Report	The Questionnaire used in the 2009 Workshop	S1, S4
<p>My first attempt at a questionnaire, feedback included the lack of being able to provide negative impact; this was used to inform the design of the ARMA questionnaire (ERAQ01). However, the results were clear enough to provide a short analysis (ERAQ03).</p>			

### 3.4 ERAQ Portfolio Items

(follow on the next page)

Electronic Research Administration Questionnaire

1. Introduction

The questionnaire should only take about **10 minutes** of your time to complete and the responses will be kept confidential with the analysis being anonymous.

This questionnaire looks at 7 areas of **Research Management and Administration**. For each area you will be asked to give your opinion on whether or not you believe that the quality and/or the quantity of the research undertaken can be increased by effective research management and administration and then whether electronic research administration system(s) can account for any further improvement.

At the end there are some classification questions to allow for further statistical analysis.

Definitions

Research Management and Administration (RMA) is taken to mean any task in support of any part of the research lifecycle.

Electronic Research Administration (ERA) means any IT based system(s) that support RMA. These can be existing systems that you use or have used, or indeed ones that you would like to use.

The Questionnaire has four parts

Part A: Quality of research

Part B: Quantity of research

Part C: Electronic Research Administration

Part D: Simple classification (for statistical analysis)

Explanation of the seven areas of Research Management and Administration (RMA)

a) Academic expertise information

Providing others, within and outside your institution, with information about the academic expertise of researchers at your institution. This might for example include mini CVs.

b) Pre application funding source identification

Providing researchers with information about funding opportunities. This includes information on funders, specific calls for proposals.

c) Costing of grant applications

Providing researchers with support to cost and price their proposals in line with the funder rules and allowances.

d) Internal Peer review & Ethics review

A system to allow other researchers to review and feedback on the quality and ethical considerations of a proposal before submission.

e) Applications and awards management

The processes involved in the management of proposals. This includes proposal tracking, submission and grant / contract negotiation.

Electronic Research Administration Questionnaire

f) Post award financial management

The processes involved in monitoring and advising on spend during a project. This includes advising on how money can be spent, how best to use the funds and claims from the funder.

g) Outputs & impact recording and archive

The management of outcomes and outputs from projects during and after the project period. This includes publications, impact, open access repositories and so on.

These terms are used in Sections A-C, so can always skip back to this page if you wish to check a definition.

The survey really should only take about **10 minutes** in total.

2. Part A: Quality of Research

QUALITY – defined in terms of originality, significance and rigour.

Please think about how Research Management and Administration (RMA) might improve the quality of any research and whether having/using an Electronic Research Administration (ERA) system might be able to further enhance the quality of any research

\* 1. Research Management and Administration improves research QUALITY

Do you agree that the listed aspects of Research Management and Administration can improve research quality?

	Strongly Agree	Agree	No effect	Disagree	Strongly Disagree	Don't Know
Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer review & Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**Electronic Research Administration Questionnaire****\* 2. ELECTRONIC Research Administration FURTHER improves research QUALITY**

Do you agree that the listed aspects of Electronic Research Administration can have any additional effect over and above just having research management without IT support?

	Strongly Agree	Agree	No Effect	Disagree	Strongly Disagree	Don't Know
Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer review & applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3. Part B: Quantity of Research**

Now please answer the same questions but this time thinking about **QUANTITY** rather than quality. Quantity is defined in terms of research income. Is the research more likely to be funded, is the funding likely to be more generous, are more applications (with a chance of being funded) being produced...?

**\* 3. Research Management and Administration improves research QUANTITY**

Do you agree that the listed aspects of Research Management and Administration can improve the quantity of research?

	Strongly Agree	Agree	No Effect	Disagree	Strongly Disagree	Don't Know
Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer review & applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Electronic Research Administration Questionnaire****\* 4. ELECTRONIC Research Management and Administration FURTHER improves research QUANTITY**

Do you agree that the listed aspects of Electronic Research Administration can have any additional effect over and above just having research management without IT support?

	Strongly Agree	Agree	No Effect	Disagree	Strongly Disagree	Don't Know
Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer review & applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**4. Part C: Electronic Research Administration**

This section is looking at your overall perception of Electronic Research Administration.

**\* 5. Research Management and Administration improves research ...**

	Strongly Agree	Agree	No Effect	Disagree	Strongly Disagree	Don't Know
QUALITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
QUANTITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\* 6. ELECTRONIC Research Administration FURTHER improves research ...**

	Strongly Agree	Agree	No Effect	Disagree	Strongly Disagree	Don't Know
QUALITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
QUANTITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the following questions please rank each of the seven areas from 1 (highest) to 7 (lowest) in order of the most positive benefit to research quality / quantity for Research Management and Administration in general and then in terms of added benefit for an Electronic Research Administration system.  
So, for example, if you think that the area in which research management and administration can have the most beneficial impact on research quality is f) Post award financial management, then put a tick in that row in the first column (1). So you will end up with one tick in each row and in each column.

## Electronic Research Administration Questionnaire

## 7. Research Management and Administration improves research QUALITY

	1 (most)	2	3	4	5	6	7 (least)
a) Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Internal Peer review & Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 8. ELECTRONIC Research Administration FURTHER improves research QUALITY

	1 (most)	2	3	4	5	6	7 (least)
a) Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Internal Peer review & Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 9. Research Management and Administration improves research QUANTITY

	1 (most)	2	3	4	5	6	7 (least)
a) Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Internal Peer review & Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Electronic Research Administration Questionnaire

## 10. ELECTRONIC Research Administration FURTHER improves research QUANTITY

	1 (most)	2	3	4	5	6	7 (least)
a) Academic expertise information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Pre application funding source identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Costing of grant applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Internal Peer review & Ethics review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Applications and awards management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Post award financial management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Outputs & impact recording and archive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 5. Part D: About you – for statistical classification

To enable statistical analysis, please answer some questions about yourself. You will be given the option to add your contact details at the end if you would like to receive a copy of results directly or would be interested in any potential follow up to this survey. Your answers will however be kept anonymous.

## \* 11. I am:

☐ Female ☐ Male

## \* 12. My age is (in the range):

☐ 16-25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66+

## \* 13. I have worked in research management and/or research administration for (years) in total:

☐ Never ☐ 0-1 ☐ 2-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21+

## \* 14. As a Research Manager and Administrator most of my experience was working in a...

☐ Not applicable ☐ HEI: Research intensive ☐ HEI: Non Research intensive ☐ Research Institute ☐ Funder Service ☐ Health ☐ Other

## \* 15. In that institution, as a Research Manager and Administrator I mainly worked in a:

☐ Not applicable ☐ Central service ☐ Dept/School/Faculty ☐ Other

## \* 16. My current (or last) salary level [or full-time equivalent if you were employed part time] is (was):

☐ Up to £19,999 ☐ £20,000- £29,999 ☐ £30,000- £39,999 ☐ £40,000- £49,999 ☐ £50,000- £59,999 ☐ £60,000- £69,999 ☐ £70,000 or more

Electronic Research Administration Questionnaire

17. Do you have any comments about the questionnaire?

18. Do you have any comments about Research Management and Administration in relation to how it can affect the quality and/or quantity of research?

19. Do you have any comments about ELECTRONIC Research Administration in relation to how it can FURTHER affect the quality and/or quantity of research?

20. Please note that it is intended that the anonymised results of this questionnaire will be published - it will be submitted to the ARMA email list. If you would like to receive a copy of results directly or would be interested in any potential follow up to this survey please complete the following.

These questions are all optional and will only be used to contact you in relation to the above.

Name:

Organisation:

Country:

Email Address:

Phone Number:

6. Thank-you!

Many thanks for taking the time to complete this questionnaire. It is intended that the anonymised results of this questionnaire will be published and submitted to the ARMA electronic research administration email list. If you are a member of ARMA (the Association of Research Managers and Administrators) you can sign up for the electronic research administration email list by [logging in](#) to the ARMA website and clicking on the My Subscriptions link. Once again, many thanks.

Electronic Research Administration Questionnaire (Academic)	
1. Introduction	
Introduction	<p>Electronic Research Administration (ERA) is a growing area and purchasing / development decisions are often predicated purely on efficiency. This survey aims to find out whether or not the use of ERA systems can actually have a positive effect on the quality and/or quantity of research.</p> <p>A UK wide survey of over 400 research managers and administrators in early 2010 concluded that they did believe that, in certain areas, ERA systems do indeed have a positive effect on quality and quantity. However that survey did not include academic staff and so a new more optimised survey has been developed.</p> <p>The aim of the survey is two-fold. Firstly to determine whether or not an audience of academic and administrative staff believe that ERA systems do affect the quality and quantity of research, and secondly to see if there is a difference between the perceptions of sub-groups of the respondents.</p> <p>So, if you are</p> <ul style="list-style-type: none"><li>• an academic member of staff,</li><li>• a researcher,</li><li>• a research manager, or</li><li>• a research administrator,</li></ul> <p><b>then please take 10-15 minutes of your time to complete this survey.</b></p> <p>It is intended that the results will be disseminated through the ARMA (Association of Research Managers and Administrators) network, so that Research Managers and Administrators can focus their efforts on areas that actually have a positive impact on the research that is undertaken.</p> <p>This is a national survey open to staff from all Universities and Research Institutes across the UK.</p> <p>If there are sufficient responses for analysis to remain anonymous (and meaningful) then institutional analysis with anonymised comparisons will also be provided, which could prove to be particularly useful - so please ask your colleagues to complete this survey too. The results of the previous survey are available.</p> <p><a href="#">ERA Administrators Survey - Executive summary</a></p> <p><a href="#">ERA Administrators Survey - Full Report</a></p> <p><b>A Little More Detail</b></p> <p>The responses will be kept confidential with the analysis being anonymous.</p> <p>This questionnaire looks at 15 areas of <b>Research Management and Administration</b>. For each area you will be asked to give your opinion on whether or not you believe that the quality and/or the quantity of the research undertaken can be increased by effective research management and administration and then whether electronic research administration system(s) can account for any further improvement.</p> <p>The Questionnaire has four parts</p> <p>Part A: Quality of research</p> <p>Part B: Quantity of research</p> <p>Part C: Overall perceptions</p>

Electronic Research Administration Questionnaire (Academic)	
Part D: Simple classification (for statistical analysis)	
The survey really should only take about 10-15 minutes in total.	
We intend to publish the results and make them available to Research Managers and Administrators through their professional association (ARMA) so that they can work more effectively in supporting your research.	
We are also asking Research Managers and Administrators to complete the survey in order to see if there are any differences in perceptions between researchers and those that aim to support researchers.	
Thank-you for taking the time to look at this survey.	

Electronic Research Administration Questionnaire (Academic)

2. Part A: Quality of Research

QUALITY – defined in terms of originality, significance and rigour.

Please think about how Research Management and Administration (RMA) might improve the quality of any research (Q1) and then (Q2) whether having/using an Electronic Research Administration (ERA) system might be able to further enhance the QUALITY of research undertaken.

Definitions

**Research Management and Administration (RMA)** is taken to mean any task in support of any part of the research lifecycle. Examples are given in the questions.

**Electronic Research Administration (ERA)** means any IT based system(s) specifically designed to support RMA, as opposed to generic IT tools (eg email or spreadsheets) used in RMA. For this questionnaire we are interested in existing ERA systems that you have used, or indeed ones that you would like to use.

Electronic Research Administration Questionnaire (Academic)

**\* 1. For each of the areas of Research Management and Administration listed please indicate whether you think that they can increase or decrease the QUALITY of research undertaken.**

	Large Increase	Small Increase	No Effect	Small Decrease	Large Decrease	Don't Know
Academic Expertise (eg mini CVs in an annual report)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding source identification (eg 'Have you seen this call for proposals?')	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of proposals (eg using a calculator / spreadsheet)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for generic parts of proposals (eg information about the University, or project management structure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer Review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical Review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk Assessment (eg lone-worker issues, intellectual property rights)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposal submission support (getting the proposal to the funder)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract negotiation (changes to price, terms, timescales etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management of the research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial management of the research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Output and impact recording (eg Annual Report)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research planning / strategy (eg prioritise Research Council funding)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Key Performance Indicators (eg proposal success rates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking (eg comparing income with like departments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Electronic Research Administration Questionnaire (Academic)

**\* 2. For each of the areas of ELECTRONIC Research Management and Administration listed please indicate whether you think that they can increase or decrease the QUALITY of research undertaken.**

**Think about whether specific IT systems can have any additional effect over and above just using generic IT tools in support of research management and administration.**

	Large Additional Increase	Small Additional Increase	No Additional Effect	Small Additional Decrease	Large Additional Decrease	Don't Know
Academic Expertise (eg on-line mini CVs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding source identification (eg automated email alerts about calls for proposals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of proposals (eg a costing and pricing system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for generic parts of proposals (eg a library of options to choose from)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer Review (eg an internet system to manage peer review)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical Review (eg an internet system for ethical approvals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk Assessment (eg a system that helps with self assessment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposal submission support (electronic submissions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract negotiation (eg a contract management system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management of the research (eg milestone alerts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial management of the research (eg online spend information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Output and Impact recording (eg Institutional Repository)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research planning / strategy (eg on-line access to department research plans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Key Performance Indicators (eg on-line access to current performance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking (eg on-line access to current benchmark data)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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### Electronic Research Administration Questionnaire (Academic)

#### 3. Part B: Quantity of Research

Now please answer the same questions (Q3 about research management and administration support and then Q4 about electronic systems) but this time thinking about **QUANTITY** rather than quality. Quantity is defined in terms of research income. Is the research more likely to be funded, is the funding likely to be more generous, are more applications (with a chance of being funded) being produced...?

#### Definitions

**Research Management and Administration (RMA)** is taken to mean any task in support of any part of the research lifecycle. Examples are given in the questions.

**Electronic Research Administration (ERA)** means any IT based system(s) specifically designed to support RMA, as opposed to generic IT tools (eg email or spreadsheets) used in RMA. For this questionnaire we are interested in existing ERA systems that you have used, or indeed ones that you would like to use.

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### Electronic Research Administration Questionnaire (Academic)

**\* 3. For each of the areas of Research Management and Administration listed please indicate whether you think that they can increase or decrease the QUANTITY (in terms of income) of research undertaken.**

	Large Increase	Small Increase	No Effect	Small Decrease	Large Decrease	Don't Know
Academic Expertise (eg mini CVs in an annual report)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding source identification (eg have you seen this call for proposals?)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of proposals (eg using a calculator / spreadsheet)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for generic parts of proposals (eg information about the University, or project management structure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer Review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical Review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk Assessment (eg bre-worther issues, intellectual property rights)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposal submission support (getting the proposal to the funder)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract negotiation (changes to price, terms, timescales etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management of the research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial management of the research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Output and Impact recording (eg Annual Report)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research planning / strategy (eg prioritise Research Council funding)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Key Performance Indicators (eg proposal success rates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking (eg comparing income with like departments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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### Electronic Research Administration Questionnaire (Academic)

**\* 4. For each of the areas of ELECTRONIC Research Management and Administration listed please indicate whether you think that they can increase or decrease the QUANTITY of research undertaken.**

**Think about whether specific IT systems can have any additional effect over and above just using generic IT tools in support of research management and administration.**

	Large Additional Increase	Small Additional Increase	No Additional Effect	Small Additional Decrease	Large Additional Decrease	Don't Know
Academic Expertise (eg on-line mini CVs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding source identification (eg automated email alerts about calls for proposals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of proposals (eg a costing and pricing system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for generic parts of proposals (eg a library of options to choose from)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer Review (eg an intranet system to manage peer review)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical Review (eg an intranet system for ethical approvals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk Assessment (eg a system that helps with self assessment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposal submission support (electronic submissions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract negotiation (eg a contract management system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management of the research (eg milestone alerts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial management of the research (eg online spend information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Output and Impact recording (eg Institutional Repository)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research planning / strategy (eg on-line access to department research plans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Key Performance Indicators (eg on-line access to current performance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking (eg on-line access to current benchmark data)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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### Electronic Research Administration Questionnaire (Academic)

#### 4. Part C : Overall Perceptions

This section is looking at your overall perception of Research Management and Administration (Q5) and then (Q6) Electronic Research Administration (ERA). Remember that by ERA we mean IT systems specifically designed to support Research Management and Administration, rather than just the use of generic tools like spreadsheets and email.

**\* 5. Overall, I believe that Research Management and Administration has the following effect on Quality and on Quantity of research undertaken.**

	Large Increase	Small Increase	No Effect	Small Decrease	Large Decrease	Don't Know
Effect on QUALITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effect on QUANTITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\* 6. Overall, I believe that ELECTRONIC Research Management and Administration has the following ADDITIONAL effect on Quality and on Quantity of research undertaken (as compared to research management and administration per se).**

	Large Increase	Small Increase	No Effect	Small Decrease	Large Decrease	Don't Know
Additional Effect on QUALITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional Effect on QUANTITY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Electronic Research Administration Questionnaire (Academic)

**\* 7. To put your responses in context it would be really helpful if you could indicate in which areas you have used Electronic Research Administration system(s), thinking only about IT systems specifically designed for the job rather than generic tools such as email and spreadsheets.**

	Yes	No (but we do have a system at my institution)	No (we have no system for this area)	Don't know if we have a system or not
Academic Expertise (eg on-line mini CVs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding source identification (eg automated email alerts about calls for proposals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costing of proposals (eg a costing and pricing system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support for generic parts of proposals (eg a library of options to choose from)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Peer Review (eg an intranet system to manage peer review)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethical Review (eg an intranet system for ethical approvals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk Assessment (eg a system that helps with self assessment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proposal submission support (electronic submissions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract negotiation (eg a contract management system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management of the research (eg milestone alerts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial management of the research (eg online spend information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Output and Impact recording (eg Institutional Repository)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research planning / strategy (eg on-line access to department research plans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Key Performance Indicators (eg on-line access to current performance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking (eg on-line access to current benchmark data)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Electronic Research Administration Questionnaire (Academic)

8. If you have used any specific ERA systems that you would like to mention then please do so below

Electronic Research Administration Questionnaire (Academic)

5. Part D: About you – for statistical classification

To enable statistical analysis, please answer some questions about yourself. You will be given the option to add your contact details at the end if you would like to receive a copy of results directly or would be interested in any potential follow up to this survey. Your answers will however be kept anonymous.

\* 9. I am: ☐ Female ☐ Male

\* 10. My age is (in the range): ☐ 16-25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66+

\* 11. Thinking about your current role, how would you categorise yourself?  

Senior Manager	<input type="radio"/>	Academic	<input type="radio"/>	Researcher	<input type="radio"/>	Research Student	<input type="radio"/>	Research Manager	<input type="radio"/>	Research Administrator	<input type="radio"/>	Other	<input type="radio"/>
----------------	-----------------------	----------	-----------------------	------------	-----------------------	------------------	-----------------------	------------------	-----------------------	------------------------	-----------------------	-------	-----------------------

as being a:

\* 12. If you are a researcher or an academic member of staff, how would describe yourself:

☐ Submitted to the last RAE ☐ Active Researcher ☐ Early Career be Researcher ☐ Would like to be Researcher ☐ Active Researcher ☐ Not Researcher ☐ I am not an Academic or Researcher

\* 13. Thinking about your current role, how long have you done this for (in total, not just your current job):

☐ Never ☐ 0-23 months ☐ 2-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21-25 years ☐ 26+ years

\* 14. Most of my experience in this role was working in a...

☐ Not applicable ☐ HEI: Research Intensive ☐ HEI: Non Research Intensive ☐ Research Institute ☐ Further Service ☐ Health ☐ Other

\* 15. Please note that we are asking this as a proxy for your seniority, like all other data it will be kept entirely confidential and used for statistical analysis only. Your current (or last) salary level [or full-time equivalent if you were employed part time] is (was):

☐ Up to £19,999 ☐ £20,000- £29,999 ☐ £30,000- £39,999 ☐ £40,000- £49,999 ☐ £50,000- £59,999 ☐ £60,000- £69,999 ☐ £70,000 or more ☐ Prefer not to say

16. Do you have any comments about the questionnaire?

Electronic Research Administration Questionnaire (Academic)

17. Do you have any comments about Research Management and Administration in relation to how it can affect the quality and/or quantity of research?

18. Do you have any comments about ELECTRONIC Research Administration in relation to how it can FURTHER affect the quality and/or quantity of research?

19. Please note that it is intended that the anonymised results of this questionnaire will be published, so that Research Managers and Administrators around the UK will be able to best focus their efforts on areas that can make a difference. It will be submitted to the ARMA email list. If you would like to receive a copy of results directly or would be interested in any potential follow up to this survey please complete the following.

These questions are all optional and will only be used to contact you in relation to the above.

Name:

Organisation:

Email Address:

Phone Number:

Electronic Research Administration Questionnaire (Academic)

6. Thank-you!

Many thanks for taking the time to complete this questionnaire.

The anonymised analysis will be made available to your institution in order that academic staff and research staff may be better supported by research managers and administrators.

It is also intended that the anonymised results of this questionnaire will be published and submitted to the Association of Research Managers and Administrators (ARMA) electronic research administration email list.

If you are a member of ARMA (the Association of Research Managers and Administrators) you can sign up for the 'electronic research administration' email list by [logging in](#) to the ARMA website and clicking on the My Subscriptions link.

Once again, many thanks.

### Electronic Research Administration – Survey Feedback

ARMA Conference 2009, 2<sup>nd</sup> June 2009, Southampton  
Session 305: Using research administration systems to improve  
quality & quantity of research.

Simon Kerridge, Jill Gollightly and Alan Walker

As part of the session, Simon Kerridge presented a questionnaire to elicit the views of participants on which types of research administration systems could have a positive effect on the quality and quantity of research (Session 305 Questionnaire), which the attendees were invited to complete during the session.

#### Questionnaire Summary

The audience were invited to score on a scale of 0 (no effect) to 10 (large effect) how much they thought that each of seven areas of electronic research administration systems could help to improve the quality or quantity of research.

The seven areas were:

1. academic expertise information
2. pre application funding source identification
3. costing of grant applications
4. internal peer review and ethics review
5. applications and awards management
6. post-award financial management
7. outputs and impact recording and archive

#### Workshop Feedback

During the session the author suggested that he thought that 3. (costing and pricing) could improve the quality, as well-costed proposals would allow for a project to do better research without being constrained by inadequate budgets.

The audience however (by a show of hands) indicated that by far the most popular area was 4. (peer review), with 7. (outputs archive) a distant second.

It was also suggested that the scale should allow for negative scores to indicate an adverse effect on quality and/or quantity.

#### Overview

During the workshop 22 papers were returned, 7 anonymously. Encouragingly there were many high scores indicating that there was a belief that Electronic Research Administration Systems (ERAS) could indeed have a positive influence on both the quality and quantity of research

### Analysis

Overall the sample size is too small for much analysis of the results to be statistically significant (except where the variance is greater than 4.14 with 95% confidence (5.45 with 99% confidence). two-tailed). However even this assumes that each person has attached the same meaning to each number on the scale which is not a given but is assumed for the purpose of analysis of this pilot data. For example, in terms of quality, the average score for all respondents for all seven areas was 6.44 as compared to 5.69 for quantity. So although the indications are that quality is perceived to be more easily amenable to positive influence from ERA systems than quantity, further work is needed to justify this position. However the original premise that ERA systems can improve the quality and quantity of research is upheld with over a 99% confidence level. Indeed the only statistically significant results are that the top rated choice (quality by 4. peer review) is 95% likely to be thought to have more of an effect than the bottom three areas (quality from 2. Funding identification; quantity from 4. Peer review and 6. Post award finance).

Internal peer review was therefore thought to have the capacity to increase the quality far more than quantity of research.

Overall the above average results were:

ERA area	Benefit	Average
4. internal peer review and ethics review	Quality	7.876
2. pre application funding source identification	Quantity	7.182
3. costing of grant applications	Quality	6.714
7. outputs and impact recording and archive	Quality	6.564
6. post-award financial management	Quantity	5.500
7. outputs and impact recording and archive	Quantity	5.476
5. applications and awards management	Quality	5.421
1. academic expertise information	Quantity	5.227
5. applications and awards management	Quantity	5.167
1. academic expertise information	Quality	4.667
3. costing of grant applications	Quantity	4.636
6. post-award financial management	Quantity	3.714
2. pre application funding source identification	Quality	3.667
4. internal peer review and ethics review	Quantity	3.500

Areas highlighted in green are positive with a 99% confidence, those in blue with a 95% confidence.

#### Comments

Respondents were also given the opportunity to comment on the questionnaire. Here are some selected quotes:

- "Don't think these functions can be most effectively performed by electronic systems (score refers to potential of the function itself to improve research)."

- "There are many other factors so people's answers will vary depending on interpretation."
- "But there is a saturation level – only for the capacity."
- "Not more applications but higher success rates."

These comments indicate that the questionnaire itself was perhaps flawed in terms of ambiguity, however it is posited that the overall results gleaned from the analysis are still valid given the high level of statistical confidence obtained in certain areas.

**Summary**

With a 99% confidence it can be said that ARMA members believe that the use of Electronic Research Administration Systems can improve the quality and quantity of research. In particular the specific areas that were identified as having a high positive impact are:

4. internal peer review and ethics review (quality)
2. pre application funding source identification (quantity)
3. costing of grant applications (quality)
7. outputs and impact recording and archive (quality)
6. post-award financial management (quality)
7. outputs and impact recording and archive (quantity)

**Further Work**

It is hoped that a more extensive and robust survey, building on the experience from the pilot survey, will be conducted in the near future.

**Thanks**

Once again, thanks to everyone who took the time during the session to complete the survey, I hope that many of you will wish to complete the follow-up survey in due course.

Simon Kerridge

7<sup>th</sup> August 2009

## Electronic Research Administration - Main Survey Feedback

**Simon Kerridge, University of Sunderland**

According to one survey respondent:

*"Electronic research administration is becoming more and more important..."*

However another noted:

*"It's people that make the greatest difference - not electronic systems!"*

So, should you invest in Electronic Research Administration (ERA)?  
And if so, where should you focus your resources?

### 1 Overview

This report presents the results of a survey of ARMA members about their perceptions on research management and administration systems in terms of their effect on quality and quantity of research. The survey was run in February-March of 2010 and from 1515 email requests there were 624 responses with 472 completing all of the sections of the questionnaire.

An Executive Summary is available at  
[https://www.arma.ac.uk/files/members/resource\\_directory/Research\\_Information\\_Management/ERAMainSurvey-feedback-executive-summary.pdf](https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback-executive-summary.pdf)

Some initial findings were also presented at a poster session at the 2010 ARMA Conference in Manchester (Kerridge 2010).

Whilst the survey was designed primarily to collect information about the effects of ERA, the perceptions of the effects of Research Management and Administration (RMA) itself were also collected to provide a context.

This survey did not aim to look at specific ERA systems (those interested in this area may wish to look at (RMAS) and (Green, McArdle et al. 2010)), but rather the effects that ERA systems in certain areas of research management and administration has / could have on the quality and quantity of research undertaken.

The underlying result of the survey is that Research Managers and Administrators (RMAs) overwhelmingly believe that Research Management and Administration (RMA) can positively affect the quality and quantity of research undertaken, rather than simply make the management and administration of research more effective and efficient. Further, they also believe that Electronic Research Administration (ERA – IT systems that support RMA) can have a further positive effect on both the quality and quantity of research.

There are a number of more detailed findings which are described in the following sections.

### 2 Background

At a workshop session at the ARMA Conference in 2009 a pilot questionnaire was instigated on the perceptions of research managers and administrators (RMAs) on the effect that electronic systems could have on the quality and quantity of research undertaken. The results of this work (Kerridge 2009) can be found on the ARMA website, however, note that it is only accessible to ARMA members.

Following on from this, in the light of feedback, a full on-line questionnaire was developed and run. It was enhanced to include questions to highlight any perceived differences between research administration and systems that support it.

#### 2.1 Electronic Research Administration

Electronic Research Administration was defined in the questionnaire as "any IT based system(s) that support RMA". This definition was derived from (Rodman and Stanford 2006) who define ERA loosely "as improving administrative processes through the application of technology, particularly computer technology", other definitions tend to be just as vague. Whilst some respondents did not think that the definition was tight enough, the main majority clearly (as can be determined from the textual responses) understood it as intended. The aim was to determine whether or not specific IT systems designed for research management and administration (rather than, for example, using generic IT tools such as spreadsheets and email) could have a positive effect on the quality and quantity of research undertaken. It is accepted however that any future questionnaires would benefit from some clarification.

### 3 The Questionnaire

A copy of the questionnaire can be viewed by ARMA members at:

[https://www.arma.ac.uk/files/members/resource\\_directory/Research\\_Information\\_Management/Survey\\_13054873-\(ERAMainSurvey\).pdf](https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/Survey_13054873-(ERAMainSurvey).pdf)

The overall aim of the survey was to determine the perceptions of research managers and administrators to the effect that different aspects of their work could have on the quality and quantity of research undertaken at their institution.

Specifically it was seeking to look at the areas in which electronic research administration (ERA) systems could make a further difference.

It was constructed in SurveyMonkey<sup>1</sup> with four sections, with the first three concentrating on three different areas of Research Management and Administration:

- Academic expertise information
  - Pre application funding source identification
  - Costing of grant applications
  - Internal peer review and ethics review
  - Applications and awards management
  - Post-award financial management
  - Outputs and impact recording and archive
- Section A (Q1 & Q2) asked about perceptions of RMAs as to whether they thought that these areas of research administration could improve the quality of research

<sup>1</sup> <http://www.surveymonkey.com/>

undertaken. Section B (Q3 & Q4) asked about the effect on quantity of research undertaken. Section C asked more generally about the effect of research administration (Q5 & Q6), and then as a cross check asked responders to rank the seven areas in terms of their affects (Q7 – Q10). Finally section D asked for information about the responders (Q 11 – Q16) in order to aid more in depth analysis, and allowed them to provide additional textual information (Q 17– Q19) if they wished. Names and email addresses (Q20) of those wishing to receive a copy of the analysis were also collected. However it was clear that the questionnaire was anonymous, and has been analysed as such.

#### 4 The Survey

The ARMA email list (from 19<sup>th</sup> Feb 2010, this consisted of 1624 email addresses) was used to invite responses to the questionnaire. The email addresses were uploaded into SurveyMonkey so that reminders could be sent to those that had not yet responded. Two emails were malformed and were manually updated, one was rejected as the person had previously opted out of SurveyMonkey questionnaires; so the collector<sup>2</sup> consisted of 1623 email addresses. From the initial request to take part in the questionnaire (by email on 21<sup>st</sup> Feb 2010) a further 108 were deemed unable to respond (64 emails were undeliverable, 18 had left their jobs, 22 were on maternity leave, 1 was on sabbatical and 3 were off long term), leaving a total 1515 (1514 excluding the author) possible responders. The initial request was followed up by reminders (to those that had not completed it) on March 2<sup>nd</sup> and March 12<sup>th</sup> and the last response was received on March 23<sup>rd</sup>.

### 5 Main Analysis

#### 5.1 Overall Approach

The data was exported from SurveyMonkey into Excel2007<sup>3</sup> and from there it was imported into SPSS<sup>4</sup> v16 and the various data types from the question responses were defined. Some initial analysis was provided by SurveyMonkey and this has been outlined on a Poster<sup>5</sup> presented at the ARMA 2010 Conference in Manchester, some of that information is repeated here. Additionally, further analyses have been performed using SPSS, with some of the charts created in Excel2007.

There were a total of 1624 addresses provided from the ARMA membership list; one had previously opted out of SurveyMonkey surveys and so only 1623 were uploaded

<sup>3</sup> A SurveyMonkey term: a method of collecting and grouping a set of survey responses

<sup>2</sup> <http://office.mircrosoft.com/en-us/excel-help/office-excel-2007-product-overview-HA010165632.aspx>

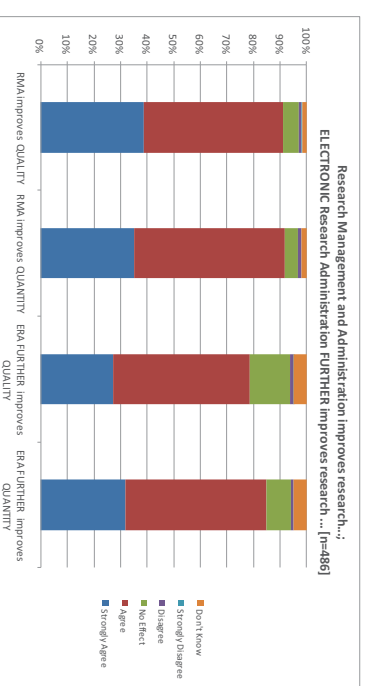
<sup>4</sup> <http://www.spss.com>

<sup>5</sup> Available on-line at [https://www.arma.ac.uk/files/guest/conference\\_images/Sunderland/Kerridge.pdf](https://www.arma.ac.uk/files/guest/conference_images/Sunderland/Kerridge.pdf)

into the collector. However there were a number of undeliverable messages with reasons ranging from invalid email addresses, maternity leave, secondment, long term sickness, and even one death; this reduced the possible response pool to 1515. From these possible responders there was an excellent response rate; 624 (41%) were received of which 477 (31%) completed all four sections.

#### 5.2 Overall Perception of RMA and ERA

Overall the responses to Q5 and Q6 [n=486] indicate very strongly that RMAs believe that good research management and administration can improve both the quality (91.2%) and quantity (92.0%) of research undertaken; and to a lesser extent that the use of electronic research administration (ERA) can further improve the quality (78.8%) and quantity (85.0%):



**Figure 1: The proportions of responses to Q5 & Q6 on the overall perceptions of research managers and administrators as to the positive impact of Research Management and Administration (RMA) and Electronic Research Administration (ERA) on the Quality and Quantity of research undertaken**

Given that one of the main functions of research managers and administrators is to facilitate research it is perhaps not surprising that they feel that they can improve the quantity of research undertaken. It is perhaps a little more surprising, but pleasant, to see such high values in relation to quality of research.

However, in order to check for significant differences in responses we need to use statistical tests. (Brace, Kemp et al. 2000) explain that for comparing responses on a non parametric ordinal scale such as the five point Likert scale for ascertaining agreement to a statement that has been used in this questionnaire that for paired (answers from the same person) comparisons a Wilcoxon test should be employed.

The Wilcoxon Signed Ranks Test for statistical difference shows a statistically significant difference between the responses for quality in relation to ERA affect as compared to RMA affect on its own ( $z=-7.801$ ,  $N-Ties=171$ ,  $p<0.0005$ , two tailed).



Comparing the differences between perceptions to ERA and RMA for quantity, there is a similar picture ( $z=4.084$ ,  $N\text{-Ties}=155$ ,  $p<0.0005$ , two tailed); ERA is less favoured to further improve quantity of research as compared to the position for RMA alone.

For RMA affecting quantity compared with quality ( $z=-0.768$ ,  $N\text{-Ties}=147$ ,  $p=0.443$ , two tailed) there is no statistical difference in responses.

Whereas for ERA affecting quantity compared with quality ( $z=-3.546$ ,  $N\text{-Ties}=156$ ,  $p<0.0005$ , two tailed) it is clear that most respondents thought that ERA could more positively affect research quantity than quality.

Whilst both differences between the affect that RMA alone can have compared with the additional affect that ERA could have are clearly in favour of RMA, the results for ERA having a positive effect are overwhelmingly affirmative.

In summary most research managers and administrators see that RMA can have a positive effect on the quality and quantity of research (in roughly equal measures). They also believe (to a lesser extent) that ERA can further improve both quality and quantity, with a large proportion thinking that quantity could be further improved more than the quantity of research. However, all the views are overwhelmingly positive.

Research Management and Administration improves both the quality and quantity of research undertaken and Electronic Research Administration can improve both quality and particularly quantity even more.

### 5.3 Analysis of the seven areas of RMA

Looking at the seven areas of research management and administration that were asked about, the following charts show the detail of these four questions in terms of those areas.

Q1 shows (see Figure below) that most of the seven areas are seen as being broadly similar in terms of their ability to improve research quality, with ('Agree' + 'Strongly Agree') positive percentages highest for Peer Review (86.5%), Costing (84.9%), Awards Management (82.9%) and Pre-award (82.3%). The weakest area, Expertise Information (77.1%), was still seen very positively. However, using the Wilcoxon test to compare the differences in the responses for Peer Review and Costing ( $z=-0.643$ ,  $N\text{-Ties}=319$ ,  $p=0.520$ , two tailed) and we can see that there is no significant difference in the perceptions. Similarly comparing Peer Review with Awards Management ( $z=-1.537$ ,  $N\text{-Ties}=309$ ,  $p=0.124$ , two tailed) there is no significant difference. It is only when we get to comparing the effect of Peer Review with Pre-Award ( $z=-3.020$ ,  $N\text{-Ties}=312$ ,  $p=0.003$ , two tailed) that we see a significant difference – Peer Review is clearly seen as being more able to positively affect research quality than Pre-Award RMA is.

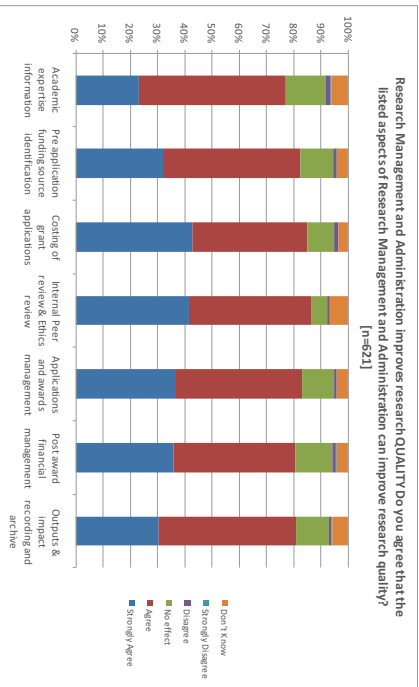


Figure 2: The proportion of responses as to whether the seven areas of RMA positively or negatively affect the quality of research undertaken (Q1)

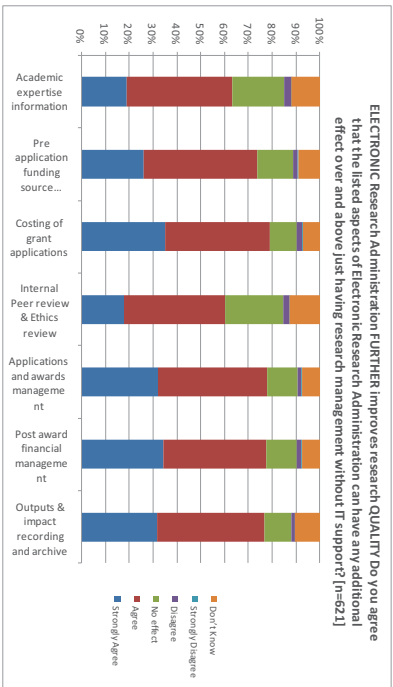


Figure 3: The proportion of responses as to whether the ERA for seven areas of RMA further (than the thoughts on Q1) positively or negatively affect the quality of research undertaken (Q2)

Q2 shows a far more varied set of responses with regard to any further increase in research quality that can be attributed to electronic research administration systems. None are as high as for research management and administration per se, but again Costing (79.2%) is high, with Awards Management (78.1%), and Post-Award (77.6%); Output Recording (76.7%) is also high. Expertise Information is again low (53.3%), however, the most obvious difference is for Peer Review

(60.2%); which had the highest level of agreement for research management and administration support per se. It would be interesting to explore this more fully; it might perhaps be related to the relative paucity of ERA systems that include peer review.

Using Wilcoxon to look for significant differences in the top areas, we see that for Costing vs Awards Management ( $z=-1.506$ ,  $N\text{-Ties}=145$ ,  $p=0.132$ , two tailed) there is no difference. It is the same for Costing vs Post-Award ( $z=-0.992$ ,  $N\text{-Ties}=138$ ,  $p=0.321$ , two tailed). However when we look at Costing vs Outputs Recording ( $z=-2.549$ ,  $N\text{-Ties}=205$ ,  $p=0.011$ , two tailed) we can see that Costing is significantly favoured over Outputs recording as an area where ERA can further enhance the quality of research undertaken.

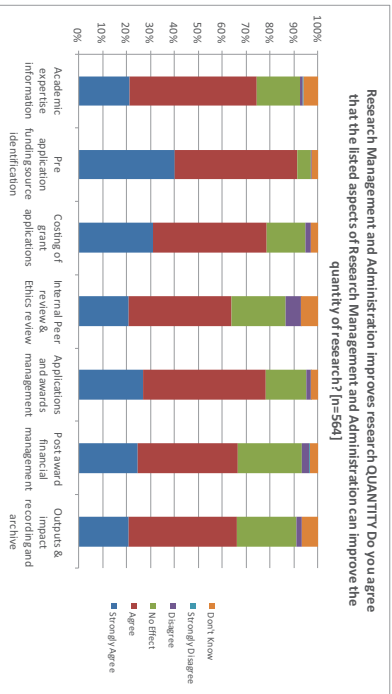


Figure 4: The proportion of responses as to whether the seven areas of RMA positively or negatively affect the quantity of research undertaken (Q3)

Q3 related to the effect of RMA on the quantity of research. Whilst the overall agreement is high, this varies between different elements much more than the responses in relation to quality. Pre-Award (91.3%) is clearly the most favoured area, with Costing (78.7%), Award Management (78.2%) and Expertise Information (74.3%) being much lower in the middle of the pack. The other three areas of Post-Award (66.7%), Output Recording (66.0%) and Peer Review (64.0%) faring least well. Notably, Peer Review (6.4%) had a much high negative (disagree) response rate than any of the other areas. It might be that a number of respondents think that peer review could reduce the number of proposals (and hence reduce quantity), but that those proposals might be better (and hence improve quality). However of the  $n=38$  who disagreed for quantity, 32 agreed for quality which is 84.2% as compared to 86.4% for the general  $n=621$  population; in effect no difference.

Using Wilcoxon to look at the top areas; when we compare Pre-Award and Costing ( $z=-7.079$ ,  $N\text{-Ties}=212$ ,  $p<0.0005$ , two tailed) we have confirmation that the graph above does clearly show that Pre-Award is indeed the area that Research Management and Administration was thought most likely to improve the quantity of research.

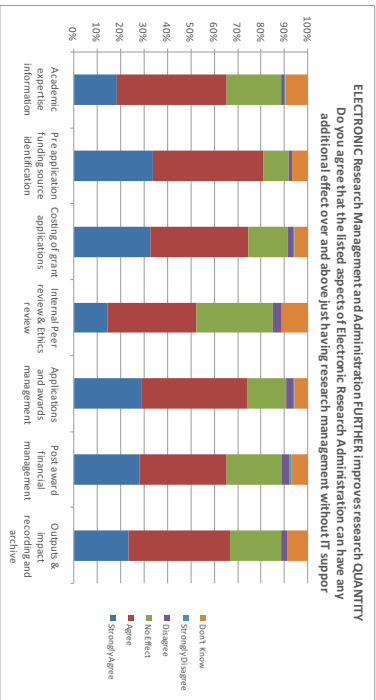


Figure 5: The proportion of responses as to whether the ERA for seven areas of RMA further (than the thoughts on Q3) positively or negatively affect the quality of research undertaken (Q4)

Q4 looked at where ERA might further improve the quantity of research over and above manual research management and administration. As expected from the previous graphs, the agreement rates were lower overall. Again, for quantity the highest agreement was for Pre-Award (81.0%), with Costing (74.8%) and Award Management (74.1%) not far below. Once again Peer Review (52.5%) had the lowest agreement.

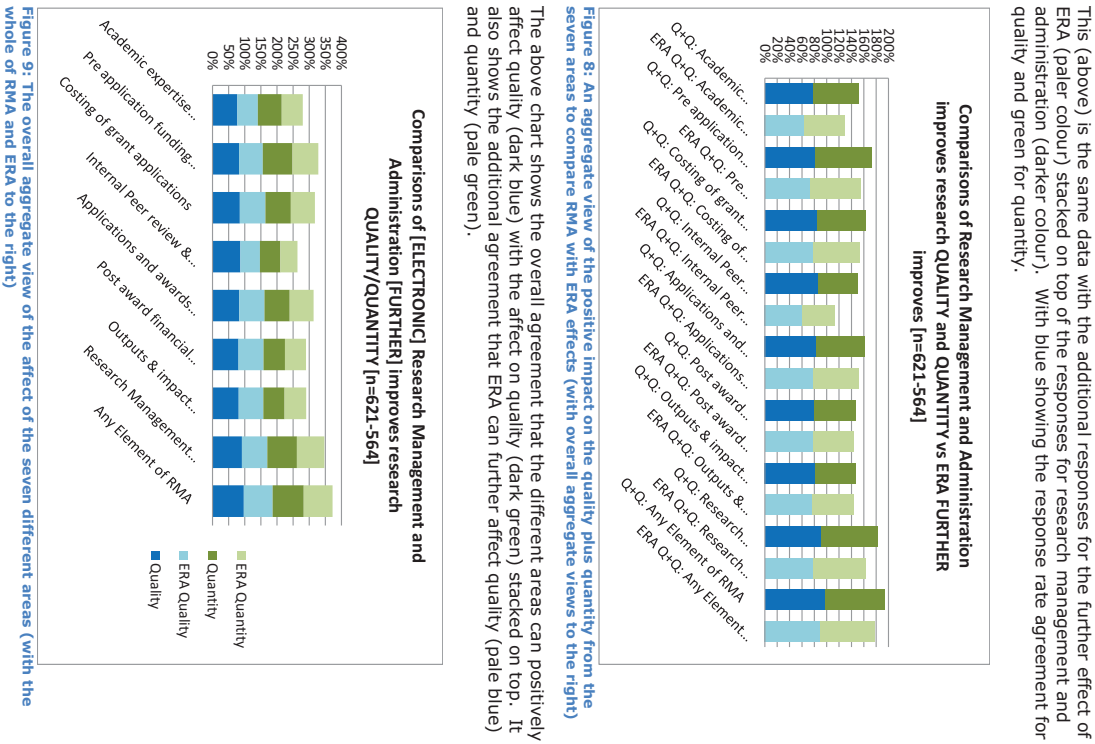
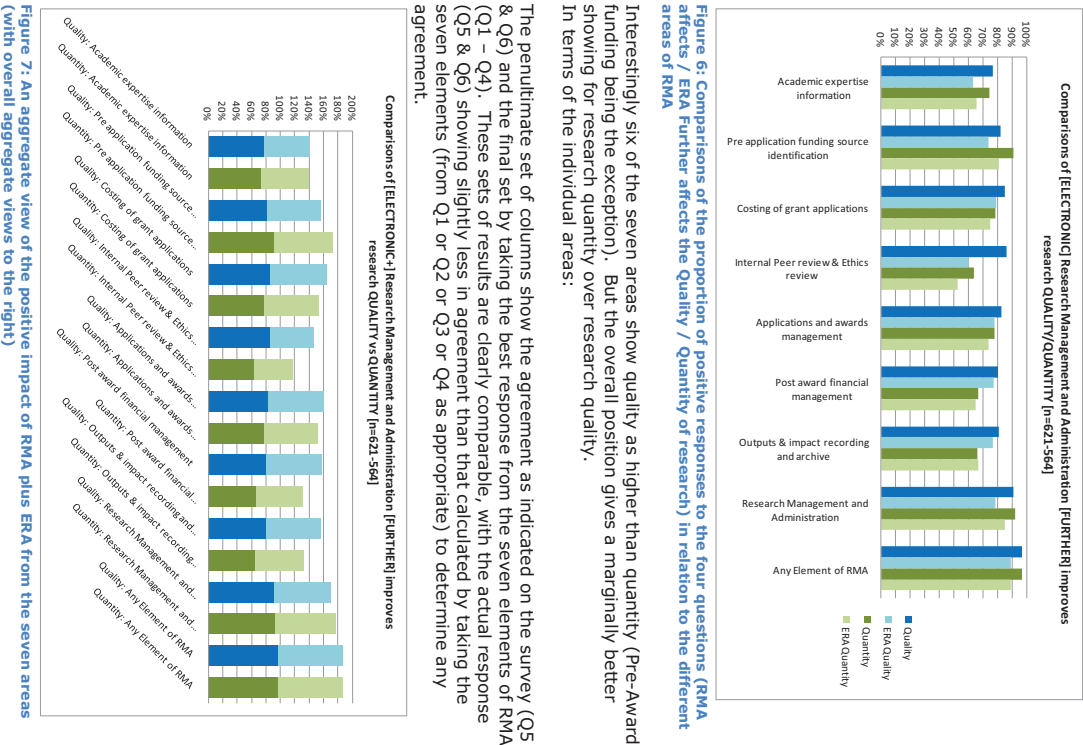
Again, using Wilcoxon to compare Pre-Award with Costing ( $z=-2.485$ ,  $N\text{-Ties}=180$ ,  $p=0.013$ , two tailed), we can see that Pre-Award is thought to be the area where an ERA system can most positively affect the quantity of research undertaken.

Taking the best grade that each responder awarded to each of the seven elements of RMA gives agreement percentages for (some element of) RMA improving. That is, if a responder graded 'Agree' or 'Strongly Agree' to any of the seven elements in Q1 about RMA improving research quality then we can infer that they agree that overall RMA can improve research quality. This analysis shows overall agreement for quality (96.9%) and quantity (97.0%) with the further improvement from ERA being: quality (89.2%) and quantity (89.0%). All of these are, perhaps unsurprisingly a little improved on the general overall assessment made by individuals, with the largest variance being seen for the ability of ERA to further improve research quality.

The overall picture painted can be seen in the chart below.

In all cases fewer people believe that ERA can further improve quality and quantity of research than those that believe that RMA itself can. However the overall picture is clearly that research management and administration can improve both the quality and quantity of research, and that ERA systems can increase this event further.





The final chart (above) in this section shows the agreement that the various areas, ERA systems in those areas, can positively impact research quality and quantity. Of the seven different areas (the first seven columns) it can clearly be seen that there is least agreement on a positive effect from using Peer Review (263.2 cumulative = an average agreement across the four method/types of 65.8%); with the highest individual area being Pre-Award (328.4 = 82.1% average). Costing (79.4%) and Award Management (78.3%) are also high.

The overall result for Peer Review gaming the least agreement that it (and ERA support for it) can positively impact the quality and quantity of research is perhaps initially somewhat surprising, given that it scored most highly for RMA positively impacting quality. However this is easily explained as it scored least well on the other three measures. This is almost a reflection of the pilot study results, where Peer Review was also ranked top for quality, but lowest for quantity, both in relation to ERA – but it is likely that the respondents were unable to disaggregate the differences between RMA per se and ERA support for RMA (indeed the questioning did not help this).

Finally it is worth noting that for:

Q1: RMA affects quality: of the 621 respondents; 16 gave "Don't know" - no opinion, of the remainder only 3 thought that none of the seven areas had a positive effect.

Q2: ERA further affects quality: from 621, there were 37 "Don't knows", with again only 3 thinking that none of the seven areas had a positive effect.

Q3: RMA affects quantity: of the 564 respondents; 8 had "Don't know" - no opinion, of the remainder only 9 thought that none of the seven areas had a positive effect, with 1 being entirely negative.

Q4: ERA further affects quantity: of the 564 respondents; 25 had "Don't know" - no opinion, of the remainder only 37 thought that none of the seven areas had a positive effect, with 4 being entirely negative.

### 6 Explicit Rank Ordering

In Section C of the Questionnaire, responders were asked to order the seven areas of research management in terms of which they thought could have the most positive effect on the quality and quantity of research (irrespective of their previous answers). We will consider the analysis of all responses and just those who thought that there was a positive effect. We can also analyse the ranking to ensure that it is related to the previous responses.

#### 6.1 Rank Ordering

In general, as we have seen, most respondents that did not see any positive effect in Q1-4 selected the 'Don't Know' option; and then many of these did not progress past the first two sections. When looking at the responses for section C there is a very high correlation between the whole set of responses and only those at agreed with the premise that RMA / ERA could improve research quality / quantity.

So for Q1 there were 602 who responded either 'Strongly Agree' or 'Agree' to at least one area of RMA, hence from the 621 total only 19 had an entirely non

positive view. Of these 19 only 4 went on to complete any of the related rank ordering questions (Q7). If we compare the results of the rank ordering in Q7 for all responders with only those responders who were positive in Q1 (of these 602, 448 went on to complete Q7) we see a correlation of 1,000 in the answers. Undoubtedly this is due in main to the low difference in the samples; however it does mean that for our purposes we can use the entire sample set to draw conclusions from. Meaning that we need not worry about those few respondents who said that they found it difficult to rank the areas when they did not see any of them as having a positive effect.

Similarly the correlation for all responses to Q8 as compared to only those from people who had a positive response to the related Q2 we get a value of 0.990. For Q9 the equivalent correlation is 0.999 and for Q10 it is 0.996.

Overall the Mann-Whitney test (for independent non parametric comparisons, see (Brace, Kemp et al. 2000)) shows no significant differences in the rankings given by the few (3) that did not attribute any positive effects to RMA or ERA but nonetheless managed to rank the seven different areas as compared to those that did see some positive effects being possible. The least similar result being for the position of ERA support Academic Experience in terms of affecting quantity ( $U=108,000, N_1=2, N_2=437, p=0.062$ , two-tailed).

Thus, we will look only at the entire set of responses for Q7-Q10.

For all responses

Research Management and Administration improves research QUALITY [n=448 to 459]	1 (most)	2	3	4	5	6 (least)	Ave.	Rank
Academic expertise information	15.0%	15.5%	10.4%	9.5%	8.0%	15.7%	25.9%	4.31
Pre application funding source identification	10.0%	20.8%	17.4%	17.6%	15.0%	13.6%	5.6%	3.70
Costing of grant applications	18.7%	22.0%	17.8%	19.3%	13.8%	3.8%	4.7%	3.18
Internal Peer review & Ethics review	30.4%	10.6%	11.1%	10.0%	10.6%	13.7%	13.5%	3.55
Applications and awards management	15.0%	15.8%	20.3%	15.4%	18.5%	9.4%	5.6%	3.57
Post award financial management	7.9%	10.7%	12.9%	14.8%	17.2%	18.8%	17.7%	4.50
Outputs & Impact recording and archive	4.4%	6.6%	11.1%	12.9%	16.8%	22.9%	25.3%	5.01

Table 1: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive effect of RMA on research Quality

The table shows for each of the seven elements of Research Management and Administration (RMA) what proportion of the responders placed them in which rank order position (from 1..7, shown in the first seven columns of data as a percentage). A ranking of 1 indicates that the responder thought that of the seven elements this one had the most positive impact on the quality of research undertaken, a 2 meant that they thought it had the second highest positive impact and so on, with a 7 indicating that they thought it had the least positive impact on quality of research.

So, for example 30.4% thought that Peer Review would have the highest positive impact on research quality; and 25.9% believe that Expertise Information has the least positive impact on quality. The penultimate column shows the average rank position for each element (with lower being better); and the final column shows the rank order list of averages. So, although Peer Review was placed top in most (30.4%), the distribution of its other positions gives it an average position of 3.55; which means that it ranks second behind Costing with an average position of 3.18

as its overall distribution is more towards the higher end with a very small percentage putting it in the bottom two positions (3.8% and 4.7% as compared to 13.7% and 13.5% for Peer Review).

When we compare this average explicit rank ordering with one derived from the agreement level (Q1):

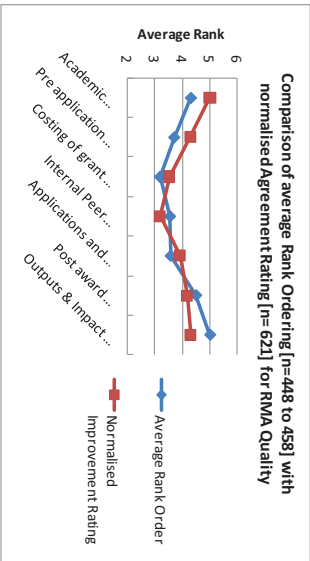


Figure 10: Comparison of average Rank Ordering (Q1) normalised to rank order (Q7) for the seven areas in terms of RMA positively affecting Quality

We can see that there appears to be a correlation between the average rank order (blue) from Q7 and the normalised derived rank order (red) from the unranked affect question Q1.

This visual correlation can be confirmed by using a non-parametric statistical analysis. Looking at the correlation between the specific elements gives a more reliable assessment of the reliability of the responses. So performing a Spearman's rho comparing the agreement responses from Q1 for RMA in relation to Academic Experience affecting quality with the ranking responses for Q7 we get a significant correlation ( $\rho=0.330$ ,  $N=452$ ,  $p<0.0005$ , two tailed). In fact the agreements with all of the seven elements in each of the four questions (Q1-4) are significantly correlated (all with  $p<0.0005$ ) with the rankings of their counterparts (Q7-Q10). Which means that we can be entirely convinced that the respondents were being consistent with their views during the questionnaire.

We can see from this that the cross-checking clearly shows that the respondents felt that Research Management and Administration (RMA) in the areas of Costing and Peer Review would have the greatest positive effect on the quality of research undertaken; with Award Management the third best area.

ELECTRONIC Research Administration FURTHER improves research QUALITY (N=441 to 451)									
	1 (most)	2	3	4	5	6	7 (least)	Ave.	Rank
Academic expertise information	12.2%	12.9%	8.7%	10.2%	10.0%	15.8%	30.2%	4.61	6
Pre application funding source identification	15.6%	16.7%	15.8%	15.6%	15.6%	5.0%	3.66	3	3
Costing of grant applications	23.0%	24.2%	19.9%	14.2%	10.8%	3.8%	2.93	1	1
Internal Peer review & Ethics review	15.9%	8.8%	7.9%	14.1%	12.5%	19.7%	21.3%	4.44	5
Applications and awards management	15.2%	18.1%	21.5%	16.3%	14.1%	10.7%	4.1%	3.44	2
Post award financial management	12.9%	12.0%	15.1%	14.7%	17.6%	13.8%	13.8%	4.09	4
Outputs & Impact recording and archive	7.8%	8.9%	11.1%	14.6%	18.2%	19.3%	20.2%	4.65	7

Table 2: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive further effect of ERA on research quality

When looking at the additional positive effect that the use of Electronic Research Administration (ERA) could have on research quality, Costing is clearly the strongest area, with Award Management and Pre-Award being next in the rankings. When cross checking these ranks with the normalised results from Q2

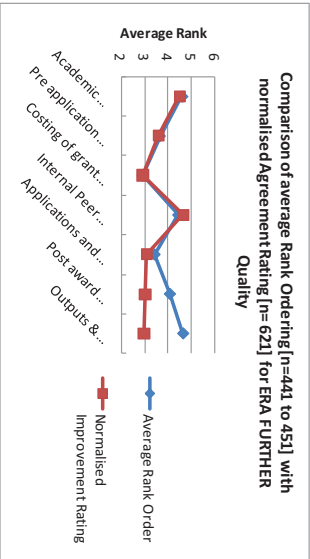


Figure 11: Comparison of average Rank Ordering (Q2) normalised to rank order (Q8) for the seven areas in terms of ERA further positively affecting Quality

We can see an extremely high correlation between all of the areas apart from Post Award and in particular Outputs Recording, perhaps indicating that the responses for these two areas are not as robust as for the other five.

However when performing a Spearman's rho correlation for the underlying data from Q2 & Q8 for Post Award and Outputs Recording we get a highly significant correlation ( $\rho=0.315$ ,  $N=449$ ,  $p<0.0005$ , two tailed) respectively ( $\rho=0.180$ ,  $N=451$ ,  $p<0.0005$ , two tailed) in both cases. This means that the apparent divergence is just a feature of the differences in the types of question (agreement and ranking).

It is clear that the most promising areas in which ERA systems can improve research quality are in Costing and Award Management; with Pre-Award, and perhaps Post Award also being fruitful.

Now looking at the effects on quantity of research

Research Management and Administration improves research QUANTITY [n=439 to 445]	1 (most)	2	3	4	5	6	(least)	Ave.	Rank
Academic expertise information	13.1%	14.0%	11.3%	11.5%	12.9%	12.7%	24.4%	4.33	4
Pre application funding source identification	37.5%	19.1%	13.9%	13.0%	7.4%	6.7%	2.2%	2.63	1
Costing of grant applications	17.6%	25.9%	25.9%	15.1%	7.9%	5.2%	2.7%	2.97	2
Internal Peer review & Ethics review	8.8%	9.3%	10.0%	15.0%	15.9%	20.6%	20.4%	4.63	6
Applications and awards management	15.0%	17.8%	19.6%	16.2%	20.0%	7.3%	4.1%	3.47	3
Post award financial management	7.0%	10.2%	11.3%	18.8%	17.2%	21.9%	13.6%	4.49	5
Outputs & Impact recording and archive	2.5%	4.3%	8.8%	10.1%	18.0%	24.3%	32.1%	5.38	7

Table 3: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive effect of RMA on research Quantity

The ranking clearly shows that Pre-Award support is thought to be the best way to improve research quantity, with Costing a clear second, and Award Management third.

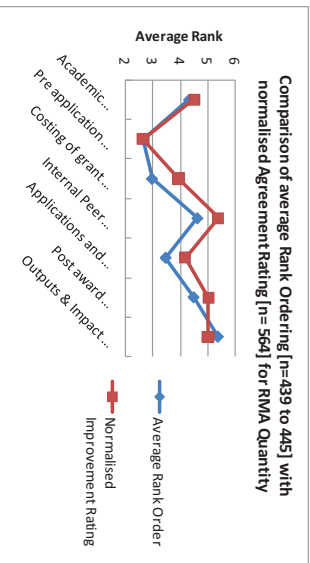


Figure 12: Comparison of strength of agreement (Q3) normalised to rank order (Q9) for the seven areas in terms of RMA positively affecting Quantity

The cross-checking shows a reasonable correlation (0.879) between the responses to Q3 (red) and Q9 (blue) about the positive impact of the seven areas on research quantity.

Pre-Award Research Management and Administration is clearly seen as the best place for investment.

The largest divergence in the processed data is for Costing, however when performing a Spearman's rho correlation for the underlying data from Q3 & Q9 for Costing we get a highly significant correlation ( $\rho=0.271$ ,  $N=444$ ,  $p<0.0005$ , two tailed).

ELECTRONIC Research Administration FURTHER improves research QUANTITY [n=429 to 439]	1 (most)	2	3	4	5	6	(least)	Ave.	Rank
Academic expertise information	8.9%	14.6%	13.2%	9.6%	13.9%	14.8%	25.1%	4.50	5
Pre application funding source identification	38.9%	15.6%	13.3%	14.2%	8.5%	7.1%	2.7%	2.71	1
Costing of grant applications	20.5%	28.1%	24.0%	14.4%	7.5%	3.9%	1.8%	2.80	2
Internal Peer review & Ethics review	5.6%	6.3%	8.6%	14.9%	16.5%	22.3%	25.8%	5.01	6
Applications and awards management	15.6%	18.9%	19.6%	17.9%	15.9%	9.3%	2.8%	3.39	3
Post award financial management	8.0%	10.3%	12.6%	19.1%	17.0%	20.5%	12.4%	4.38	4
Outputs & Impact recording and archive	4.1%	6.9%	8.7%	9.4%	20.0%	22.0%	28.9%	5.16	7

Table 4: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive further effect of ERA on research Quantity

In terms of the additional benefits that ERA can provide, again Pre-Award is the strongest area, but Costing is a much close second, with Award Management again third.

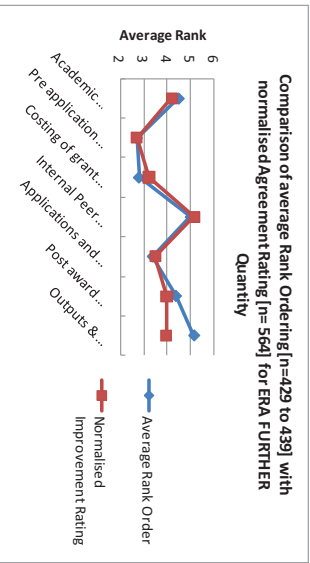


Figure 13: Comparison of strength of agreement (Q4) normalised to rank order (Q10) for the seven areas in terms of ERA further positively affecting Quantity

Cross checking Q4 (red) with Q10 (blue), again there is a good correlation, apart from perhaps for Outputs Recording. However when performing a Spearman's rho correlation for the underlying data from Q4 & Q10 for Outputs Recording we get a highly significant correlation ( $\rho=0.269$ ,  $N=436$ ,  $p<0.0005$ , two tailed).

It is clear that for ERA systems helping to improve the quantity of research that the best area (lowest on the graph, i.e. closest to a being ranked 1 = top) is Pre-Award, with Costing a close second and Post Award third.

## 7 Comparative Analyses

There are many analyses that could be undertaken to see if different parts of the population had different perceptions, a few will be considered here. We will consider just the overall agreement to the different elements of RMA with respect to RMA / ERA and quality / quantity (Q1-Q4). As the data is from a rating scale and hence ordinal, a non parametric correlation test must be used, in this case a Mann-Whitney test.



### 7.1 Experienced vs Less Experienced RMAs

Looking at the differences in responses between experienced (11+ years; group 1) and less experienced (group 2) research managers and administrators we see the following:

#### Q1: RMA affecting quality

For none of the seven elements is there a significant difference in the responses, with the results ranging from (U=22063.500, N<sub>1</sub>=350, N<sub>2</sub>=127, p=0.894, two-tailed) for Outputs Recording to (U=20325.500, N<sub>1</sub>=350, N<sub>2</sub>=127, p=0.122, two-tailed) for Post Award.

#### Q2: ERA further affecting quality

The situation is slightly different here as there is a significant difference in one area: Peer Review (U=19660.500, N<sub>1</sub>=350, N<sub>2</sub>=127, p=0.042, two-tailed) meaning that the more experienced RMAs on average ranked ERA support for Peer Review (2.32) higher on positive impact on quality than did their less experienced (2.62) counterparts on the (1=Strongly Agree [top] to 5= Strongly Disagree [bottom]) descriptive scale

#### Q3: RMA affecting quantity

Again for this aspect there is a significant difference (only) for Peer Review (U=19081.000, N<sub>1</sub>=350, N<sub>2</sub>=127, p=0.013, two-tailed). With the more experienced RMAs believing more strongly (mean=2.21 as compared to 2.49 for the less experienced respondents) that RMA could positively affect the quantity of research undertaken.

This is perhaps a surprising result, although could conceivably be explained by a long term view – initially proposal throughput would be reduced, but overall, eventually, income could rise with a better success rate.

#### Q4: ERA further affecting quantity

There were no significant differences in this area.

When we look at different groupings we can see other significant differences

### 7.2 Female vs Male RMAs

Comparing female (group 1) and male (group 2) respondents, there are significant differences in:

#### Q1: RMA affects quality

Females rated Post Award (U=18430.500, N<sub>1</sub>=352, N<sub>2</sub>=125, p=0.004, two-tailed) rated more positively than males; with a mean of 1.81 as compared to 2.12. And also for Outputs Recording (U=19174.500, N<sub>1</sub>=352, N<sub>2</sub>=125, p=0.019, two-tailed) with a mean of 1.92 compared with 2.14.

#### Q3: RMA affects quantity

Here females rated Costing significantly better than (U=18965.000, N<sub>1</sub>=352, N<sub>2</sub>=125, p=0.013, two-tailed) males; with means of 1.95 compared to 2.13. There are no obvious reasons for the gender differences and this may warrant further investigation.

### 7.3 RMAs working in Research Intensive vs Non-Research Intensive HEIs

Where we might expect differences are where RMAs have worked in different types of institutions. The two largest respondents groups are from Research Intensive HEIs (group 2) and Non-Research Intensive HEIs (group 3)

#### Q1: RMA affects quality

Here the Research Intensive respondents considered Pre-Award (U=13390.500, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.023, two-tailed) more positively than their colleagues from Non-Research Intensive HEIs (with a mean of 1.85 compared to 1.99). Also Costing (U=13526.500, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.034, two-tailed) was viewed more positively with a mean of 1.67 compared to 1.89.

#### Q2: ERA further affects quality

Again the Research Intensives viewed Costing (U=13324.000, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.021, two-tailed) more positively (mean of 1.89 compared to 2.18). Also for ERA to affect quality, Award Management (U=13280.000, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.019, two-tailed) with means of 1.94 and 2.18. And Post Award (U=13584.000, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.043, two-tailed) means of 1.93 and 2.17.

#### Q4: ERA further affects quantity

Again, Costing was significantly better thought of by the Research Intensives (U=13320.500, N<sub>2</sub>=324, N<sub>3</sub>=96, p=0.023, two-tailed) with a mean of 1.99 whereas the mean from respondents who had worked mainly in Non-Research Intensive HEIs was 2.32

Overall, in every case where there was a significant difference between the responses of the two groups in relation to the affect of RMA / ERA on quality / quantity, those that had worked mainly in Research Intensive HEIs were more positive than those that had worked mainly in Non-Research Intensive HEIs. This seems to imply that working at a Research Intensive HEIs allows you to better see the benefits of Research Management and Administration and Electronic Research Administration.

### 8 Correlations

Other than the correlations that have been used to verify the robustness of the data, there are many other correlations that can be considered.

Using Spearman's rho we can consider how the responses for each of the seven elements in the questions correlate to each other.

#### Q1: RMA affects quality.

Comparing each of the seven elements which the other six reveals that they are all significantly correlated (with p<0.0005). The best correlation being between Contract Management and Post Award (rho=0.760, N=621, p<0.0005, two-tailed), indicating that the two areas are linked in the minds of the respondents.

**Q2:** ERA further affects quality  
Comparing each of the seven elements which others reveals that they are all significantly correlated (with  $p < 0.0005$ ). The best correlation is again between Contract Management and Post Award ( $\rho = 0.833$ ,  $N = 621$ ,  $p < 0.0005$ , two-tailed), supporting the supposition that the two areas are linked in the minds of the respondents.

**Q3:** RMA affects quantity  
Again all of the responses are significantly correlated ( $p < 0.0005$ ) with the highest rho value again being for Contract Management and Post Award ( $\rho = 0.699$ ,  $N = 564$ ,  $p < 0.0005$ , two-tailed).

**Q4:** ERA further affects quantity  
Finally all the seven areas are again significantly correlated ( $p < 0.0005$ ) with the highest rho value again being for Contract Management and Post Award ( $\rho = 0.788$ ,  $N = 564$ ,  $p < 0.0005$ , two-tailed).

These strongly suggest that the elements of Contract Management and Post Award are closely related in terms of their impact on quality and quantity of research.

The responses to Q5 & Q6 are also significantly correlated to each other ( $p < 0.0005$ ).

**Q7:** Ranking of RMA elements for quality  
When comparing the ranks that respondents gave to the seven elements with their agreement to positive effect of RMA on quality, we find that not all combinations are significantly correlated.  
For example, comparing the ranking of Academic Experience with Peer Review there was no significant correlation ( $\rho = 0.056$ ,  $N = 440$ ,  $p = 0.244$ , two-tailed). Peer Review was also not correlated with Outputs Recording ( $\rho = 0.005$ ,  $N = 444$ ,  $p = 0.919$ , two-tailed). Outputs Recording was also not correlated with Award Management ( $\rho = 0.056$ ,  $N = 443$ ,  $p = 0.237$ , two-tailed) or Post Award ( $\rho = 0.087$ ,  $N = 452$ ,  $p = 0.066$ , two-tailed).

**Q8:** Ranking of ERA elements for quality  
It is a similar picture for the responses with respect to the order for ERA further affecting quality in a positive way.  
Peer Review was not significantly correlated with Academic Experience ( $\rho = 0.063$ ,  $N = 436$ ,  $p = 0.237$ , two-tailed). Pre-award was not correlated with Costing ( $\rho = -0.085$ ,  $N = 435$ ,  $p = 0.078$ , two-tailed). Post Award was not correlated with Outputs Recording ( $\rho = -0.051$ ,  $N = 442$ ,  $p = 0.286$ , two-tailed); and Costing was not correlated with Post Award ( $\rho = -0.048$ ,  $N = 432$ ,  $p = 0.320$ , two-tailed).

**Q9:** Ranking of RMA elements for quantity  
Again most pairs of elements are correlated, but Peer Review is not correlated with Academic Experience ( $\rho = 0.024$ ,  $N = 434$ ,  $p = 0.621$ , two-tailed) or Pre-Award ( $\rho = -0.045$ ,  $N = 435$ ,  $p = 0.346$ , two-tailed); and Award Management is not correlated with Costing ( $\rho = 0.052$ ,  $N = 435$ ,  $p = 0.282$ , two-tailed). Outputs Recording is not correlated with either Award Management ( $\rho = -0.013$ ,  $N = 437$ ,  $p = 0.782$ , two-tailed) or Post Award ( $\rho = 0.039$ ,  $N = 439$ ,  $p = 0.412$ , two-tailed).

**Q10:** Ranking of ERA elements for quantity  
Again, most of the elements are correlated with the other elements. But, Peer Review is not correlated with Academic Experience ( $\rho = 0.004$ ,  $N = 426$ ,  $p = 0.928$ , two-tailed) or Pre-Award ( $\rho = -0.066$ ,  $N = 426$ ,  $p = 0.177$ , two-tailed). Costing is not correlated with Award Management ( $\rho = 0.030$ ,  $N = 420$ ,  $p = 0.539$ , two-tailed). Outputs Recording is not correlated with Award Management ( $\rho = 0.012$ ,  $N = 423$ ,  $p = 0.811$ , two-tailed) or Post Award ( $\rho = 0.051$ ,  $N = 428$ ,  $p = 0.289$ , two-tailed).

So there are significant correlations between the agreement levels responses (Q1-Q4) meaning that the overall patterns of which areas are stronger than others is robust.

There are also correlations between the cross checking questions (when comparing agreement with ranking, Q1-4 with Q7-10), so the respondents are clearly being consistent in their responses.

However there are elements in the ranking questions (Q7-Q10) which are not correlated, meaning that if we wish to use these ranking data to distinguish between elements that are close in agreement levels then this should be done with caution.

## 9 Comparisons with the Pilot Study

ERA area	Pilot Rank	RMA rank	ERA rank	Av Rank
Pre application funding source identification: Quantity	2	1	1	1
Internal peer review & ethics review: Quantity	1	2	13	9
Costing of grant applications: Quantity	3	3	2	2
Applications and awards management: Quantity	7	4	3	3
Pre application funding source identification: Quantity	13	5	8	6
Outputs & impact recording and archive: Quantity	4	6	5	5
Post award financial management: Quantity	5	7	4	4
Costing of grant applications: Quantity	11	8	6	7
Applications and awards management: Quantity	9	9	7	8
Academic expertise information: Quantity	10	10	12	10
Academic expertise information: Quantity	8	11	10	11
Post award financial management: Quantity	12	12	11	13
Outputs & impact recording and archive: Quantity	6	13	9	12
Internal peer review & ethics review: Quantity	14	14	14	14

Table 5: The fourteen element-effects ranked by strength of positive agreement from the Pilot Study and this study for RMA and ERA – ordered by RMA effect rank

We can compare (above) the rank order of the 7 areas for quality and quantity (for RMA and ERA combined) with the rank order from the pilot study.

The tables show the rank orderings in terms of the highest agreement that the areas listed can have a positive impact on the quality or quantity of research undertaken. The first ranking is from the small pilot study (to give an indication of the replicability of the results, although it should be borne in mind that the questions were not the same and the sample size was over an order of magnitude smaller). The last the columns show the ranking from the main survey, with the RMA rank being that for questions on research management and administration; ERA the rank is for further positive effects from electronic research administration; and the final showing the average of the two, which is perhaps the closest in meaning to the pilot study question.

The table (above) shows the rankings ordered by the amount of agreement that the areas of research management and administration (RMA) can have a positive effect on the quality (dark blue) and quantity (dark green).

The table (below) shows the rankings ordered by the amount of agreement that Electronic Research Administration (ERA) in the areas of research management and administration can have a further positive effect on the quality (pale blue) and quantity (pale green).

ERA area	Pilot Rank	RMA rank	ERA rank	Av Rank
Pre application funding source	2	1	1	1
Identification: Quantity	3	3	2	2
Costing of grant applications: Quality	7	4	3	3
Applications and awards management: Quantity	5	7	4	4
Post award financial management: Quality	4	6	5	5
Outputs & impact recording and archive: Quantity	11	8	6	7
Costing of grant applications: Quantity	9	9	7	8
Applications and awards management: Quantity	13	5	8	6
Pre application funding source Identification: Quality	6	13	9	12
Outputs & impact recording and archive: Quantity	8	11	10	11
Academic expertise information: Post award financial management: Quantity	12	12	11	13
Academic expertise information: Internal peer review & ethics review: Quantity	10	10	12	10
Internal peer review & ethics review: Quantity	1	2	13	9
Internal peer review & ethics review: Quantity	14	14	14	14

Table 6: The fourteen element-effects ranked by strength of positive agreement from the Pilot Study and this study for RMA and ERA – ordered by ERA effect rank

It can clearly be seen that there is good agreement between the ordering from the pilot questionnaire and the main questionnaire – with the exception of quality from ERA support for Peer Review and to a lesser extent for quality from Pre Award. However as mentioned above the analysis from main questionnaire is seen as being more due to the number of responses.

10 Summary of Analysis

Overall, the data is extremely robust. There were some potential correlation issues with the effect of Electronic Research Administration (ERA) systems for Outputs Recording, however the Spearman's rho correlation showed that the underlying data were sound.

The sections above indicate the areas thought to be most fruitful for Research Management and Administration (RMA) in terms of increasing the quality and quantity of research, and also for ERA systems in support of those areas.

Whilst there was a fear that respondents would not be able to distinguish the effects of ERA as opposed to those from RMA alone, there are differences in the responses.

The results are largely the same as those from the much smaller pilot questionnaire that led to this study, but where there are differences it is felt that this much larger and more robust study should be given precedence.

It should be remembered that these are the views of Research Managers and Administrators themselves; however they may be considered to be expert in the field.

11 ERA Findings

11.1 ERA for increasing research Quality

When looking at Electronic Research Administration (ERA) systems it appears that in order to have a positive effect on research quality the best areas to be looked at are:

- Costing of grant applications
- Applications and awards management
- Pre application funding source identification

One perhaps surprising result is that for increasing quality, whilst RMA support for Peer Review was seen to have the most positive effect, ERA for Peer Review was seen as the least positive.

11.2 ERA for increasing research Quantity

In terms of increasing research quantity the picture is slightly different:  
Pre application funding source identification  
Costing of grant applications  
Applications and awards management

Whilst the areas are the same as for the positive effect on research quality, the ordering in terms of the size of the impact is different.

12 Textual Comments

Questions 17-19 allowed the respondents to comment on the questionnaire, Research Management and Administration (RMA) and Electronic Research Administration (ERA). Whilst not strictly the core focus of this paper, it is interesting to reflect on some of the nearly 350 comments (over 100 under each heading) that the respondents took the time to leave. Many of the responses are pertinent to the analysis in terms of the reasons for the results of the various analyses. The overall content is so rich that it would benefit from a structured analysis itself, but that is out of the scope of this report.

The Appendix (see section 18) contains a large selection of the textual comments; however the main issues and points raised can be summarised as follows:

- Many felt it difficult to disaggregate ERA from RMA
- Some thought that the seven sub-areas of RMA were too restrictive
- ERA is not only desirable but essential
- RMA, and further, ERA can affect quality and quantity of research
- However, the focus should always be on supporting the research
- ERA should be fully integrated and embedded into the wider systems
- ERA systems should meet the needs of a range of users
- ERA systems are tools, not an end in themselves

13 Conclusions

The results indicate that investing in Electronic Research Administration is likely to be of benefit in all areas of Research Management and Administration.

If the imperative is to increase research quality then the most fruitful area to look at is Costing; and then Pre-Award and Post-Award.

If increasing research quantity is paramount then Pre-Award and Costing are the most fertile areas for investment; and then Post Award.

However, when considering the possible factors that will have influenced the responses, in terms of the Electronic Research Administration (ERA) questions it seems likely that people reflected on their own experiences of actual systems rather than thinking about what a possible system might do.

This might explain the poor showing for Peer Review in terms of quality. There are many Pre-Award, Costing and Award Management systems, but relatively few ERA Peer Review systems.

On the other hand it might be that the Peer Review is seen as working well and then an ERA system to support it cannot really add any value in terms of quality, just, perhaps, in terms of efficiency.

Finally, Electronic Research Administration is in its infancy and perhaps the most crucial lesson to be learnt is that whatever the possible benefits, if an ERA system is not user friendly and does not meet the requirements of all its users (administrative and academic) then it will fall short of its potential to have a positive impact on both the quality and quantity of research.

14 Weaknesses

Notwithstanding the trialling of the questionnaire that informed the assertion that it would only take 10 minutes to complete, many complained that it took longer than that. This is borne out by the data, of those that completed the questionnaire in one day (n=404) the median elapsed time to complete was 14 minutes and 25 seconds. Some took a very long time, for example 16 responders took over 100 minutes elapsed time, however it is likely that this was not concentrated effort on the questionnaire alone. The actual median could therefore be a little lower, but it is likely to still be over ten minutes, were the questionnaire to be re-run it should probably indicate that it should take less than 15 minutes to complete.

Whilst definitions of these seven areas were provided, it cannot be guaranteed that all responders had the same understanding of each section.

The wording to the first 4 questions was slightly ambiguous, so that someone wanting to indicate a negative effect might be unsure as whether to answer 'no effect' or one of 'disagree'/'strongly disagree' (this is mitigated in the analysis).

Some respondents noted that it was difficult to remember the (in some views) somewhat arbitrary definitions of the seven elements questioned and it was also suggested that other elements could have been included (for example: planning).

Three respondents were unhappy answering Q16 about their salary (but the question was mandatory), so these three responses were removed post hoc (as they were likely to be unreliable). However this could mean that other responses to this question were unreliable too.

Overall responders found it difficult to disaggregate the differences that could be accrued to electronic support for and research management and administration per se. However some differences were apparent.

Finally, it was noted by many that it would be useful to garner the perceptions of non-RMAS, most notably academic staff, towards the impact that research support functions have.



Notwithstanding all the above, the high response rate, both in terms of numbers and percentage, mean that this is a valuable data source and that the analysis should be able to be robust.

15 Future Work

There are two main directions that appear to be fruitful avenues for further work in this area.

Firstly there are some results that appear counter intuitive, particularly in terms of the ranking for ERA for Peer Review in relation to quality, a possible rationale has been postulated and this could perhaps be tested by follow-up interviews, taking into account the textual responses from this questionnaire.

Secondly, the questionnaire was only directed at a subset of the users of ERA systems, namely Research Managers and Administrators (RMAs); it would be insightful to perform a similar experiment with both RMAs and the other main group of users of ERA systems – academic staff.

Additionally, the existing dataset could be subjected to additional analysis, for example to look at whether RMAs working in central offices responded differently to those working in departments.

16 Acknowledgments

The author would like to thank everyone that took the time to respond to the survey, and also to ARMA<sup>6</sup> for enabling the use of their members email list for eliciting the responses in the first place.

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18 Appendix – Free Text Responses

Questions 17–19 allowed the respondents to comment on the questionnaire, Research Management and Administration (RMA) and Electronic Research Administration (ERA). Some of the most salient ones are listed below.

Comments are listed verbatim, except where text appears in [square brackets], which indicates text replaced to keep the response anonymous.

18.1 Q17: Do you have any comments about the questionnaire?

Many respondents commented negatively on the length, layout, complexity, difficulty in ranking answers and the seemingly repeating issues in the questionnaire; these tens of responses were balanced by a single ‘Fun to complete’ response.

*Found it difficult to rank some of the questions*

*It seemed unreasonable to me to try and rank the effects on quality and quantity of research in cases where I didn't think there were any effects.*

*interesting but hard sometimes to distinguish RMA from electronic RMA as some electronic tools, such as fee costing are now so integral to the process.*

*Some questions took several readings to interpret what was being asked. Very difficult to rank 1-7 as all important and answers may depend on what your current "view of work is".*

Many found it difficult to disaggregate ERA from RMA and some thought that there was no need.

*It's hard to distinguish between effects of RMA per se and additional effects of electronic systems. For example, some things may be effective mainly or only because electronic systems exist to implement them, but you'd still classify them as effective tools. I would have found it easier to express this if the questionnaire had asked which tools would be less effective if electronic systems were not available to administer them - because we use electronic systems for all of them these days don't we?*

*The impact of both RMA and ERA in most cases are indirect - e.g. improving support for costing does not directly improve the quality of research, however by having better systems and support structures in place the academic may focus more on the academic case etc. which in turn can improve the quality. It was difficult to try to show this, making some answers look contradictory*

A number of responders bemoaned the fact that integration / workflow issues were not included as they saw this as the key benefit of ERA.

*Misses the key point that the principal benefit of electronic systems is actually workflow management*

Some indicated that they were basing their ERA responses on the knowledge of existing systems only, perhaps supporting the premise that ERA for Peer Review scored poorly compared to RMA for Peer Review with respect to quality improvement.

*I am unfamiliar with the use/availability of electronic systems for internal peer and ethical review and this is reflected in my ranking of such electronic systems (in terms of adding value to research quality/quantity). I would be interested to know more about such systems, however, as this could well alter my perception of this area in the future.*

More generally some felt that they might be biased against the areas that they did not know as well.

*Answered may be biased due to nature of job or areas of expertise vary. As for me, I scored ethics review activities low as I am not involved in these and therefore can't comment on these particular questions sufficiently.*

It was suggested that academic staff should be invited to comment on these topics too

*Has this been completed by people outwith the roles of Research Manager/Administrator? It would be interesting to see the comparison if say academics were to answer this questionnaire too.*

*[From Q19] Not specific to ERA, more a general comment that it would be useful to ask the academic community the same questions and compare with the results from the Res Man community.*

Some areas of RMA were pointed out as missing from the seven asked about.

*My research support role is mainly in policy development - a category missing from your research management framework.*

*No reference to where Enterprise and Research overlap - different ethos amongst Entrepreneurs*

*[From Q18] You missed out research governance and research integrity (Q4 as it applies to research)*

*[From Q18] I understand why the focus is on the grants/contracts lifespan but research administration encompasses many other dimensions- particularly at the corporate level where matters such as institutional risk management for example are pivotal. In this regard perhaps some Q's along the lines of: How does Research Admin add value to your organisation? might be useful.... We use our electronic system for corporate and statutory reporting purposes for example which manages financial and reputational risk.*

18.2 Q18: Do you have any comments about Research Management and Administration in relation to how it can affect the quality and/or quantity of research?

Overwhelmingly, respondents thought that RMA had a key role to play in supporting research and impacting on research quality and quantity (which was clearly reflected in the quantitative data).

*Truly believe effective research administration can be key to aiding high-quality research. Likewise though, poor-quality administration can be detrimental to the whole research process and leave researchers / academics with the feeling that they'd be better off doing it themselves.*

*Research Management and Administration is vital to supporting and improving the quality and quantity of research. It has an improves quantity by matching academics with funding calls and ensuring that they have a good proposal put together to secure the funding. It improves the quality by making sure that there are sufficient funds to carry out the research (costing the project) so that the piece of work may be completed in good time and without need for additional funds. If the institution offers development programmes for emerging researchers this will also improve the quality and quantity of research as new*

academics will be more comfortable in writing grant proposals and applying for funding. With support, specifically tailored to their development needs, emerging researchers are more likely to secure funding for their research projects.

Any system that facilitates the success of well costs funding applications will increase academic productivity and therefore quality and quantity of research  
Research Management is a very important role in the support of Academic activity, however, if the organisation does not commit 100% to it, then research management will have little impact or in fact could provide a negative experience. The organisations over all goals need to be understood and related KPI's and targets need to be developed, and measured including all individuals involved. Implementing open or unmonitored procedures will make the development or implementation of an electronic system to support research management even more difficult, and will provide an easy escape route when growth is not obtained. A structured, controlled and respected set of procedures for the administration and management of research grants will always impact positively on the outcomes. It is when the structure is lost that the outcomes suffer. An electronic system will always provide an easier and more integrated set of ways of working but can only be implemented on a platform of structured, controlled and monitored procedures.

Having moved from a research intensive [1994 Group] to a virtually non-existent research culture at [Million+ University], I am crucially aware of how important it is to have a level of RMA infrastructure in place to support the bidding process. Since I have been in post the level of bidding has increased dramatically, partly as an awareness raising exercise, and also through my facilitation of the application process.

However there was also recognition that the most important player in research is of course the researchers.

While research management and administration can improve quality and quantity not all aspects of RMA will have effects on research activity in these terms and certain aspects of RMA will not improve either quality or quantity. I therefore question whether approaching the value of RMA from this point of view only is actually the best way to achieve the promotion of RMA. The bottom line is however that without a committed group of research active academic colleagues to support, the best RMA system - electronic or otherwise - is of no value.

I believe that RMA is a time saving device which enables academics to spend more time on their research and improves the quality of grant applications to enhance success rate.

Effective Research Management should free Researchers to do what they are good at. As Research has become increasingly specialised, so the work around managing projects, applications and funding has also become increasingly a specialism of its own. It is not effective to imagine that all researchers make good research managers, nor that this is the most effective use of their time.

It think it can and does improve research quality (by allowing researchers to 'get on with things' and hopefully bringing researchers together so they can learn from one another), and quantity (by providing assurances that there is someone there to help with admin and management issues, who can share some of the burden of applying for and managing funding).

I strongly feel that support we, Research Managers and Administrators, provide to academics re. research related activities (completing research grant applications in particular) is essential to both quality and quantity of their research projects as there are so many elements in the process that could be done by support staff (finances for example) so that academics can concentrate their time and effort to academic side of the project/work

Good management (ideally as unobtrusive and supportive as possible) helps keep researchers motivated, motivated researchers do research.

The key driver of research quality is not the Administration it is the quality of the academic staff  
There was a call for sharing best practice

I think institutions should be sharing best practice amongst its research administration staff. I also think funders could do a lot more in sharing information and what they expect from institutions.

Some saw the benefit of localised RMA support

Strongly believe some research management should be locally based at department/school level to maximise both quality and quantity of research. Current discussions at my institution to move RMA to faculty levels may impact on success rates as local discipline specific knowledge and expertise will be diffused.

I have recently moved from a central service into a department role. It seems to me that at the department level a large part of the effects the research administrator can have on the research quality and quantity depend very much on the capacity of the research administrator, working with central services, to demystify the application process and the grant management process. If academic staff view the research application process is seen as mysterious and cumbersome (and likely to lead to more administration work for them) then they are reluctant to get involved in it.

Research admin provides optimal impact when: 1. it is located in close proximity to researchers - i.e. knowledge is accumulated about funders' & research objectives, research domains and research partner networks. 2. it is involved in both pre and post-award management - i.e. experience and knowledge of post-award management informs improved bid application and improved management.

RMA adds value

We best enhance quality by adding value in some of the areas that academic or clinical researchers are sometimes not best trained in themselves. For example costing, pricing, justification of resources, presenting research (and groupings or fields of research) to different audiences, and managing internal review processes to provide constructive comments and guidance to less experienced applicants or those from other countries. Quality is tackled in a different way, largely through targeting new sources of funding and relieving the burden of pre and post award administration on successful project leaders. have you considered resource as an issue as it leads to reduced functionality, as well as resistance to change (why should we internally peer review when we've never done it before and it takes up too much time and I don't want someone else to steal my ideas etc.)

Research Management and Admin is an essential element in the research grant process and in my experience the more local the support the more attention to detail can be provided. This School has a one stop shop for pre and post award admin allowing the admin staff here to fully engage with academics on the areas of the project where their expertise is vital. This also allows admin staff to feedback into the next application the financial knowledge gained from managing the award. In my experience Central pre and post award departments are separate entities where this feedback is not easily shared.

The relationship of research management and administration to both quality and quantity of research is indirect in as much as it may improve the efficiency with which research is developed or prosecuted and in so doing free up resources to concentrate on the research itself. It may open up funding streams that allow a researcher to do more or do better research, but the quality of the research can be good or bad irrespective of administrative support and management frameworks.

A professional and efficient RMA can deliver huge benefits to the research community and it is hard to imagine how any research-intensive University could manage without it. To that extent I feel some of the questions in the survey were redundant.

Good management = good project = good conduct = good outputs = good reputation = good funding

*In order to undertake the highest quality research you need the highest quality research administration. As such the RMA will impact research quality. However its biggest impact is in the research facilitation and the work that is undertaken as part of the project team, in discussing ideas, forming and shaping the academic team, even writing elements of the bid. The survey and the 7 elements of RMA actually does not appear to cover research facilitation which is where the biggest impact on research quality, other than through peer review, (from RMA purposes) can be impacted.*

*It certainly affects academics badly if the needed research administration & management is not provided for them. I believe we should take the most of the workload off from their shoulder so they can really focus on their research. At the end it always affects the quality and no time for increasing the quantity.*

**Need to ensure that RMAs are user focussed**

*Need to be careful that this is user friendly and there is a balance between administration in upkeep of systems vs value obtained from the information*

*RMA is crucial to improve quality and quantity of research but must be user-friendly and user-focussed to not appear overly bureaucratic and obstructive. Good ERA systems can help with this.*

*I have a lot of problems with the term "Research Management and Administration" because it is trying to shove a range of activities under a single term: as many in the field would say, it is a dynamic, flexible field whose job description changes quickly. If applied in a supple manner, assistance to researchers can yield tremendous results - if applied to a rigid set of tasks, its influence is marginal.*

*I think electronic research management is essential, we have a system which records all awards and each month and 6 monthly review of all projects - impossible to control without this. This has improved both the number and quality of the research as well as deadlines, applications and final reporting, making these systems transparent and open to all members of the service is crucial. We are involved in making our centralised research services share all grant applications (with sensitive data removed).*

#### General comments

*I found it interesting to consider what aspects of research management really might make a difference to the quality and quantity of research that is done. I think my answers don't reflect what is usually emphasised - we spend far too much time worrying about costing processes and systems and far too little time considering the effect of funding source on what is possible, whether the contracts we sign help or hinder the work that is done, and how to improve proposals and the design and outcomes of the work that is done by getting advice and input from others (internal peer review).*

*Research management provides professional support to an expert task. It enables researchers to achieve more, relieves them of unnecessary tasks, is a cost-effective use of time and resources and improves the accuracy of management information. It also improves the scope of research opportunities and enhances application success.*

*There is no doubt that Research Management and Administration can positively affect the quantity and quality of research.*

*I believe that good RMA is key to delivering increased research quality and quantity across groups, such as a department, although it has to be embedded within an understanding and supportive academic environment. Without academic co-operation, it is at worst a source of conflict, at best neither efficient nor effective.*

*Effective RM & A is an asset the benefits of which are overlooked until a key staff member leaves ... and then chaos ensues and the researcher community is suddenly up on its collective hind legs complaining loudly!*

### 18.3 Q19: Do you have any comments about ELECTRONIC Research Administration in relation to how it can FURTHER affect the quality and/or quantity of research?

*Isn't it a no brainer?*

*Electronic research administration has had measurable improvement effects in both quality and quantity in my own institution, which has increased its research funding success rates by around 20% in the past year, partly as a result of a number of different aspects of RA carried out effectively, including online forms for internal permissions and costings as well as tracking and managing funding applications.*

*Electronic Research Administration benefits central research offices in that it makes it much easier to track and benchmark developments in research. It can ease the academics' burden of research administration and create a seamless process for assisting academics in sourcing research funding and applying for grants. It can also make it much easier to run consolidated reports and collate data on research outputs and activity within the institution. I have used and been part of the development process for an electronic Research Administration and Management systems in the past. [...] It has been helpful in consolidating all data and providing a better procedure for collating research output data and application data.*

*It obviously enables an increase in research quantity: electronic costing, approval and management systems allow higher throughput of bids. It can also indirectly raise quality because it gives skilled research managers and administrators more time to target funding opportunities, comment on bids, and contribute to departmental research strategies, etc.*

*e-RMA can also affect research quality & quantity and indirectly, although a direct impact on quality is the least common.*

**Is ERA anything more than just RMA done more efficiently...**

*Electronic RMA makes the same difference to quality and quantity as "ordinary" RMA as per my comments relative to question 18. What it can achieve is to make the processes involved more efficient (saving time, money, effort) and can therefore do more, but electronic RMA does not add anything that isn't done already in ordinary RMA.*

*Effective information is needed for effective decision making. Electronic RMA systems can provide academics with good quality information to assist with their research. ERA can only affect the quality and/or quantity of research if it is efficient and well designed. Too many IT solutions are cumbersome, clunky, slow, designed by and for "technies" rather than researchers/administrators.*

*Electronic research administration is one of the tools to do the job, not a panacea. Its main usefulness is in improving accuracy and throughput of stages such as costing and pricing, and monitoring finance in the post-award stages. It can also be very useful in streamlining the flow of proposals and projects through the various stages, with the minimum of errors, losses, ... and paper. This in itself can increase the quantity and quality of the research we do by simply giving academic/clinical researchers and everyone involved more time to do what they do best.*

*The academics (in particular) and support staff involved in formulating and running a research project are the key determinants of the quality and quantity of research. Any electronic administration system that enables them to work more efficiently will enable them to devote more time to e.g. formulating/reviewing proposals or conducting the research and thus should have a positive influence on the quality of the research proposed.*



*Most RMA is electronic in one way or another - there is no clear separation between RMA and electronic RMA.*

*It can add dimensions*

*Electronic systems allows many more people to share the application as it is being progressed, this allows for more informed feedback at every stage and therefore results in a better thought out project.*

*Or is it over the top for some institutions*

*I guess it depends on the type of institution you work for - my university is quite small, so very swish systems probably wouldn't be as useful for us. I think these systems, particularly for those working in a smaller institution and who don't have an enormous volume of projects to worry about, are better in terms of making things happen more speedily and easily rather than sending quality soaring. That, though, is just one techno-phobe opinion!*

*Does it make any difference at all, or indeed make things worse...*

*I have found no difference with the addition of electronic research administration. I have found that the quantity and accuracy of the data accessed from Central Services needs to be continually monitored as it can produce erroneous information which, if used without thinking, can cause problems.*

*Some of the electronic applications have proved more complicated, required some duplication of work and have also required the relevant academic to be able to sit at a computer to push a particular button. Not always easy! But for admin, the more information we have to hand the better support we can provide.*

*I do not see how have electronic RMA has any further affect.*

*Sometimes Universities concentrate too much on electronic research administration at the expense of really training academic staff on basic project management skills. Seen as too much the panacea, especially when ultimately research is about HUMAN endeavour and computers are only a tool.*

*Academics prefer working with people.*

*I'm not a fan of electronic systems for their own sake - having a bit of software can't often substitute for knowledge, thought and judgement.*

*Electronic admin allows the same information to be used multiple times, saving time and effort, and forces people to agree on facts and figures, thereby maintaining consistency. However, I think it is not suitable for peer review and ethics where the value is obtained by face - to - face discussion and interactions. The downfall is maintaining the currency of the information.*

*Electronic research management I feel can only have an impact in the transactional aspects: costing, post award management and recording of research outputs. Where this might hopefully have an impact in research manager's role is freeing up time to allow managers to concentrate on the qualitative aspects of research management.*

*ERA needs to meet the needs of all users (especially the academic staff).*

*Better again providing that there is a clear value add for the RESEARCHER*

*If you could get more academics to engage with this, it would save much time and frustration.*

*ERA should be integrated, not isolated, disjoint systems*

*RMA needs to be backed up by appropriate electronic tools to speed up the support process. Often these are piecemeal and not 'joined up' so a service delivering the whole spectrum would be welcomed, although very difficult to implement something which fits all universities' needs.*

*What is ERA exactly anyway...*

*I would like to have "Electronic Research Administration" adequately defined.*

*Can we live without ERA...*

*During a recession when funding is even more competitive, electronic provision becomes really valuable. To me it is simple, we need "GOOGLE" a research equivalent of "GOOGLE".*

*Electronic research administration is becoming more and more important, in particular in relation to the research councils. It might be interesting for ARMA members to hear the RC views on this, especially in relation to possible future developments.*

*There really should be an of-the-shelf system for Universities to use !!*

*There is a clear need for a suitable system that can cope with the complexities of HE Research, from identification of potential and actual funding opportunities through to the post award financial and communications aspects.*

*Electronic systems are an absolute must, particularly in the larger universities whether research intensive or not. It means that there is consistency across the whole system for costing and pricing, for gathering information for REF, HERCIS and HESA returns, and generally making the whole system much more cost effective.*

*In my experience developing electronic tools has helped us become more efficient, and more accurate - I cannot see an argument against it.*

*Can we afford to do it...*

*In this day and age it goes without saying that electronic based administration helps productivity and efficiency so electronic research administration is not an exception. Unfortunately software is also an expensive resource so not all Universities are in a position to acquire relevant electronic resource even if they recognize that it would help overall administration and management of the processes.*

*Not only do the elements of ERA need to be properly integrated, ERA also needs to be embedded across the whole institution.*

*I firmly believe it can further affect quality but it needs to be accepted across the organisation and not just within research management teams to be fully successful.*

*Finally it must be remembered that ERA is just a tool, not an end in itself.*

*Electronic systems must be a tool to aid a process rather than the process itself, or else there is a strong risk that an oversimplified system could damage research data quality.*

*These are just a selection of the responses to the open questions at the end of the questionnaire. There is a lot of rich information which would benefit from a systematic analysis. However it is clear that there is a wide range of opinion on the matters of the impact that Research Management and Administration (RMA) and electronic support for RMA (ERA)*

Electronic Research Administration – Main Survey Feedback  
*Simon Kerridge, University of Sunderland*

Executive Summary

This is a brief summary of the results of a survey of ARMA<sup>1</sup> members about their perceptions on research management and administration systems in terms of their effect on quality and quantity of research.

The full analysis (Kerridge 2010) can be accessed by ARMA members on the ARMA website in the Resources Directory.

The survey was run in February-March of 2010 and from 1515 email requests there were 624 responses with 472 completing all of the sections of the questionnaire (which can be found on the ARMA website). It follows on from a pilot study (Kerridge 2009) that was conducted at the ARMA conference in 2009.

The underlying result of the survey is that Research Managers and Administrators (RMAs) overwhelmingly believe that Research Management and Administration (RMA) can positively affect the quality and quantity of research undertaken, rather than simply make the management and administration of research more effective and efficient. Further, they also believe that Electronic Research Administration (ERA – IT systems that support RMA) can have a further positive effect on both quality and quantity of research.

Whilst the survey was designed primarily to collect information about the effects of ERA, the perceptions of the effects of RMA itself were also collected to provide a context; these are commented on further in the full report.

This survey did not aim to look at specific ERA systems, but rather the effects that ERA systems in certain areas of research management and administration has / could have. Those interested in the capabilities of specific systems may wish to look at the findings of two recent projects that have as part of their work looked at the current market; see (RMAS) and (Green, McArdle et al. 2010).

The detailed analysis and techniques used to produce them can be found in the full report; this short executive summary contains only some of the main findings.

<sup>1</sup> The Association of Research Managers and Administrators, UK (see [www.arma.ac.uk](http://www.arma.ac.uk)). The input from ARMA members to the survey is gratefully acknowledged.

The diagram below (Figure 1) clearly shows that RMAs think that they can positively impact on the quality and quantity of research; and the ERA can have a further positive impact.

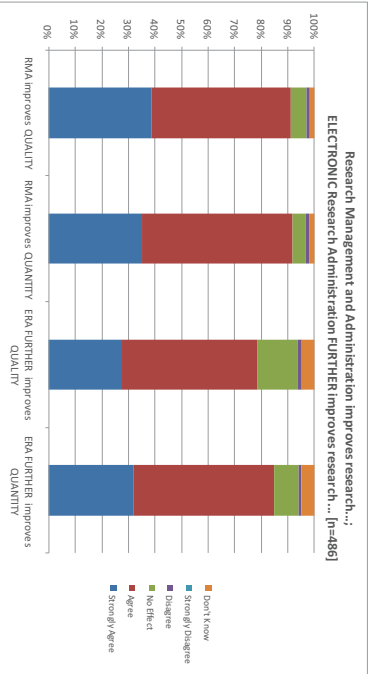


Figure 1: The proportions of responses to Q5 & Q6 on the overall perceptions of research managers and administrators as to the positive impact of Research Management and Administration (RMAs) and Electronic Research Administration (ERAs) on the Quality and Quantity of research undertaken

As well as ERA in general, the differing impact of different areas of RMA were considered.

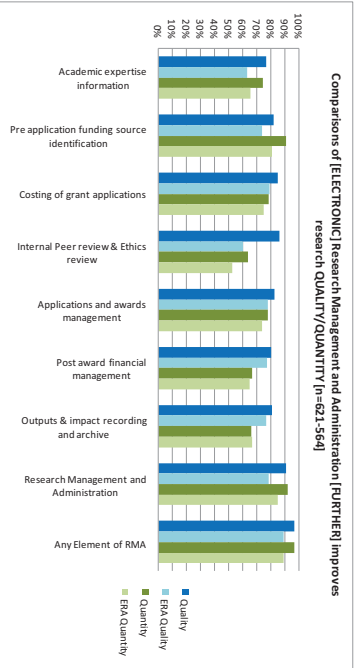


Figure 2: Comparisons of the proportion of positive responses to the four questions (RMA affects / ERA further affects the Quality / Quantity of research) in relation to the different areas of RMA

The diagram above (Figure 2) shows how the seven different areas of Research Management and Administration (RMA) are perceived

by RMAs in terms of their positive ('Strongly Agree' or 'Agree' to Q1 (dark blue – RMA affecting quality), Q2 (pale blue – ERA further affecting quality), Q3 (dark green - RMA affecting quality) and Q4 (pale green - ERA further affecting quality)) impact. For comparison, the penultimate set of bars show the agreement in Q5 & Q6 in relation to ERA as a whole. The final set of columns show the agreement to any of the seven areas from Q1 – Q4 respectively.

From this we can clearly see that in almost every area, there are some who believe that ERA support does not have any additional benefit over Research Management and Administration itself. However, this is the minority view.

ELECTRONIC Research Administration FURTHER improves research QUALITY [n=441 to 451]							
	1 (most)	2	3	4	5	6 (least)	Ave. Rank
Academic expertise information	12.2%	12.9%	8.7%	10.2%	10.0%	15.8%	30.2%
Pre application funding source identification	15.6%	16.7%	15.8%	15.6%	15.8%	5.0%	3.66
Costing of grant applications	23.0%	24.2%	19.9%	14.2%	10.8%	3.8%	4.1%
Internal Peer review & Ethics review	15.9%	8.8%	7.9%	14.1%	12.5%	19.7%	21.3%
Applications and awards management	15.2%	18.1%	21.5%	16.3%	14.1%	10.2%	4.1%
Post award financial management	12.9%	12.0%	15.1%	14.7%	17.6%	13.8%	3.44
Outputs & Impact recording and archive	7.8%	8.9%	11.1%	14.6%	18.2%	19.3%	4.09
							20.2%
							4.65
							7

Table 1: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive effect of ERA on research Quality

This table shows, in the first seven columns of data the proportion of respondents who placed each of the seven areas of RMA (the rows) in each rank order position – for example 23.0% of respondents placed Costing at the top of the list in terms of which area of ERA would have the most positive effect on the quality of research undertaken. The penultimate column shows the 'average' rank order and the final column shows the overall ranking for the seven areas based on these average rankings. The colour coding shows high percentages / low averages rankings / high rankings (low numbers) in dark green going through to yellow for the least prominent scores, to enable the data to be seen in a more visual way.

Costing is seen as the strongest area in which an ERA system can improve research quality. This is perhaps surprising as Peer Review is often seen as being the best way of improving the quality of proposals (and indeed it scores very highly on the questions asking about RMA rather than ERA in terms of positive impact on quality), but it is ranked lowly here. Looking at the textual comments at the end of the questionnaire it seems that some respondents considered Peer Review to be something best left entirely to academic staff and that an ERA system to 'help' them might actually be seen as being counterproductive. Also, it is possible that as there are few ERA systems that support Peer Review then the respondents were

finding it difficult to imagine the benefits. The converse of this probably helps to explain why Costing has scored highly, with respondents being able to draw on experience having seen a well costed proposal becoming a project that does not run out of money, enabling the research to be properly undertaken.

ELECTRONIC Research Administration FURTHER improves research QUALITY [n=429 to 439]							
	1 (most)	2	3	4	5	6 (least)	Ave. Rank
Academic expertise information	8.9%	14.6%	13.2%	9.6%	13.9%	14.8%	25.1%
Pre application funding source identification	38.9%	15.6%	13.3%	14.2%	8.5%	7.1%	2.7%
Costing of grant applications	20.5%	28.1%	24.0%	14.4%	7.5%	3.9%	1.8%
Internal Peer review & Ethics review	5.6%	6.3%	8.6%	14.9%	16.5%	22.3%	25.8%
Applications and awards management	15.6%	18.9%	19.6%	17.9%	15.9%	9.3%	2.8%
Post award financial management	8.0%	10.3%	12.6%	19.1%	17.0%	20.5%	12.4%
Outputs & Impact recording and archive	4.1%	6.9%	8.7%	9.4%	20.0%	22.0%	28.9%
							5.16
							7

Table 2: The proportions of respondents who placed each of the seven areas of RMA in the rank ordering of most positive effect of ERA on research Quality.

This table shows the responses in relation to ERA affecting the quantity of research undertaken. For increasing quantity, ERA Pre-Award support scores highly, with respondents seeing that locating additional sources of funding can enable the submission of more / better targeted proposals leading to more projects being funded. Costing can also help increase funding by ensuring that the amount of funding requested is maximised; requesting the 'incorrect' amount can decrease funding success.

### Summary

Research Managers and Administrators (RMAs) see the value of investing in Electronic Research Administration (ERA) in terms of the potential to increase the quality and the quantity of research undertaken.

ERA for Costing of grant applications is seen as a quick win with strong positive effects on both quality and quantity.

ERA Pre application funding source identification can increase the quantity of research undertaken, and to a lesser extent, quality.

Overall, all seven identified areas are agreed to increase both the quality and quantity of research; with positive responses ranging from 52.5% (ERA Peer Review increasing quantity) to 81.0% (ERA Pre-Award increasing quantity). Undoubtedly some respondents were more familiar with some areas than others, so perhaps the most telling statistic is that only 39 (6.3% of) respondents were not



positive about ERA in any area improving quality or quantity of research; and of these only 2 (0.3% of the total) thought that all areas would have a negative impact on both quality and quantity.

It should also be remembered that a crucial feature of any IT system is its usability (as many commented on in the free text responses); is it intuitive and easy to use and does it meet the needs of the various different types of users?

Further analyses can be found in the full report available to ARMA members at:  
[https://www.arma.ac.uk/files/members/resource\\_directory/Research\\_Information\\_Management/ERAMainSurvey-feedback.pdf](https://www.arma.ac.uk/files/members/resource_directory/Research_Information_Management/ERAMainSurvey-feedback.pdf)

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## Electronic Research Administration – Perceptions

### Overview

In the latter part of 2010 and early 2011 a survey was undertaken into the perceptions of staff to Research Management and Administration (RMA) and Electronic Research Administration (ERA). The survey elicited 191 responses, of which 182 contained sufficient data for some analysis and 150 completed the entire questionnaire. The respondents were members of staff at universities: academic staff; research managers and administrators and other staff. They were asked about their perceptions on whether different aspects of RMA could affect the quality and/or quantity of research undertaken; the questionnaire can be viewed<sup>1</sup> on-line.

The resounding conclusion is that all types of staff do believe (in differing degrees) that all aspects of RMA and ERA systems that support them do have a positive effect on the quality and the quantity of research undertaken. This report outlines differences in the various responses and discusses the possible reasons for them.

### Definitions

For the purposes of the questionnaire the following definitions are adopted:

**RMA:** Research Management and Administration; any task in support of any part of the research lifecycle (examples are given in the questions)

**RMAs:** Research Managers and Administrators; those members of staff in an institution whose job is to (or includes) performing the tasks of RMA as above.

**ERA:** Electronic Research Administration; any IT based system(s) specifically designed to support RMA, as opposed to generic IT tools (eg email or spreadsheets) used in RMA.

**Quality:** in terms of originality, significance and rigour, as used in the UK wide Research Assessment Exercises that the respondents will have been familiar with.

**Quantity:** in terms of research income. Is the research more likely to be funded; is the funding likely to be more generous; are more applications (with a chance of being funded) being produced...?

### Questionnaire

The questionnaire development was informed by previous work<sup>2</sup> by the author looking at the perceptions of research managers and administrators to ERA systems. The questionnaire was developed in SurveyMonkey<sup>3</sup> It was trialled by a series of users: locally at the University of

<sup>1</sup> <http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/Internal/ERA%20Survey/ERAAcademSurveyquestionnaire.pdf>  
<sup>2</sup> <http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/Internal/ERA%20Survey/ERAMainSurvey-feedback-executive-summary.pdf>  
<sup>3</sup> [www.surveymonkey.com](http://www.surveymonkey.com)

Sunderland; by research managers and administrators from other universities and finally by academic staff from other universities. There were no major changes required and the questionnaire went live in Dec 2010.

### Survey

Initial emails were sent to ARMA<sup>4</sup> members. ARMA ERA special interest group members and staff at the University of Sunderland on 4<sup>th</sup> Dec 2010. Reminders were sent on Dec 13<sup>th</sup>, 14<sup>th</sup> and 19<sup>th</sup> to the various groups. Final reminders were sent on Jan 10<sup>th</sup> and 31<sup>st</sup>, with the latter eliciting only two additional responses. The survey was closed on Feb 6<sup>th</sup> after having been open for approximately nine weeks including the Christmas vacation period. There were 191 responses in total, with 182 of them answering some of the questions and 150 completing the entire questionnaire. There were initially 194 responses but 3 of them were pruned from the data that was analysed due to inconsistent responses (for example one respondent had selected the first answer for all questions, making them a senior manager on the lowest salary band, never having worked at the institution).

### Research Question

The main aim of the questionnaire was to determine whether or not academic staff had different perceptions to RMA and ERA as compared to research managers and administrators themselves. Previous work<sup>5</sup> by the author has shown that the latter overwhelming believe that that they can improve the quality and quantity of research undertaken at their institutions, and that ERA systems can have a further positive effect. So, do academic members of staff share this rosy view or do they believe that RMAs and ERA systems hinder rather than help their research efforts?

### Analysis

Initial analysis was provided from SurveyMonkey, with more advanced statistical analysis being undertaken with the response data downloaded into in Excel<sup>6</sup> and SPSS<sup>7</sup>.

### Respondent Types

In order to address the main research question, the data must first be split by respondent type. Q11 asked respondents to classify themselves into one of seven roles (variable JobType in SPSS):

JobType				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Senior Manager	12	6.6	7.6	7.6
Academic	73	40.1	46.5	54.1
Researcher	4	2.2	2.5	56.7

<sup>4</sup> [www.arma.ac.uk](http://www.arma.ac.uk); the association of research managers and administrators in the UK with around 1600 members  
<sup>5</sup> <http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/Internal/ERA%20Survey/ERAMainSurvey-feedback.pdf>  
<sup>6</sup> [office.micrsoft.com/en-us/excel/](http://office.micrsoft.com/en-us/excel/); version 2007 was used for the analysis  
<sup>7</sup> [www.spss.com/uk/](http://www.spss.com/uk/); version 16 was used for the analysis

Research Manager	19	10.4	12.1	68.8
Research Administrator	44	24.2	28.0	96.8
Other	5	2.7	3.2	100.0
Total	157	86.3	100.0	
Missing System	25	13.7		
Total	182	100.0		

Note that there were no responses for the role of Research Student.

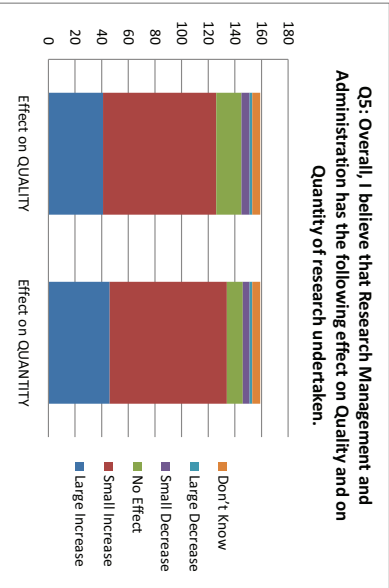
Given the relatively small number of responses overall, in order to perform the comparative analysis JobType was re-coded into a new variable Academic\_or\_RMA. With Academic and Researcher being grouped into Academic, and Research Manager and Research Administrator being grouped into RMA and other responses disregarded (coded as system missing).

Academic_or_RMA				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Academic	77	42.3	55.0	55.0
RMA	63	34.6	45.0	100.0
Total	140	76.9	100.0	
Missing System	42	23.1		
Total	182	100.0		

This means that comparative analysis can be undertaken with (n=140) responses, with a roughly equal number (77:63 split) from each group.

Overall Perceptions to RMA effects on Quality and Quantity

Q5 asked about the overall effect of Research Management and Administration on research quality, using a 5 point Likert scale (large increase, small increase, no effect, small decrease, large increase) and a Don't Know option. Another line in the question asked about effect on quantity:



It can clearly be seen that overall the respondents (n=159) looked favourably on the effects that Research Management and Administration (RMA) have on both the quality and to a slightly greater extent the quantity of research undertaken.

Given the small number of negative responses (15 in total across the two questions) it was decided to amalgamate the two answers into one group (and hence also the two positive categories into one group) in order to attempt statistical analysis.

Comparison of Academic and RMAs' perceptions to RMA effect on Quality

Looking at the aggregated Likert scale responses (Increase, No Effect, Decrease) from Academic and RMA respondents only we can attempt to determine if the two groups have different perceptions.

The data for the effect of RMA on quality shows:

		Crossstab			
		Question			
Academic_or_RMA	Academic	Increase	No Effect	Decrease	Total
	Count	51	16	6	73
	% within Academic_or_RMA	69.9%	21.9%	8.2%	100.0%
RMA	Count	59	2	1	62
	% within Academic_or_RMA	95.2%	3.2%	1.6%	100.0%
	Total	110	18	7	135
	% within Academic_or_RMA	81.5%	13.3%	5.2%	100.0%

This indicates that Academic members of staff have a less favourable view of the effect of research management and administration on research quality than research managers and administrators themselves do. This is perhaps unsurprising after all one would expect RMAs to believe that their

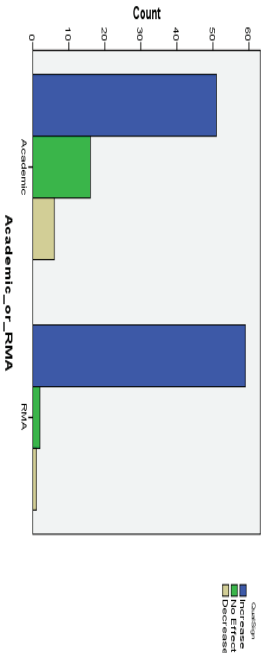
jobs make a difference and this is reflected in other studies<sup>8</sup>. Conversely it is reassuring that Academic members of staff also appear to appreciate the help and support that RMAs provide. However in order to determine if this apparent difference is statistically significant a chi-squared test is required:

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.240 <sup>a</sup>	2	.001
Likelihood Ratio	16.043	2	.000
Linear-by-Linear Association	11.904	1	.001
N of Valid Cases	135		

a. 2 cells (.333%) have expected count less than 5. The minimum expected count is 3.21.

This does seem to indicate that there is a significant  $\chi^2(2, N=135) = 14.240, p=.001$  difference between the sets of responses, but because there are so few negative responses, the chi-square test fails its validity check; the expected response rate is less than 5 for them.

Responses by Type to the effect that RMA has on the Quality of Research Undertaken



However, looking at the graphs clearly indicates that there is a difference between the perceptions of Academic staff and Research Managers and Administrators in this respect, but more responses (or at least more negative responses) would be required to allow for a valid chi-squared test to be performed. By further grouping the No Effect and Decrease answer options together:

<sup>8</sup> [http://www.amaa.ac.uk/files/guest/conference\\_images/Sunderland\\_Kerridge.pdf](http://www.amaa.ac.uk/files/guest/conference_images/Sunderland_Kerridge.pdf)

Academic_or_RMA * QualPos Crosstabulation					
		QualPos			
		Increase	Decrease or No Effect	Total	
Academic_or_RMA	Academic	Count	51	22	73
		% within Academic_or_RMA	69.9%	30.1%	100.0%
	RMA	Count	59	3	62
		% within Academic_or_RMA	95.2%	4.8%	100.0%
	Total	Count	110	25	135
		% within Academic_or_RMA	81.5%	18.5%	100.0%

A chi-squared test can then be performed and shows a significant difference  $\chi^2(1, N=135) = 14.220, p<.0005$  between the perceptions of Academic staff as compared to RMAs as to whether research management and administration can have a positive effect on the quality of research undertaken.

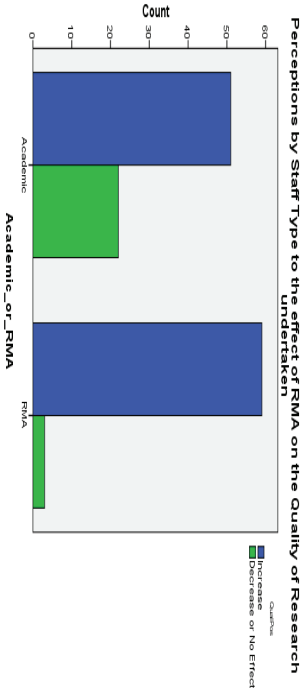
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.220 <sup>a</sup>	1	.000		
Continuity Correction <sup>b</sup>	12.583	1	.000		
Likelihood Ratio	15.996	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	14.115	1	.000		
N of Valid Cases	135				

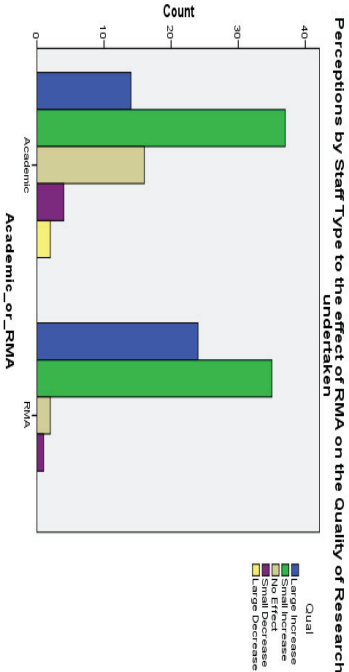
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.48.

b. Computed only for a 2x2 table

Again this is also seen clearly when shown graphically.

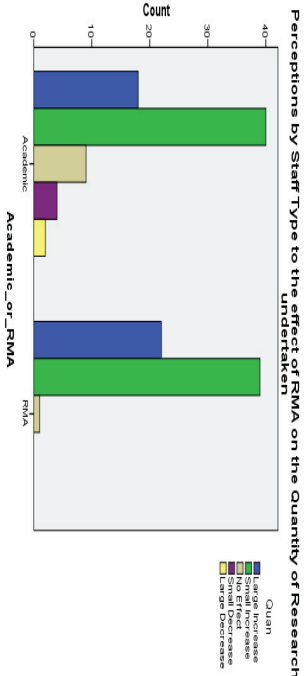


After all of the data aggregation it is worth reflecting on the original source data to remind ourselves of the spread of answers across the likert scale.



### Comparison of Academic and RMA's perceptions to RMA effect on Quantity

Looking at the perceptions to the effect of research management and administration on the Quantity of research undertaken a similar profile in the responses of academic staff (to the left) and research managers and administrators (to the right) is seen. Almost all RMAs have a positive view of their ability to increase the quality of research undertaken, this view is echoed by some academic staff, but by no means all.



Conflating the positive responses into one group and all other responses ("no effect" and negative) into another gives the following data:

Academic_or_RMA * QuanPos Cross-tabulation					
		QuanPos			
		Increase	Decrease or No Effect	Total	
Academic_or_RMA	Academic	Count	58	15	73
		% within Academic_or_RMA	79.5%	20.5%	100.0%
	RMA	Count	61	1	62
		% within Academic_or_RMA	98.4%	1.6%	100.0%
	Total	Count	119	16	135
		% within Academic_or_RMA	88.1%	11.9%	100.0%

With a chi-squared analysis showing a statistically significant  $\chi^2(1, N=135) = 10.506, p=.001$  difference in the pattern of responses.

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.506 <sup>a</sup>	1	.001		
Continuity Correction <sup>b</sup>	9.765	1	.002		
Likelihood Ratio	13.878	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	11.420	1	.001		
N of Valid Cases	135				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.35.

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.506 <sup>a</sup>	1	.001		
Continuity Correction <sup>b</sup>	9.765	1	.002		
Likelihood Ratio	13.878	1	.000		
Fisher's Exact Test				.001	
Linear-by-Linear Association	11.420	1	.001		
N of Valid Cases	135				.000

- a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.35.
- b. Computed only for a 2x2 table

As with the effect on quality this shows  $\chi^2(1, N=135) = 11.506$   $p=.001$  that the views of academic staff are different from their research management and administration colleagues with respect to the effect or RMA on quantity. However, it should be remembered that both groups are overwhelmingly positive about the effects of research management and administration on the quantity of research undertaken.

Overall comparison of the effect of RMA on quality and quantity

Using the Wilcoxon signed ranks test on the responses, we can determine whether or not there is an overall view that research management has a more positive effect on quality or quantity:

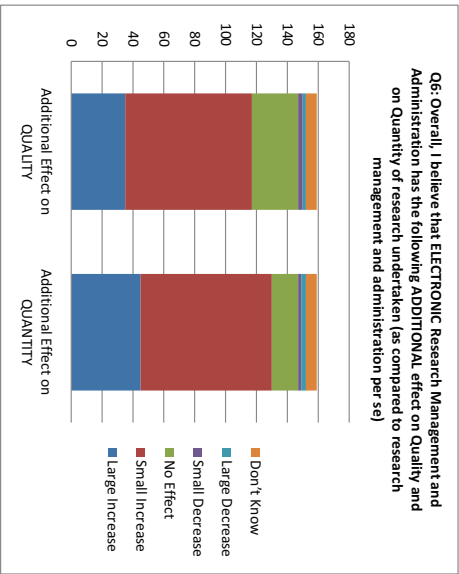
Test Statistics <sup>a</sup>	
	QualPos - QuanPos
Z	-1.566 <sup>a</sup>
Asymp. Sig. (2-tailed)	.117

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

It can be seen that whilst there is an indication the RMA may affect quantity more than quality there is in fact no significant different  $Z=1.560$ ,  $p=.117$  between the overall perceptions as to whether RMA affects Quality and Quantity of research. This is reflected in the analysis of the original data with the complete 5 point Likert scale (and "Don't Know"), with  $Z=1.465$ ,  $p=.143$ :

Additional Effects of Electronic Research Administration

The respondents were also asked, Q6, to indicate (on the same 5 point and "Don't Know" scale) what additional effect the use of ERA systems has on the Quality and Quantity of research.



These overall results ( $N=159$ ) appear similar to those for the effects of RMA, with the general view overwhelmingly being positive for the effect on Quality and apparently even more so for the effect on Quantity. This time there were even fewer negative responses (10 across the two questions) and so aggregation is again required in order to attempt tests for statistical significance.

Comparison of Academic and RMA perceptions to ERA effect on Quality

As there are so few negative responses, in order to perform a chi-squared analysis, some aggregation is again required. The Likert scale responses are grouped (Large Increase, Small Increase) and (No Effect, Small Decrease, Large Decrease) from Academic and RMA respondents only.

Academic_or_RMA * EqualPos Crosstabulation		EqualPos		
		Increase	Decrease or No Effect	Total
Academic_or_RMA	Academic	Count 45	Count 27	Count 72
		% within Academic_or_RMA 62.5%	% within Academic_or_RMA 37.5%	% within Academic_or_RMA 100.0%
	RMA	Count 54	Count 8	Count 62
		% within Academic_or_RMA 87.1%	% within Academic_or_RMA 12.9%	% within Academic_or_RMA 100.0%
Total		Count 99	Count 35	Count 134

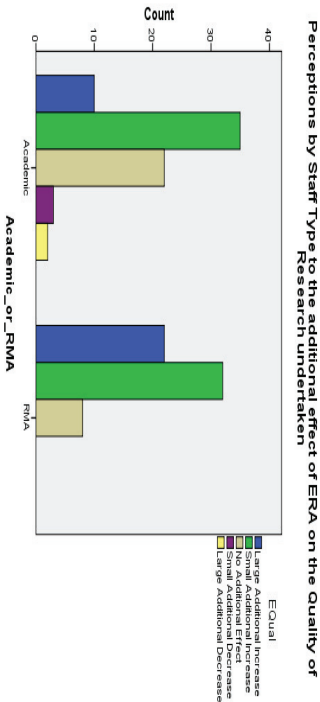
Academic_or_RMA * EqualPos Cross-tabulation				
			EqualPos	
			Increase	Decrease or No Effect
Academic_or_RMA	Academic	Count	45	27
		% within Academic or RMA	62.5%	37.5%
	RMA	Count	54	8
		% within Academic_or_RMA	87.1%	12.9%
Total	Count	99	35	134
	% within Academic or_RMA	73.9%	26.1%	100.0%

This indicates that Academic members of staff have a less favourable view of the effect of Electronic Research Management and Administration on research quality than research managers and administrators do. Due to the aggregation the expected cell counts are now all above 5 and so we can use the chi-squared test.

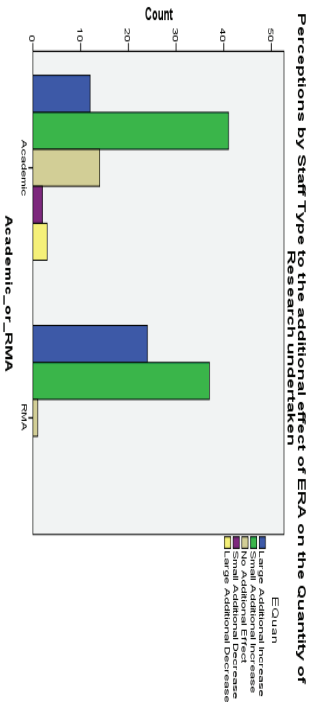
Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	10.444 <sup>a</sup>	1	.001	
Continuity Correction <sup>b</sup>	9.209	1	.002	
Likelihood Ratio	10.965	1	.001	
Fisher's Exact Test				.001
Linear-by-Linear Association	10.366	1	.001	
N of Valid Cases	134			

- a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.19.
- b. Computed only for a 2x2 table

This shows that the results are  $\chi^2(1, N=134) = 10.444$   $p=.001$  statistically different. Research Managers and Administrators do indeed believe more strongly than academic staff that ERA systems can positively effect the quality of research undertaken. This can also be seen visually by looking at the original un-aggregated Likert scale data.



**Comparison of Academic and RMA perceptions to ERA effect on Quantity**  
A similar picture can be seen when looking at the perceptions to the additional effect of ERA on the Quantity of research undertaken.



Whilst the RMAs again appear to be more positive than the academic staff, it also seems that both groups of staff believe that ERA can affect the Quantity of research more than the Quality of research. Intuitively, this seems to make sense, it is easy to imagine that ERA systems could enable more proposals to be submitted, but perhaps less easy to imagine the proposals resulting in higher quality research. Indeed, it might have been expected that there would be little or no effect on the Quality of research undertaken; this issue warrants further investigation.

Returning to the aggregation of results into positive (increase) and non-positive responses for statistical analysis we see that:



		EQUanPos			
		Increase	Decrease or No Effect	Total	
Academic_or_RMA	Academic	Count	53	19	72
		% within Academic_or_RMA	73.6%	26.4%	100.0%
	RMA	Count	61	1	62
		% within Academic_or_RMA	98.4%	1.6%	100.0%
Total		Count	114	20	134
		% within Academic_or_RMA	85.1%	14.9%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	16.105 <sup>a</sup>	1	.000		
Continuity Correction <sup>b</sup>	14.213	1	.000		
Likelihood Ratio	19.600	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.985	1	.000		
N of Valid Cases	134				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.25.  
b. Computed only for a 2x2 table

There is indeed a statistical difference  $\chi^2(1, N=134) = 16.105, p<.0005$  between the responses from Academic staff and RMA staff in respect to their perceptions of the effect that ERA systems have on the Quantity of research undertaken.

Taking all the responses together, without data aggregation, we can confirm whether or not there is an overall difference in the perceptions of staff to the effects of ERA on Quality and Quantity by using the Wilcoxon signed ranks test:

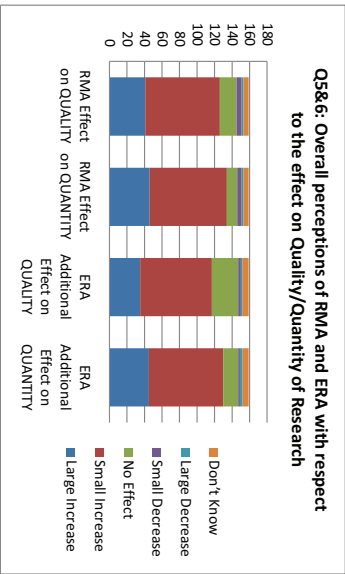
Test Statistics <sup>a</sup>	
Z	-2.703 <sup>a</sup>
Asymp. Sig. (2-tailed)	.007

a. Based on positive ranks.  
b. Wilcoxon Signed Ranks Test

It can be seen that there is a statistical difference  $Z=2.703, p=.007$  between the responses to the effects of ERA on Quality and Quantity; this was not the case for the effects of RMA on Quality and Quantity.

Electronic Research Administration (ERA) is seen as having a more positive effect on the Quantity of research as opposed to the Quality of research; although the effects on both are overwhelmingly positive. For the effect that Research Managers and Administrators (RMAs) themselves have, there is no appreciable difference; the positive effect on the Quality and Quantity of research is the same.

Summary of Overall Perceptions  
Q5&6: Overall perceptions of RMA and ERA with respect to the effect on Quality/Quantity of Research



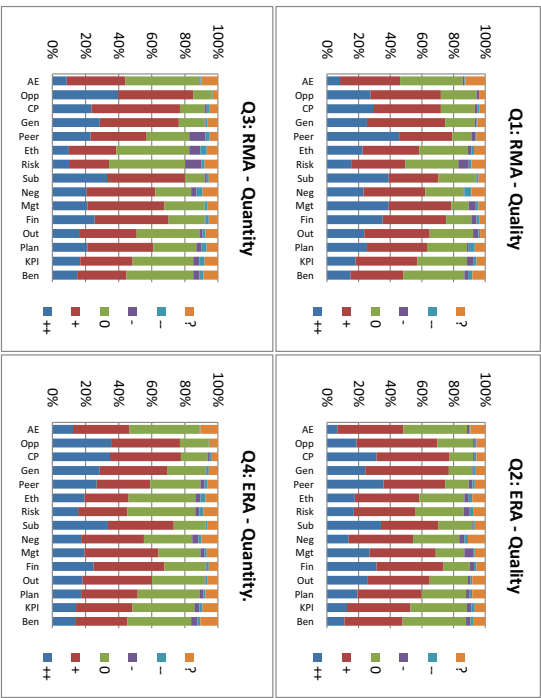
This chart clearly shows that RMA and ERA are perceived to increase both the quality and quantity of research undertaken. It has been shown, statistically, that Academic staff are less positive about the effects of RMA, and the additional effects of ERA on both the Quality and Quantity of research undertaken when compared to research managers and administrators. Whilst respondents in general believe that ERA affects Quantity more than it affects Quality, there was no statistical difference between the effects that RMA per se has on Quality and Quantity of research.

Perceptions on specific elements of RMA and ERA

As well as asking for overall perceptions, the questionnaire also divided RMA (and hence ERA) into 15 areas and asked for specific perceptions of the effect of each area on the Quality and Quantity of research undertaken. The 15 areas are:

Area of Research Management and Administration	Short Code
Academic Expertise (eg mini CVs in an annual report)	AE
Funding source identification (eg "have you seen this call for proposals?")	Opp
Costing of proposals (eg using a calculator / spreadsheet)	CP
Support for generic parts of proposals (eg University info, or project management)	Gen
Internal Peer Review	Peer
Ethical Review	Eth
Risk Assessment (eg lone-worker issues, intellectual property rights)	Risk
Proposal submission support (getting the proposal to the funder)	Sub
Contract negotiation (changes to price, terms, timescales etc)	Neg
Project management of the research	Mgt
Financial management of the research	Fin
Output and impact recording (eg Annual Report)	Out
Research planning / strategy (eg prioritise Research Council funding)	Plan
Key Performance Indicators (eg proposal success rates)	KPI
Benchmarking (eg comparing income with like departments)	Ben

The Short Code is sometimes used in text and charts for brevity.



This cluster of graphs gives an impression of the overall landscape of the effects of different areas of research management and administration (and the electronic systems that support them) on the quality and quantity of research. The graph in the top left (Q1) shows the proportion of respondents that indicated "Large Increase" (++), "Small Increase" (+), "No Effect" (0), "Small Decrease" (-), "Large Decrease" (-) and "Don't Know" (?) for each of the fifteen areas of RMA with respect to its effect on research Quality. The lower left graph shows the same information but in respect to the effect on research Quantity (Q2). The graphs to the right indicate the effect of ERA systems in each area on Quality (Q2, top right) and Quantity (Q4, bottom right).

As the focus of this report is on the differences in perceptions of academic staff and RMAs an in depth analysis of the different areas of Electronic Research Administration is not provided, however some brief conclusions can be drawn.

These charts (N=182 [Quality], N=161 [Quantity]) clearly show that the respondents thought that the different areas of research management and administration (and ERA systems that support them) vary in their effect on the Quality and Quantity of research undertaken.

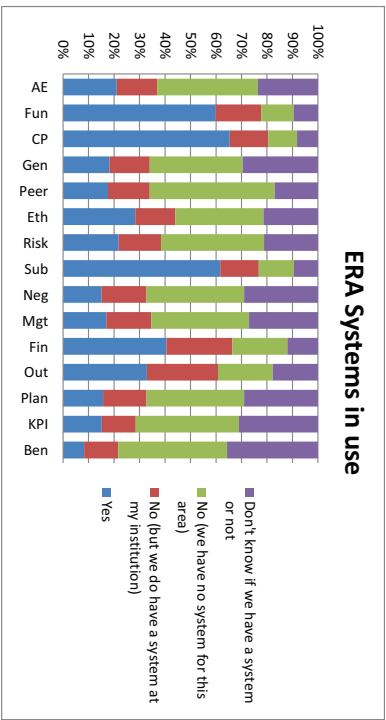
For example, with respect to the effect of RMA on research Quality, Peer Review and Project Management are looked on much more favourably than Academic Expertise and Risk Assessment. These findings are in line with the previous work looking at perceptions of RMAs to ERA.

Looking at the negative responses to the effect of RMA on Quantity, Peer Review, Ethics Review and Risk Assessment are seen by some as the areas that can most lead to a decrease in the quantity of research (Q3). Risk Assessment is also viewed negatively in terms of the effect on the quality of research (Q1), and Ethics Review is also negative, however Peer Review is seen as one of the best ways of increasing quality (at the expense of quantity). Academic Expertise information has one of the lowest proportions of positive indicators for both quality and quantity, but at the same time is not perceived by many to have a negative effect on either.

In terms of ERA systems for the areas, Funding Source Identification, Costing and Pricing and Electronic Submission fare well in terms of increasing the quantity of funding (Q4). In terms of increasing quality the situation is less clear, but ERA systems for Costing and Pricing, Generic Parts of Proposals, Peer Review, Financial Management are the front runners. Again Academic Expertise has the lowest positive indicators for both quality and quantity, but with few negative responses. Ethics Review, Risk Assessment, Benchmarking and KPIs are lower than average in positive responses for increasing quantity. Benchmarking, KPIs, Risk Assessment and Ethics Review, along with Contract Negotiation, are also behind the pack in terms of increasing the quality of research.

ERA systems in use

The chart below shows the relative usage of ERA systems by (N=159) respondents,



As the previous studies have noted, responses to questions on the effect of ERA systems on quality and quantity may well be skewed by the existence and usage of ERA systems. Indeed it seems likely that Funding Source Identification, Costing and Pricing and Electronic Submission have a high proportion of "increase" effect responses as these are areas where ERA systems have existed for some time, and hence users are able to see the actual benefits rather than having to imagine their potential.

It is interesting to note that whilst five areas have a good penetration of systems in use, all other areas of research management and administration are provided for with ERA systems in at least some institutions. It is also perhaps insightful that for some areas there are a large proportion of "Don't Know" responses; there appears to be an underlying 10% of responders that were not familiar with ERA provision at their institutions, but for some areas an additional 20% did not know whether or not systems were available. As always it appears that internal communication is an issue.

It is also interesting to note that for every area there are some institutions where there is no ERA support (or at least the respondents were sure that this was the case, which perhaps amounts to the same thing).

In summary we can conclude that whilst ERA systems are common in some areas of RMA they are by no means pervasive.

Comparison of Academic and RMA perceptions to the 15 Areas

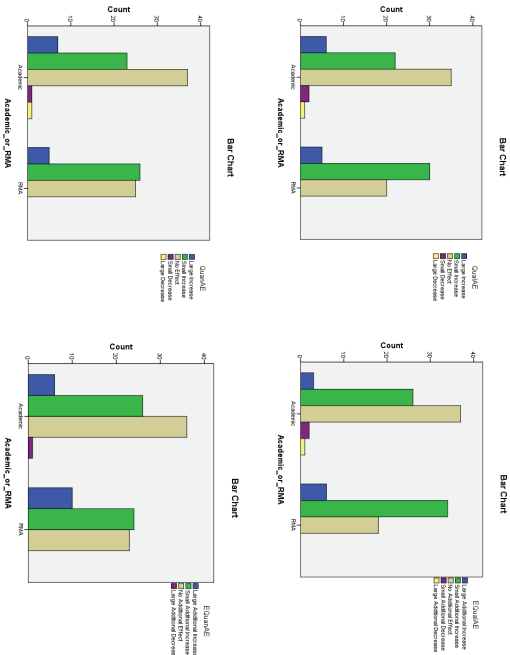
Looking again at the two groups; Academic Staff and Research Managers and Administrators (RMAs) we can compare their responses to the effects of the 15 areas. With the effect on quality and quantity by both RMA and ERA systems making 4 variables for each area, there are 60 possible comparisons that can be made. For completeness each is presented below, although only some enable significant conclusions to be drawn.

Areas of Research Management and Administration

It is useful to look at the perceptions of the two groups to each of the areas of research management and administration in turn in order to get a view of how useful each area is perceived to be in increasing the quality and quantity of research undertaken. In each section four charts are shown, on each the profile of responses from academic staff is shown on the left and from research managers and administrators on the right. In all cases the chart to the top left is for the effect of RMA on quality, to the bottom left is the chart for the effect of RMA on quantity. The charts to the right show the additional effect of ERA systems on quality (top right) and quantity (bottom right).

Academic Expertise (AE)

Information about the expertise and research interests of academic and research staff being available to others, this might be in a newsletter or annual report. An ERA system might be a searchable database, perhaps on the web, for example InfoEd's GENIUS<sup>9</sup>.



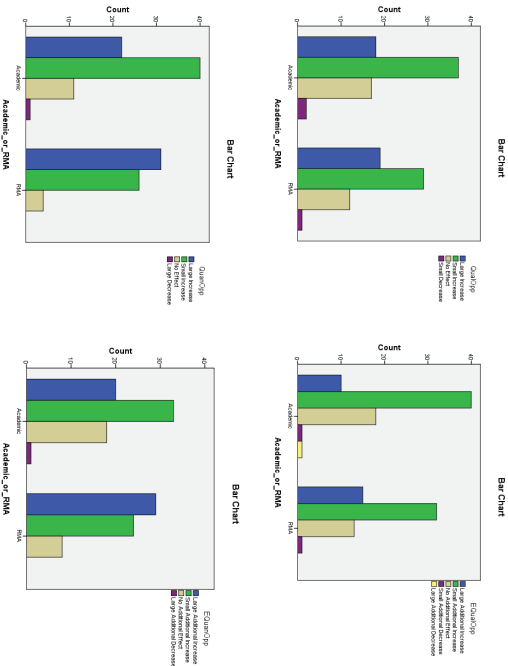
<sup>9</sup> <http://www.infoed.org/GeniusSearch/genius.asp>, an on-line academic expertise database.

In relation to questions on Academic Expertise information, each of these 4 charts above shows the profile of responses from the two groups. On each chart; Academic staff responses are shown to the left, and Research Manager and Administrator (RMAs) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

We can see that no RMAs perceive any negative effects (decreases in quality or quantity), but similarly there are few (relative to the other areas of RMA) positive indications either. However, as with all the areas the overall picture is of a positive effect on the quality and quantity of research by both research management and administration and ERA systems. There is no marked difference between the responses for RMA and ERA systems, perhaps indicating that Academic Expertise information is generally thought to be supported by electronic systems anyway.

**Funding Source Identification (Fun)**  
Providing academic and research staff with information about potential funders of their research and of forthcoming deadlines for proposal submission. Many UK Universities use ERA systems (for example Research Professional<sup>10</sup> and InfoEd's SPIN<sup>11</sup>) to provide targeted funding information to academic staff based on profiles and automated searches.



In relation to questions on Funding Opportunities, each of these 4 charts above shows the profile of responses from the two groups. On each chart; Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

Overall we can see that these are much more positive than the responses for Academic Expertise, with the vast majority being one of the two “increase” options for RMA and ERA effecting quality and quantity. There are no apparent differences between the responses of academic and RMA staff in terms of the effect on quality, however RMAs appear to be more positive about the effects on Quantity both for research management and administration per se, and for ERA systems.

<sup>10</sup> [www.researchprofessional.com](http://www.researchprofessional.com)  
<sup>11</sup> [http://www.infoed.org/new\\_spin/spin.asp](http://www.infoed.org/new_spin/spin.asp)

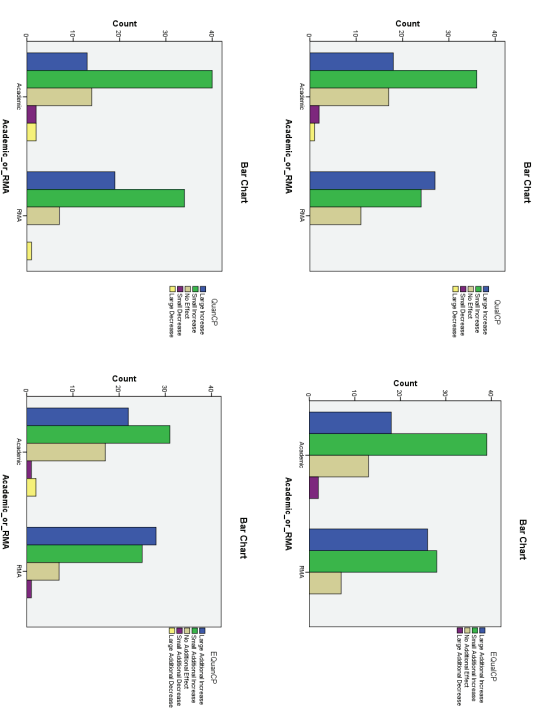
By aggregating all the non positive responses into a single group we can perform a chi-squared on the responses ("Large Increase", "Small Increase", "No Effect or Decrease") to see if there is a statistical difference between the perceptions of Academic staff and RMAs. It is the case that there is a difference,  $\chi^2(2, N=135) = 7.314, p=.026$ ; RMAs are more likely than academic staff to think that a Funding Opportunities system will increase the quality of research, however the latter still strongly support that hypothesis. The picture is the same for the effect on quantity;  $\chi^2(2, N=133) = 6.692, p=.035$ , where RMAs are significantly more positive than their academic counterparts.

Looking at the difference between the effects of ERA Funding Opportunities on quality and quantity, using a Wilcoxon signed ranks test, it is clear  $z=-3.581, N-Ties=80, p<.0005$ , that the effect on quantity is higher than the effect on quality.

We can conclude that Funding Opportunities is an excellent area to invest in ERA in order to increase quality and in particular quantity of research.

Costing of Proposals (CP)

This entails working out salary costs with on-costs, future pay awards and increments, estates and indirect cost calculations, estimating consumable and travel costs, and so on. It also requires a knowledge of funder allowable costs rules and experience of previous bids. It may involve the use of spreadsheets and calculators. As well as in-house tools there are some commercial ERA systems designed specifically for costing and pricing such as pFACT<sup>12</sup>.



In relation to questions on Costing of Proposals, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMAs) responses are to the right:

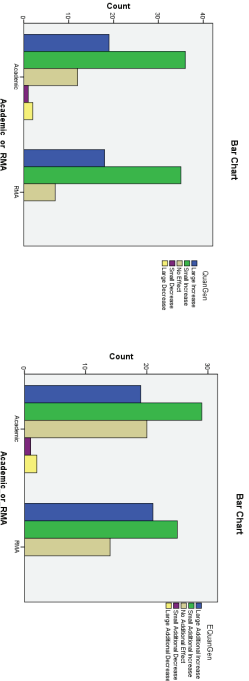
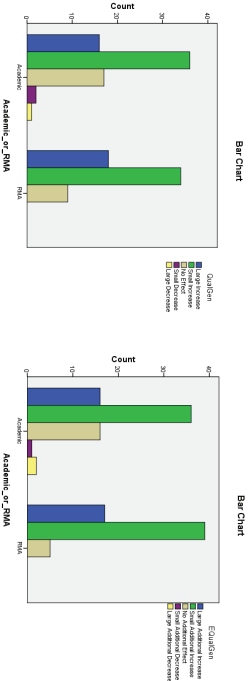
Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

When comparing these graphs with Funding Opportunities it appears that the responses with respect to quality are more favourable for Costing of Proposals. However the situation for the effect on quantity is reversed. The overall pattern of responses from academics and RMAs are broadly similar.

<sup>12</sup> <http://www.unik4software.co.uk/>

It is clear that ERA for proposal costing is appreciated across the board, this may well be influenced by the fact that costing tools have been in common usage for some time and hence their benefits can be realised rather than postulated.

[Support for generic parts of proposals \(Gen\)](#)  
Some information is common across a number of proposals, such as information about the host institution and perhaps project management structures. A research office may have a library of such information from previously successful proposals. An ERA system could provide access to the library without the intervention of the research managers and administrators in the research office.



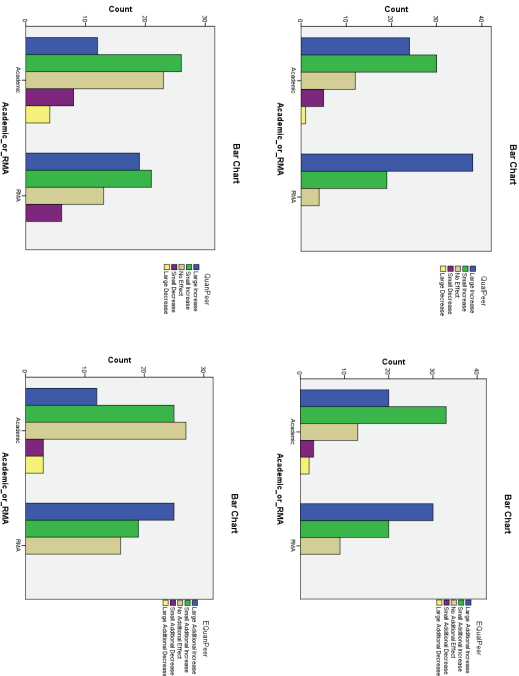
In relation to questions on Generic Proposal Elements, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMAs) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

The graphs for the responses of academics and RMAs appear very similar: there is much agreement that having a library of generic proposals components can increase both the quality and the quantity of research.

This should be a fruitful area to investigate for developing some ERA capability as a low proportion of respondents (particularly when compared to Funding Opportunities and Proposal Costing systems) reported having used such a system.

**Internal Peer Review (Peer)**  
Often funders will use a peer review process to inform their funding decisions. It is considered good practice by many to perform an internal peer review on proposals before they are submitted in order (amongst other things) to improve the quality of the proposal, and hence the chances of securing funding. Some funders are currently looking at making it a requirement of submission that an internal peer review has been undertaken.



In relation to questions on Internal Peer Review, each of these 4 charts above shows the profile of responses from the two groups. On each chart; Academic staff responses are shown to the left; and Research Manager and Administrator (RMA) responses are to the right:

Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

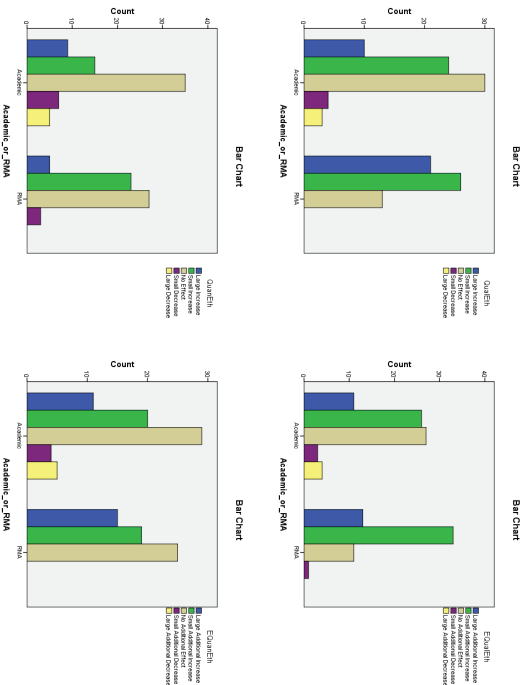
This time there appears to be a difference in the responses between academics and RMAs on all counts, with RMAs seemingly being more positive than their academic counterparts. To check this a chi-squared analysis can be performed, however to avoid low expect cell counts the negative and "No Effect" responses are grouped together. This reveals that for RMA, the effect on quality,  $\chi^2(2, N=133) = 13.724, p=.001$ ; for ERA effect on quality,  $\chi^2(2, N=130) = 7.142, p=.028$ ; and ERA effect on quantity,  $\chi^2(2, N=130) = 10.577, p=.005$ ; that RMAs do indeed view the effect of internal peer review more positively than their academic colleagues. However for the effect of RMA on quantity,  $\chi^2(2, N=132) = 5.430, p=.066$ , then RMAs are in agreement with academic staff.

Anecdotally peer review is reported to increase quality at the expense of quantity, but it is clear that this is not thought to be the case here. Although some responded with decreased quantity many more selected increased quantity. The overall number of No Effect responses was much higher in relation to quantity than quality.

There are relatively few Peer Review ERA systems in use, and these results indicate that effort in this area would reap sizeable benefits, both in terms of doing internal peer review at all, and in terms of using an ERA system to support the process.



**Ethical Review (eth)**  
Often it is desirable, and depending on the research being proposed, a requirement for the proposal to be subject to ethical review. In some ways this is akin to Peer Review but ethics review has particular stipulations for experiments involving humans and animals. Most ERA systems that support Ethical Review are databases and workflow systems.



In relation to questions on Ethical Review, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

When comparing these graphs with those for Peer Review it is clear that Ethical Review is seen by both academic staff and RMAs alike as having less to offer in terms of increasing both quality and quantity of research. As with all areas of research management and administration the overall position is still positive and academic staff and RMAs have similar opinions on the matter.

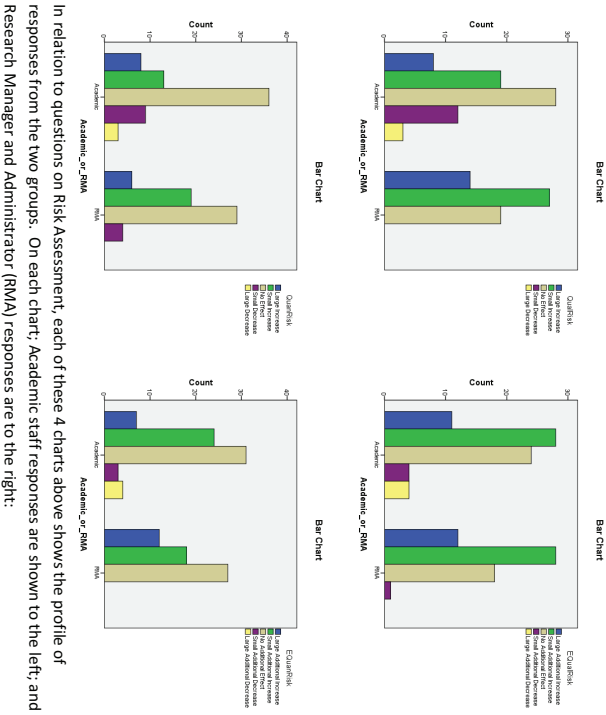
The chart for the effect of RMA on quantity is interesting as it is one of the very few where the number of "Large Increase" responses from academic staff is higher than for RMAs. With the number of negative responses, in order to perform a valid chi-squared analysis we need only aggregate "Large Decrease" and "Small Decrease" into a group. This reveals that this apparent difference is indeed statistically significant:  $\chi^2(3, N=129) = 8.031, p=.045$ ; however it is less clear

what this difference actually is as overall RMAs were more positive. It is clear though the views of academic staff were more extreme, they were more likely to indicate Large effects of RMA on quantity.

In summary Ethical Review is not an area commonly supported by ERA systems, and although there are some perceived benefits, other areas appear to have more potential.

Risk Assessment (Risk)

Risk can come in many forms: financial, reputational, legal, physical and so on. Risk assessment (and mitigation) tries to identify issues and reduce the likelihood and/or potential impact. It might be a lone interviewer is at risk, which can be to some extent mitigated by, for example, providing personal safety training and a personal alarm. Some ERA systems have an element of risk assessment for proposals based on multiple choice questions.



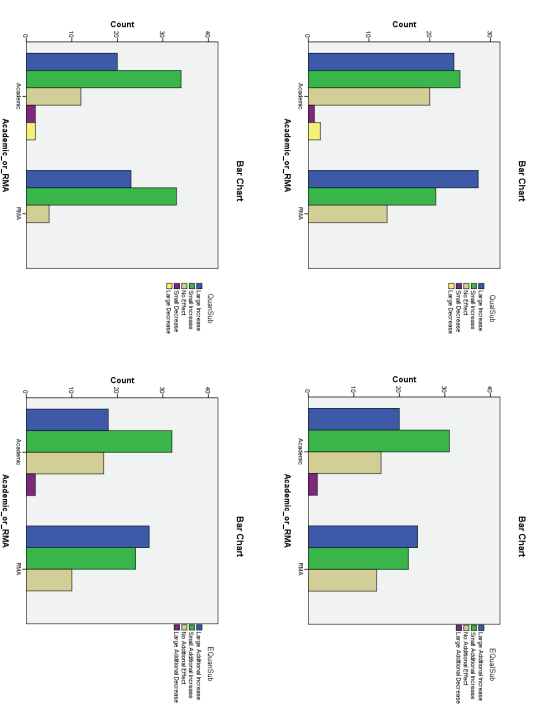
Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

The responses from academic staff and RMAs are fairly similar on each aspect apart from for the effect of risk assessment on the quality of research undertaken. The overriding impression from academic staff is that risk assessment has little or no effect on the quality or quantity of research. However these charts also show some of the highest responses for a decrease in quality and quantity. RMAs are a little more upbeat in terms of quality but tend to agree with the academics in terms of quantity.

Overall, there are few ERA systems for Risk Assessment and the overall impression is that developing them should be a low priority if the intention is to increase the quality and in particular the quantity of research.

Proposal Submission Support (Sub)

After a proposal has been developed it is of course essential that it is delivered to the proposed sponsor with in the correct format with the correct information and signatures and before any deadline. RMAs typically provide such a service. A number of funders now have electronic submission systems; some institutions have internal systems that can generate the required information in the required format. One HEI (Bristol) even has a direct submission system (for financial information) to automatically take information from their system and transfer it to the funder system (in this case the RCUK Je-S<sup>13</sup> system).



In relation to questions on Proposal Submission, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMAs) responses are to the right:

Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

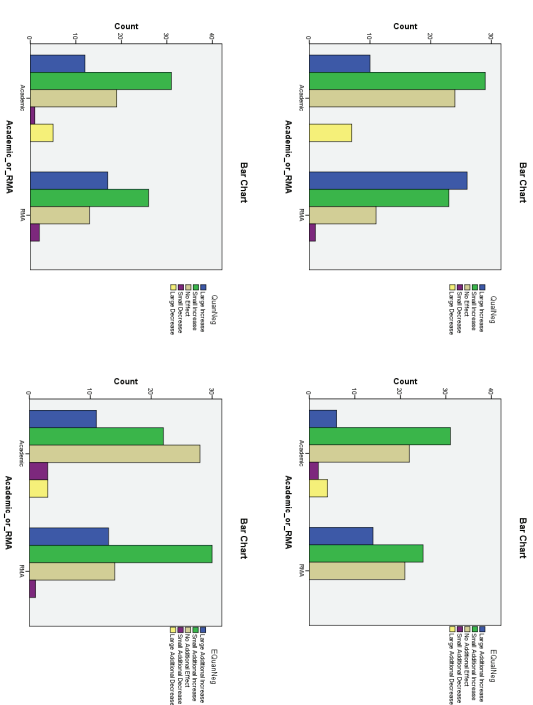
The overall tenor of the graphs is very positive, particularly for the effect on quantity, with the large majority of responses from both groups being positive; and the profiles are similar for each group.

Proposal submission was one of the top three ERA systems in terms of current usage. It is clear that those not currently using ERA systems to support proposal submission are missing out an opportunity to increase both the quality and quantity of research undertaken.

<sup>13</sup> See <https://je-s.rcuk.ac.uk/>

Contract Negotiation (Neg)

Sometimes proposals are funded as submitted, however often there may be changes stipulated by the funder, some funders (particularly commercial ones) are open to negotiation in order to achieve their aims. Negotiation may cover timescales, intellectual property issues, price, and so on. ERA systems to support negotiation tend to be document management systems to support standard clauses and version tracking.



In relation to questions on Contract Negotiation, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

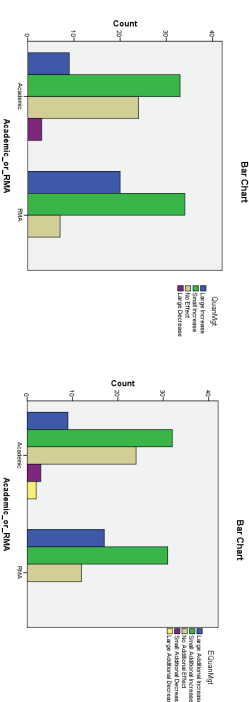
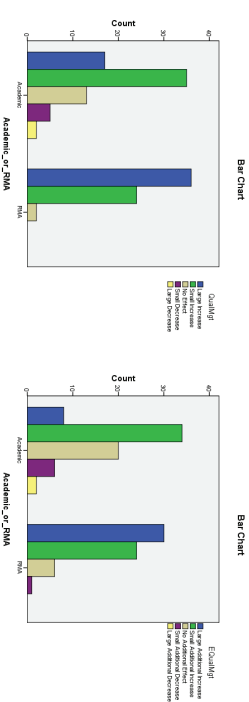
Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

There appears to be some difference in the profiles of responses between the two groups, particularly with regard to contract negotiation affecting quality and ERA support for contract negotiation affecting quantity. To perform a chi-squared test the "Large Decrease", "Small Decrease" and "No Effect" responses are grouped. This reveals,  $\chi^2(2, N=131) = 15.654, p < .0005$ , for RMA effect on quality; and  $\chi^2(2, N=125) = 8.159, p = .017$ , for ERA effect on quantity; whereas the other options do not show a significant difference.

The overall perceived effects of Contract Negotiation are in the middle of the pack and the current usage of ERA systems are low, so it appears that it may be worth investing in this area. The two

groups agree on the effect of ERA on quality, and whilst there is a divergence of opinion with respect to quantify the overall position is still positive.

**Project Management of the research (Mgt)**  
When actually undertaking research, particularly for projects with large teams, there is a need for managing the team of workers which need not be undertaken by researchers. ERA systems can support this process by providing integrated tools to manage the project lifecycle, for example setting and monitoring deliverables and milestones.



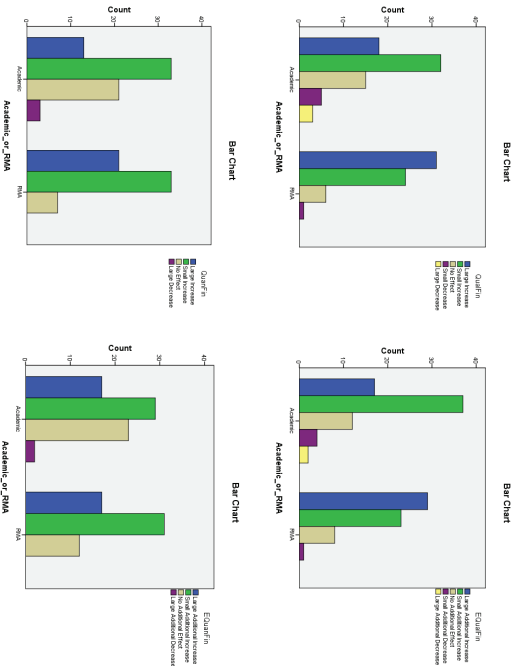
In relation to questions on Project Management, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

These profiles appear markedly different in terms of the responses of academic staff as compared to the responses from RMAs. This can be tested with a chi-squared analysis (by aggregating "Large Decrease", "Small Decrease" and "No Effect" into a single group) and is shown to be the case. For RMA effect on Quality,  $\chi^2(2, N=134) = 22.971, p < .0005$ ; ERA effect on Quality  $\chi^2(2, N=131) = 26.568, p < .0005$ ; RMA effect on Quantity,  $\chi^2(2, N=130) = 15.519, p < .0005$ , and for ERA effect on Quantity,  $\chi^2(2, N=130) = 8.809, p = .012$ . These differences on the whole relate to the magnitude of effect with academic staff tending towards a small increase and RMAs towards a large increase (particularly for the effect on quality).

The overall effects of Project Management are in the upper half of the pack and the use of ERA systems is low so this is potentially a useful area for development. If RMAs are to be believed the potential for increasing the quality of research seems high, but academic staff are not as positive.

**Financial Management of Research (Fin)**  
A particular subset of project management (that is often undertaken by staff from the finance department) is financial management; keeping track of budgets and expenditures, claiming income from funders and providing financial reports. Some ERA systems provide alerts when expenditure is high or low against profile, or simply provide online access to expenditure information.



In relation to questions on Financial Management, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

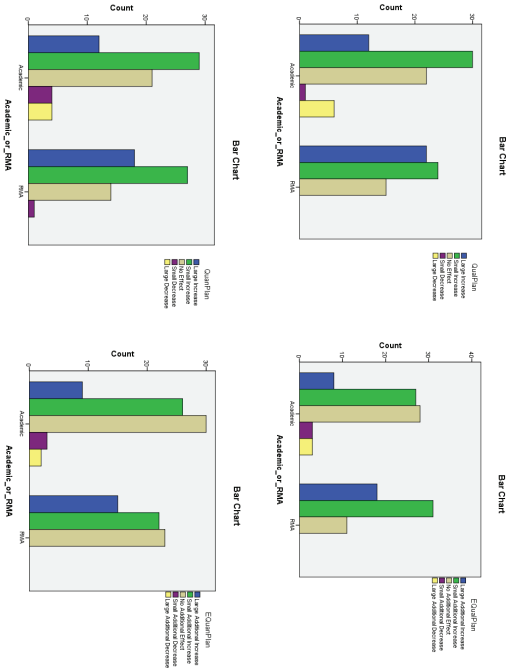
Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

The graphs for the effect of Financial Management on quantity show a strong agreement between the views of academic and RMA staff. In terms of effect on quality though the profile of responses appear rather different; again, aggregating the negative and "No Effect" responses allows a valid chi-squared analysis to be performed. For RMA effect on Quality,  $\chi^2(2, N=133) = 8.546, p = .014$ . Indeed, also for RMA effect on quantity the difference is also significant,  $\chi^2(2, N=131) = 10.637, p = .005$ ; but for ERA effect on quantity,  $\chi^2(2, N=131) = 3.737, p = .154$ , there is no significant difference between the views of academic staff and RMAs.



collection and wider dissemination and linkage is not the best place to focus effort in terms of increasing quality and quantity of research. However, it seems more beneficial than a number of other areas, such as Risk Assessment and Ethical Review.

**Research Planning / Strategy (Plan)**  
Within the overall context of an institution there are often plans and strategic objectives for research; for example to increase research income, or to be listed in the top 100 universities in the world. There are few ERA systems that directly support strategic objectives other than to make them available electronically, and perhaps provide targets for KPIs (see below).



In relation to questions on Planning and Strategy, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

Top left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

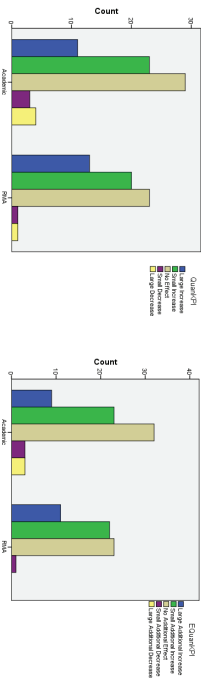
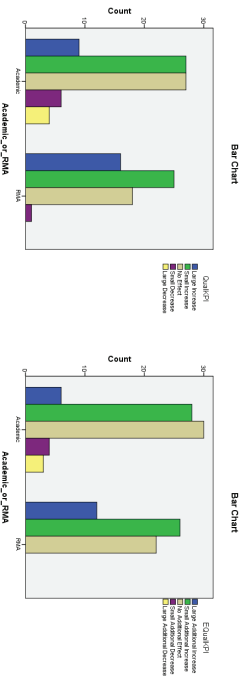
There appears to be good agreement between academics and RMAs in terms of the effect on research quantity. For the quality of research it again appears that RMAs look upon things more favourably than their academic colleagues. Overall there is a reasonably high proportion of "No Effect" responses which leaves the overall increase in the middle of the pack.

There are few ERA systems reported in use and the above graphs to not make a compelling case for the introduction of systems in this area to be a high priority, unless all the other more favourable avenues have already been provided for.



Key Performance Indicators (KPIs)

Many institutions have internal key performance indicators for research, often tied to strategic aims. Examples include number of post-graduate research students, research income, league table position and performance in research assessment exercises; often these are moderated by the number of academic staff employed. ERA systems can report on KPIs by collating information from various sources and processing them as required.



In relation to questions on Key Performance Indicators (KPIs), each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

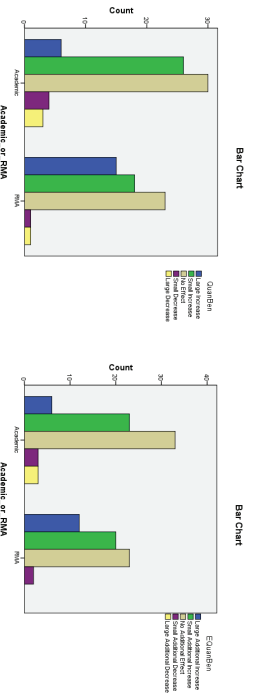
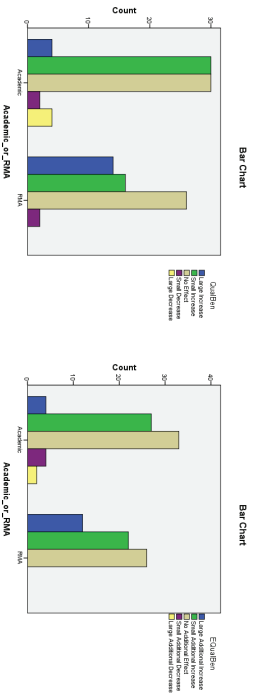
Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

These graphs indicate a good agreement between academic staff and research managers and administrators in regard to the effect of KPIs. There is a large proportion of "No Effect" responses resulting in a relatively poor showing in the overall effect in terms of quality and quantity.

There were a low number of ERA systems reported in use, and whilst useful as a management tool for assessing progress against targets the measuring and reporting of the KPIs did not in themselves have a large expected impact on quality and quantity as compared to, say, Funding Opportunity Identification or Peer Review – which is not surprising.

Benchmarking (Ben)

In effect this is the use of common KPIs between numbers of institutions in order that a relative comparison can be made. These could be defined in terms of a peer group of institutions, the UK as a whole, or indeed worldwide; strategic plans are often elucidated in terms of benchmarks. ERA systems can be used to measure and record benchmark information in much the same way as KPIs, although they often need to be more complex to capture external data. Many benchmarks are provided by external bodies.



In relation to questions on Benchmarking, each of these 4 charts above shows the profile of responses from the two groups. On each chart, Academic staff responses are shown to the left, and Research Manager and Administrator (RMA) responses are to the right:

Top Left: <i>Effect on Quality</i>	Top Right: <i>Effect of ERA on Quality</i>
Bottom Left: <i>Effect on Quantity</i>	Bottom Right: <i>Effect of ERA on Quantity</i>

Unsurprisingly these graphs are very similar to those for KPIs above; the two aspects are very similar in a number of ways and this is reflected in the profile of responses, again characterised by a high level of "No Effect"s. Indeed comparing the responses for KPIs with these for benchmarking shows only one significant difference (for RMA affecting quality);  $z=2.254$  N-Ties=118,  $p=.024$ . The other areas are in agreement (ERA affecting quality,  $z=-1.927$  N-Ties=151,  $p=.054$ ; RMA affecting quantity,  $z=-1.055$  N-Ties=121,  $p=.291$ ; and ERA affecting quantity,  $z=-1.000$  N-Ties=122,  $p=.371$ ).

ERA Benchmarking systems are arguably the rarest of all the fifteen areas and the potential for them to affect the quality and quantity of research appear to be low.

General Comments

Of course this report needs to be read in the context that excellent research management and administration and indeed excellent ERA systems can only do so much, the crucial element is having excellent researchers. However, an excellent researcher that has better support (including RMA and ERA) is surely more likely to be able to do excellent research; and this is borne out in the analysis.

Conclusions

The number of responses means that statistical tests on the raw data cannot in general be undertaken. In particular, the small number of negative responses on the Likert scale questions means that these need to be grouped (and often with the "No Effect" responses) in order to perform analyses. However this does mean that overall the responses can be concluded to be supportive of research management and administration (RMA) and electronic research administration (ERA) systems in terms of their impact on both the quality and quantity of research at an institution.

In general the responses from academic staff were less favourable than those from research managers and administrators themselves, which is perhaps unsurprising. It can be assumed that the RMAs believe that they 'make a difference' otherwise job fulfilment would be very low. However, doing what is best for the institution may not always be what an individual member of academic staff would like; the role of an RMA is a balance between facilitator and gatekeeper. It is however heartening for RMAs that a large proportion of academic staff do appreciate the research support that they get in terms of believing that RMAs and ERA can contribute in a positive manner to the quality and quantity of research that is conducted.

Increasing Quality

In terms of Research Management and Administration (RMA), the following rank order (by response median) of areas that can increase the quality of research undertaken is:

Descriptive Statistics				
	N	Minimum	Maximum	Mean
QualPeer	172	1	5	1.72
QualMgt	174	1	5	1.85
QualSub	174	1	5	1.89
QualFin	175	1	5	1.92
QualGen	173	1	5	1.97
QualOpp	175	1	4	1.98
QualCP	175	1	5	1.99
QualOut	176	1	5	2.14
QualPlan	170	1	5	2.15
QualNeg	166	1	5	2.17
QualEth	169	1	5	2.19
QualKPI	172	1	5	2.29
QualBen	167	1	5	2.40
QualRisk	166	1	5	2.40
QualAE	159	1	5	2.40
Valid N (listwise)	142			

With 1=Large Increase, 2=Small increase, 3=No Effect, 4=Small Decrease, 5=Large Decrease

It should be noted that not all positions in the rank ordering are statistically significant. For example, whilst Internal Peer Review appears above Research Project Management in terms of a positive impact on the quality of research undertaken, a Wilcoxon test (grouping all non positive responses) reveals that the former is not significantly  $z=1.592$ ,  $N\text{-Ties}=95$ ,  $p=.111$ , more favoured than the latter. However comparing Peer Review with Subcontracting does reveal that the former is,  $z=-2.278$ ,  $N\text{-Ties}=76$ ,  $p<.023$ , more likely to be considered to increase quality than the latter. So the overall ranking does give a good indication of where best to focus research management and administration efforts in order to increase the quality of research.

Academic Expertise Information, Risk Assessment and Benchmarking were least likely to have a positive effect on quality.

With respect to Electronic Research Administration (ERA), the situation is slightly different with, for example, Costing and Pricing appearing much higher in the rankings.

Descriptive Statistics				
	N	Minimum	Maximum	Std. Deviation
EqualPeer	170	1	5	.885
EqualCP	172	1	5	1.88
EqualSub	170	1	5	1.88
EqualFin	172	1	5	1.91
EqualGen	171	1	5	1.95
EqualOut	167	1	5	1.96
EqualMgt	170	1	5	2.05
EqualOpp	172	1	5	2.06
EqualPlan	167	1	5	2.10
EqualEth	167	1	5	2.20
EqualRisk	168	1	5	2.25
EqualNeg	162	1	5	2.30
EqualPI	170	1	5	2.32
EqualAE	165	1	5	2.38
EqualBen	168	1	5	2.42
Valid N (listwise)	146			2.43

With 1=Large Increase, 2=Small increase, 3=No Effect, 4=Small Decrease, 5=Large Decrease

Increasing Quantity

For those looking to focus on increasing the quantity of research rather than the quality then the views of the respondents indicates the following rank order with respect to the effect of Research Management and Administration.

Descriptive Statistics				
	N	Minimum	Maximum	Std. Deviation
QuanOpp	156	1	5	1.72
QuanSub	162	1	5	1.84
QuanGen	151	1	5	1.91
QuanCP	153	1	5	1.99
QuanFin	152	1	5	2.03
QuanMgt	151	1	5	2.09
QuanNeg	146	1	5	2.21
QuanPlan	150	1	5	2.22
QuanPeer	153	1	5	2.32
QuanOut	149	1	5	2.34
QuanPI	148	1	5	2.40
QuanAE	145	1	5	2.43
QuanBen	147	1	5	2.44
QuanEth	150	1	5	2.63
QuanRisk	148	1	5	2.66
Valid N (listwise)	128			.893

With 1=Large Increase, 2=Small increase, 3=No Effect, 4=Small Decrease, 5=Large Decrease

With respect to the areas of Electronic Research Administration affecting the quantity of research:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
EQuanOpp	153	1	5	1.83	.768
EQuanCP	155	1	5	1.87	.827
EQuanSub	151	1	5	1.89	.821
EQuanGen	152	1	5	1.99	.834
EQuanFin	152	1	5	2.05	.820
EQuanPeer	151	1	5	2.15	.936
EQuanMgt	150	1	5	2.16	.828
EQuanOut	151	1	5	2.20	.800
EQuanNeg	145	1	5	2.28	.894
EQuanPlan	149	1	5	2.31	.853
EQuanAE	144	1	5	2.35	.743
EQuanKPI	146	1	5	2.38	.865
EQuanEth	149	1	5	2.40	.964
EQuanRisk	147	1	5	2.41	.898
EQuanBen	144	1	5	2.42	.874
Valid N (listwise)	129				

With 1=Large Increase, 2=Small Increase, 3=No Effect, 4=Small Decrease, 5=Large Decrease

Summary

There is an overwhelming agreement that research management and administration (RMA) can increase the quality and quantity of research. Further, specific Electronic Research Administration systems can generate an additional increase in both quality and quantity. Research Managers and Administrators themselves were more positive about the benefits of ERA systems than their academic colleagues, but the latter group were still firmly positive.

Looking at the individual areas for RMA and ERA systems there was much variation between them in terms of the ranges of responses. Some of the areas were reported as having different effects on quality and quantity.

Overall the benefits of RMA and ERA are clear and these analyses should help inform where best to focus effort for the desired effect.

## Electronic Research Administration – Perceptions

### Summary of the main findings

*Which areas of ERA are most likely to have a positive impact on research quality and quantity?*

#### Overview

This is an executive summary of the full report that can be found on-line at: <http://www.grs.sunderland.ac.uk/AcademicServices/WebFiles/GRS/Internal/ERA%20Survey/ERAAcademicSurvey-feedback.pdf>, which provides background information and justification of the results outlined below.

#### Background

Research Management and Administration (RMA) is a developing profession whose practitioners aim to support any and all parts of the research lifecycle from funding opportunities, proposal development, post-award as well research students, research information, strategy, ethics, and other related activities. Electronic Research Administration (ERA) is the use of tailored IT systems to aid the tasks that RMAs undertake in support of their academic colleagues. This report summarises the results of a national survey into the perceptions of academic staff and RMAs to ERA systems, and in particular into whether or not the use of ERA systems can affect the quality and/or quantity of research undertaken. It focuses on whether members of academic staff have differing views on the matter to their counterparts working in research management and administration.

#### The Survey

The survey was conducted in the latter part of 2010 and early 2011 and elicited 191 responses, of which 182 contained sufficient data for some analysis and 150 completed the entire questionnaire. The respondents were members of staff at universities: academic staff, research managers and administrators and other staff. They were asked about their perceptions on whether different aspects of RMA could affect the quality and/or quantity of research undertaken; the questionnaire can be viewed<sup>1</sup> on-line. The definitions used for quality of, and quantity of, research are:

**Quality:** in terms of originality, significance and rigour, as used in the UK wide Research Assessment Exercises that the respondents will have been familiar with.

**Quantity:** in terms of research income. Is the research more likely to be funded, is the funding likely to be more generous, are more applications (with a chance of being funded) being produced...?

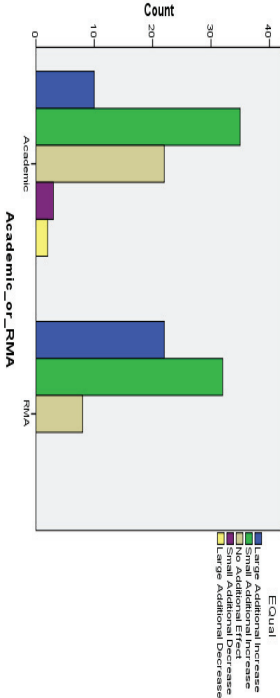
The resounding conclusion is that both groups of staff do believe (in differing degrees) that all aspects of RMA and ERA systems that support them do have a positive effect on the quality and the

<sup>1</sup> <http://www.grs.sunderland.ac.uk/AcademicServices/WebFiles/GRS/Internal/ERA%20Survey/ERAAcademicSurvey-questionnaire.pdf>

quantity of research undertaken. This report outlines differences in the various responses and discusses the possible reasons for them.

### Comparison of Academic and RMA perceptions to ERA effect on Quality

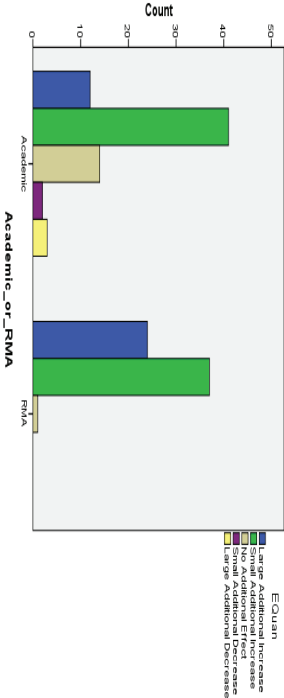
Perceptions by Staff Type to the additional effect of ERA on the Quality of Research undertaken



### Comparison of Academic and RMA perceptions to ERA effect on Quantity

The chart above shows that both groups perceive that ERA has a positive effect on quantity. A similar picture can be seen below, with respect to the effect on quantity of research undertaken.

Perceptions by Staff Type to the additional effect of ERA on the Quantity of Research undertaken



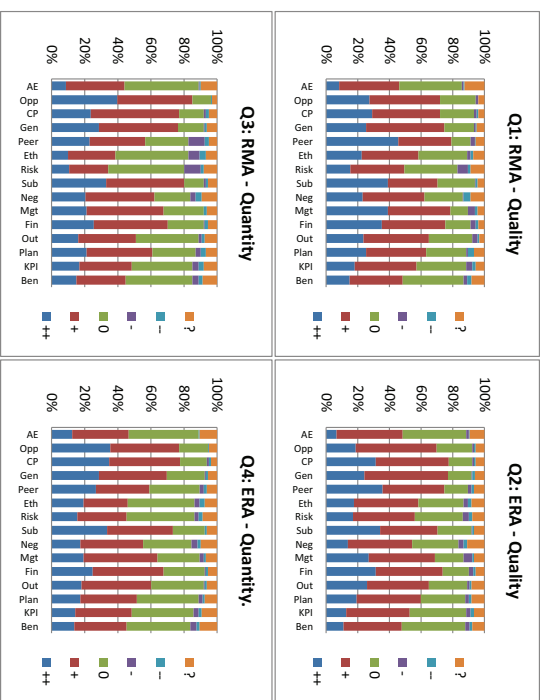
Whilst the RMAs appear to be more positive than the academic staff, it also seems that both groups of staff believe that ERA can affect the Quantity of research more than the Quality of research. Intuitively, this seems to make sense, it is easy to imagine that ERA systems could enable more proposals to be submitted, but perhaps less easy to imagine the proposals resulting in higher quality research. Indeed, it might have been expected that there would be little or no effect on the Quality of research undertaken; this issue warrants further investigation.

Perceptions on specific elements of RMA and ERA

As well as asking for overall perceptions, the questionnaire also divided RMA (and hence ERA) into 15 areas and asked for specific perceptions of the effect of each area on the Quality and Quantity of research undertaken. The 15 areas are:

Area of Research Management and Administration	Short Code
Academic Expertise (eg mini CVs in an annual report)	AE
Funding source identification (eg "have you seen this call for proposals?")	Opp
Costing of proposals (eg using a calculator / spreadsheet)	CP
Support for generic parts of proposals (eg University info, or project management)	Gen
Internal Peer Review	Peer
Ethical Review	Eth
Risk Assessment (eg lone-worker issues, intellectual property rights)	Risk
Proposal submission support (getting the proposal to the funder)	Sub
Contract negotiation (changes to price, terms, timescales etc)	Neg
Project management of the research	Mgt
Financial management of the research	Fin
Output and impact recording (eg Annual Report)	Out
Research planning / strategy (eg prioritise Research Council funding)	Plan
Key Performance Indicators (eg proposal success rates)	KPI
Benchmarking (eg comparing income with like departments)	Ben

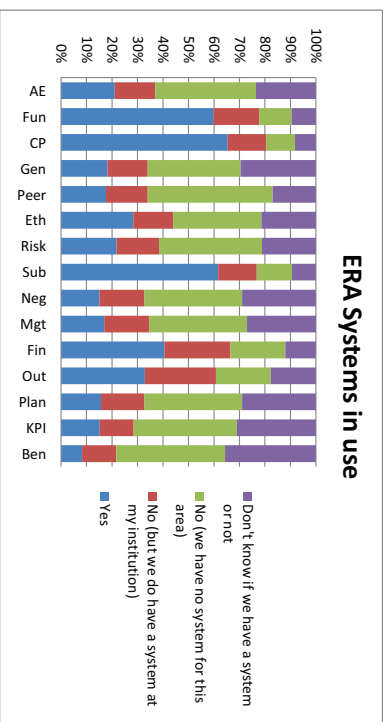
The Short Code is sometimes used in text and charts for brevity.



This cluster of graphs gives an impression of the overall landscape of the effects of different areas of research management and administration (and the electronic systems that support them) on the quality and quantity of research. The graph in the top left (Q1) shows the proportion of respondents that indicated "Large Increase" (++), "Small Increase" (+), "No Effect" (0), "Small Decrease" (-), "Large Decrease" (--), and "Don't Know" (?) for each of the fifteen areas of RMA with respect to its effect on research Quality. The lower left graph shows the same information but in respect to the effect on research Quantity (Q2). The graphs to the right indicate the effect of ERA systems in each area on Quality (Q3, top right) and Quantity (Q4, bottom right).

ERA systems in use

The chart below shows the relative usage of ERA systems by (N=159) respondents.



As previous studies have noted<sup>2</sup>, responses to questions on the effect of ERA systems on quality and quantity may well be skewed by the existence and usage of ERA systems. Indeed it seems likely that Funding Source Identification, Costing and Pricing and Electronic Submission have a high proportion of "increase" effect responses as these are areas where ERA systems have existed for some time, and hence users are able to see the actual benefits rather than having to imagine their potential.

Conclusions

The number of responses means that statistical tests on the raw data are in general not conclusive. In particular, the small number of negative responses on the Likert scale questions means that these need to be grouped (and often with the "No Effect" responses) in order to perform analyses. However this does mean that overall the responses can be concluded to be supportive of research management and administration (RMA) and electronic research administration (ERA) system in terms of their impact on both the quality and quantity of research at an institution.

<sup>2</sup> See: <http://www.grs.sunderland.ac.uk/AcademicServices/WebFiles/GRS/Internal/ERA%20Survey/ERAMainSurvey-feedback.pdf>

In general the responses from academic staff were less favourable than those from research managers and administrators themselves, which is perhaps unsurprising. It can be assumed that the RMAs believe that they 'make a difference' otherwise job fulfilment would be very low. However, doing what is best for the institution may not always be what an individual member of academic staff would like; the role of an RMA is a balance between facilitator and gatekeeper. It is however heartening for RMAs that a large proportion of academic staff do appreciate the research support that they receive, believing that RMAs and ERA can contribute in a positive manner to the quality and quantity of research that is conducted.

**ERA Increasing Quality**

With respect to Electronic Research Administration (ERA), the top areas in terms of increasing the quality of research are: Peer Review, Costing and Pricing, Proposal Submission, Financial Management, and Support for Generic Parts of Proposals. Whilst this ordering is not statistically significant, all of these areas are more highly thought of than some of the other areas lower down the rankings such as Benchmarking and Academic Expertise Information.

It is interesting to note that there are few ERA systems supporting peer review or providing libraries of generic proposal parts, but these areas are perceived to be able to have a large positive impact on the quality of research by academic members of staff and research managers and administrators alike. However, for peer review, whilst they were still overwhelmingly positive, academic members of staff were not as positive as the RMAs.

**ERA Increasing Quantity**

The areas in which ERA was deemed to best be able to help increase the quantity of research were: Funding Opportunities, Costing and Pricing, Proposal Submission, Support for Generic Parts of Proposals, and Financial Management. Benchmarking can again be found at the bottom of the rank ordering, this time with Risk Assessment.

As with for the effect on quality, support for generic parts of proposals figures highly in the ranking, yet there are few systems providing this functionality. Again there is agreement in the responses from academic members of staff and research managers and administrators for this area. It would seem to be a subject warranting further investigation.

**Conclsions for ERA**

Overall, the two groups (academic members of staff, and research managers and administrators) agree that all areas of ERA have a positive effect on both the quality and quantity of research. When looking at the different sub-areas, some areas are more beneficial than others; and in some areas RMAs are more positive than their academic colleagues. However even the lowest ranked area was still deemed to have a positive effect on both quality and quantity by both groups of respondents. The ranking of the sub-areas is different for the effect on quality and quantity (see the full report).

Depending on whether the driver is to increase the quality or the quantity of research (or both) and the current state of ERA systems in an institution then the full report should enable readers to focus their efforts on those areas that are perceived to be able to have the biggest impact.

However, as one respondent put it: *“Administration should not become impersonal. I like the idea that using computers may help administrators but not replace them.”*





2009 CONFERENCE

Session 305: Research Systems

Questionnaire



University of Sunderland

Dear colleague,

I would very much appreciate a couple of minutes of your time to feedback your thoughts on which of the following elements of electronic research management systems (or potential systems) can have a positive effect on the quality and/or quantity of research.

RMAS	Activity	Potential ways to increase Research	Quality	Quantity	Comment	Issues
a	Academic expertise information	increase external visibility better internal knowledge for support for b)			Direct effect on quantity if academic staff are found for collaboration by this route	Are sources of collaboration recorded and analysed?
b	Pre application funding source identification	more funding opportunities more information on opportunities more background (reference) information			Direct effect for previously unknown opportunities. Potential to increase quality with added background info.	Are the sources of opportunities recorded and analysed? How can this be measured in a meaningful way?
c	Costing of grant applications	less likelihood of proposal rejection (finances) more likelihood of sufficient funding if awarded			With sufficient funding the proposed work can be properly undertaken.	Are projects that are unable to fund necessary resources recorded / analysed to check costings?
d/h	Internal Peer review & Ethics review	more likelihood of proposal success less reactive to time sensitive opportunities			Success rates increase Proposal process is longer	Is this measured? How? Is this a good or a bad thing?
e/f/g	Applications and awards management	less chasing for academic member of staff			If done badly, sponsors could pull out of the process.	Is any recording or analysys of the timescales of these processes undertaken?
i.m	Post award financial management	less likelihood of overspend less likelihood of ineligible expenditure less likelihood of underspend more likelihood of early detection of problems less likelihood of missing deadlines			If done badly, sponsors could pull out of the process. If done well funds could be made available to better support research.	Is analysis done on projects that do not complete, and the reasons why? Is analysis done on projects that change funding profiles and how this was enabled?
n/o	Outputs & impact recording and archive	increase external visibility better internal knowledge for support for b) better knowledge of 'worth' of research			These form part of a) Additionally they can show the wider 'worth' of research.	Are outputs linked to projects? Is analysis done on which outputs and impact contribute to future projects?

Please score on a 0..10 point scale, where 0 = no effect and 10 = (potentially) a very high positive effect. Please try to score the potential benefits independently.

If you have any further comments, please add them on the reverse of this sheet

Whilst this survey is confidential, if you would like to be informed of the outcome of the analysis, please put your name and email address here:

Name: ... .. Email: ... ..  
Or just email me (simon.kerridge@sunderland.ac.uk)  
Many thanks! Simon Kerridge

Please note that it is intended that the anonymised results of this questionnaire will be published.

## 4 ESTEEM PORTFOLIO ITEMS

Portfolio items are grouped into these seven areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- ERA Questionnaire (ERAQ)
- **Esteem (Est)**
- Focus Group (FG)
- Historical Items (Hist)
- Profession (Prof)

This section contains the items pertaining to the **Est** area.

### 4.1 Esteem (Est)

These items broadly provide evidence for (either directly or indirectly) my standing in the field, providing underpinning for claims of my deep understanding of the research management and administration arena, particularly in relation to ERA.

After this introduction there is an index table of items in this section (an example is shown below), and the portfolio items themselves follow the index table.

Table 6: Sample Portfolio Index Table (Est)

Ref	Type	Description	Outcome(s)
Estxx	<type>	<title>	Kx, Sx
A short description of item Estxx with its relevance and importance in order to demonstrate the learning outcomes Kx & Sx that they address (K1-2; S1-5, see below for explanations of the learning outcomes). <type> is the type of the item, for example: report, email or presentation. <title> is the title of the item, for example: Invitation to join Steering Group. Estxx is the unique identifier for the portfolio item (xx is a two digit number) which is used to reference it in the doctoral report, or indeed from another portfolio item.			

Each item is described in the table, with two rows of information. The first row of the pair has the portfolio reference, type of document, short description and learning

outcome(s) claimed. The second row describes the context and importance of the item, in order to substantiate the claim towards the learning outcomes listed in the first row. The actual portfolio items follow after the index table.

Note that the numbering is not contiguous as the items presented as evidence have been selected from a larger possible portfolio of items. So for example item Est06, the full 30 page report from the Vitae policy forum, has not been included as the 12 page general report (Est15) provides the same information for the purposes of the portfolio.

Also note that items with confidential sections that have been redacted are indicated with red and those that are abridged have the reference number coloured with orange.

## 4.2 Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner

- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of the seven learning outcomes above, in most cases the listings are restricted to just those outcomes which are the main foci of the item, normally 2 or 3 learning outcomes at the most.

### 4.3 Esteem Portfolio Index

Table 7: Portfolio Index Table for Esteem (Est) Items

Ref	Type	Description	Outcome(s)
Est01	letter	Letter of thanks, re ROCG Membership	K1, S1
A thank-you letter from the Phil Sooben, the Chair of the RCUK Operational Strategy Group (OSG) for my time (2006-2010) as an ROCG Member. The Research Organisation Consultation Group (ROCG) is the primary method of interaction between HEIs (and other research organisations) and RCUK. The ROCG provides input into RCUK policy, in particular in relation to the management of research grants and contracts.			
Est02	email	Invitation to join HEFCE LGM PI Project Steering Group	K1, S2, S3
An email from Jane Wellens, the PI Project Manager from the University of Nottingham, following up from (Est03). I was invited to join as an ARMA representative and subsequently provided input into the project management part of the developed website resource (Prof11): <a href="http://www.vitae.ac.uk/policy-practice/273421/Project-background.html">http://www.vitae.ac.uk/policy-practice/273421/Project-background.html</a> (accessed 25 <sup>th</sup> April 2011). In effect my contribution was to provide a description of the processes of research management for Principal Investigators (PIs).			
Est03	Minutes	of LGM PI meeting where it was suggested that I join	K1, S2, S3
The minutes of the meeting of the Leadership Development for Principal Investigators (HEFCE LGM PI Project) Steering Group at which it was agreed to invite me (and others) to join the steering group – see agenda item 7ii. This item shows my standing in the field, known to have sector-wide experience and knowledge of research management and administration, see (Est02, Prof11)			
Est04	Email	from Pete Dixon, SSC asking for me to be a referee	K1, S3
An email from Pete Dixon the Je-S/GMG Support Manager at the RCUK Shared Services Centre asking me to be a referee on a tender opportunity that they were bidding for. My reply demonstrates a good understanding of the ERA landscape by correctly surmising the proposed system to be developed.			
Est05	Update	From UKRDS SG Chair on progress	K2, S3
This update from Professor John Wood of Imperial College, chair of the UK Research Data Service (UKRDS) Steering Group indicates the value he places on the membership (of which I was one, see Est16). The UKRDS (see <a href="http://www.ukrds.ac.uk/">http://www.ukrds.ac.uk/</a> , accessed 25 <sup>th</sup> April 2011) project tested the viability of setting up a UK repository for storing research data sets. See (Est24) for an example of the work that the project produced.			
Est08	Report	Draft Report on Je-S, sent to me for comment	K1, S1
This is the draft version of a desk study to review the potential for reinvigorating the Je-S costing upload service written by Duke & Jordan Ltd for the JISC Flexible Service Delivery (FSD) programme. I was invited to provide comment on the report due to my expertise in ERA. I was also one of the telephone interviewees for this study.			

Est09	Agenda	UKCGE-ARMA event draft agenda	K1, S1
I was invited by UKCGE to present at this event on Current Issues in Research Management and Administration (this is the programme as originally advertised) but was unable to do so due to a diary clash. So I arranged for Dr Ray Kent (from the ARMA Board and Head of Research Development & Policy Support, Loughborough University), Claire Skinner (Faculty Head of Research Support, University of Leeds) and Dr Mark Mortimer (Director of Research and Enterprise, University of York) to run the workshop on Models of Research Support in my stead (see <a href="http://www.ukcge.ac.uk/events/eventsarea/manandadmin10">http://www.ukcge.ac.uk/events/eventsarea/manandadmin10</a> , accessed 25 <sup>th</sup> April 2011).			
Est10	Email	RO input into proposed Je-S registration options	K1, S1
This email shows my co-ordination role in feeding UK University (and other research organisations) input into shaping the RCUK Je-S system. I gave my feedback to Janet Niven, the Je-S Helpdesk Manager, verbally and agreed to canvass for wider opinion. This is also an example of the use made of the ARMA ERA email list that I set up (see ERA49).			
Est11	Email	Invitation to review JISC RIM proposals	K1, K2, S3
An email invitation to thirty or so UK experts on Research Information Management to review JISC proposals in this area. I evaluated the proposals and took part in the panel ranking in order to determine the projects to be funded.			
Est12	Email	Invitation to join the RMAS project steering group	K1-2, S1-3
The aim of the HEFCE funded RMAS project was to try and develop a sector wide Electronic Research Administration (ERA) system (dubbed a Research Management and Administration System - RMAS), (see <a href="http://as.exeter.ac.uk/rmas/">http://as.exeter.ac.uk/rmas/</a> , accessed 25 <sup>th</sup> April 2011). I was invited to join the project steering group in 2009 after the initial phase of the project. The next phase of the project has been funded (ERA67) and I led the Sunderland pathfinder part of the project (ERA71). The project will develop a procurement framework for an integrated modular 'mix and match' system which will then be made available to all UK Universities. This is probably currently one of the most important projects in the ERA arena in the UK.			
Est13	Email	Thanks for talk and invite to write an article (ResRes)	K1, S3, S4
This is an email from Jeska Harrington Gould, Managing Director at ResearchResearch (see <a href="http://www.researchresearch.com/">http://www.researchresearch.com/</a> , accessed 25 <sup>th</sup> April 2011) thanking me for the presentation (ERA59) that they invited me to give at their London headquarters on research management and administration and the preliminary findings from the ARMA ERA Questionnaire that I undertook. Ehsan Masood, the editor of their UK fortnightly publication on research policy and funding (Research Fortnight) subsequently invited me to write an article for them, see (Prof08).			
Est14	Email	Invitation to join the UUK Open Access group	K1
Invitation to join a Universities UK (UUK) national expert advisory group to update their position statement on open access publication. I was unable to accept because of diary clashes but passed the opportunity on to the ARMA board and Dr Ian Carter, the chair, was able to attend. The current statement is available at: <a href="http://www.universitiesuk.ac.uk/PolicyAndResearch/PolicyAreas/Documents/Research/OpenAccessUUKPolicyStatementSept2005.pdf">http://www.universitiesuk.ac.uk/PolicyAndResearch/PolicyAreas/Documents/Research/OpenAccessUUKPolicyStatementSept2005.pdf</a> , accessed 29th April 2011.			

Est15	Report	From the 2010 Vitae Policy Forum	S1, S3, S4
The report produced from the 2010 Vitae Policy Forum included (p8) some of the points that I made during the stakeholder panel session (see Est17). The Vitae Policy forum is an annual invitation only event for PVCs or equivalent (see <a href="http://www.vitae.ac.uk/researchers/1151-126801/Vitae-policy-forum-2010.html">http://www.vitae.ac.uk/researchers/1151-126801/Vitae-policy-forum-2010.html</a> , accessed 25 <sup>th</sup> April 2011).			
Est16	Web	UKRDS About Us	K2, S3
This shows the steering group of the UK Research Data Service project which I was a member of, see (Est05) and <a href="http://www.ukrds.ac.uk/about">http://www.ukrds.ac.uk/about</a> , accessed 25 <sup>th</sup> April 2011. One of the summary reports can also be seen in the portfolio (Est24).			
Est17	Web	Programme from the 2010 Vitae Policy Forum	S1, S3, S4
Originally Dr Ian Carter was due to take part in this stakeholder discussion, but he was unable to attend. Janet Metcalf, the Chair of Vitae invited me to take his place to provide the view of research managers and administrators in the debate on funding for researcher development. See <a href="http://www.vitae.ac.uk/policy-practice/1151-126801/Programme/Vitae-policy-forum-2010.html#pageInfo">http://www.vitae.ac.uk/policy-practice/1151-126801/Programme/Vitae-policy-forum-2010.html#pageInfo</a> , accessed 25 <sup>th</sup> April 2011. The report from the event (Est15) is also available.			
Est18	Email	Invitation to join UUK FP8 sounding board	K2, S3
An email invitation (which I accepted) to be part of a Universities UK (UUK) sounding board to develop a UK HE position on the European Commission's proposals for Framework Programme 8 (FP8, now called Horizon2020). This group developed a short position statement (see <a href="http://europeunit.ac.uk/sites/europe_unit2/resources/FP8Position.pdf">http://europeunit.ac.uk/sites/europe_unit2/resources/FP8Position.pdf</a> , accessed 29 <sup>th</sup> April 2011) which will directly feed into the UK negotiations on the next framework programme which will distribute billions of Euros of research funding across the UK and Europe. See also <a href="http://fpmatters.europeunit.ac.uk/sites/fpmatters/home/fp8_advisory_group.cfm">http://fpmatters.europeunit.ac.uk/sites/fpmatters/home/fp8_advisory_group.cfm</a> , accessed 25 <sup>th</sup> April 2011.			
Est19	Email	Thanks for reviewing JISC eContent proposals	K1, S1, S3
This email from UK Joint Information Systems Committee (JISC) thanks me for reviewing proposals to the JISC Grant Funding call: e-Content Programme Strand A: Enriching via Collaboration call (I reviewed five proposals) and invited me to the panel meeting (which I was unable to attend; but I sent additional comments for consideration).			
Est20	Email	RO Representative on Je-S Steering Group	K1, S1, S3
The email from the Research Councils shows my appointment to the Je-S 1 Steering Group. This group oversaw the roll out and subsequent developments for the Research Council's joint electronic proposal submission system, Je-S. The first meeting was held on 6 <sup>th</sup> May 2004. In 2006 it became the Je-S Management Board (see Est22) and then in 2011 with the move to the RCUK Shared Services Centre the group was disbanded, my input over the seven years is recounted in (Est22). See also (Est21).			
Est21	Papers	RCUK Je-S Management Board	K1, S1, S3
The agenda and terms of reference for the Je-S Management Board that superseded the Je-S Steering Group see (Est20). This first meeting was 25 <sup>th</sup> Sept 2006 (and the final meeting was on 26 <sup>th</sup> Jan 2011); see (Est22) for an outline of my contributions. After that the responsibility for Je-S developments was moved into the RCUK Shared Services Centre (SSC).			



Est22	Email	Thanks from the Chair of RCUK Je-S Management Board	K1, S1, S3
This email provides confirmation of my role on the Je-S Management Board (Est21; and Steering Group (Est20) before that) and outlines some of my contributions and the esteem in which they are held by the Research Councils.			
Est23	Email	Invitation to join JISC Research Identifiers group	K1, S1
An invitation to join the UK Joint Information Systems Committee (JISC) Research Identifier Task and Finish Group (which I advocated setting up) to advise JISC on an efficient and effective way to assign unique identifiers to researchers (in the UK). This is a prerequisite of being able to create an infrastructure within which research management information can be effectively shared across the sector.			
Est24	Report	UKRDS The Data Imperative, summary report, 2009	K1, S1, S3
The 16 page summary report from the HEFCE funded UK Research Data Service project looking at the business case for a UK wide research data archive service. I sat on the steering group for this project which proposed a two year pathfinder project to demonstrate the feasibility and utility of such a service. See <a href="http://www.ukrds.ac.uk">www.ukrds.ac.uk</a> , accessed 25 <sup>th</sup> April 2011, (Est16) and (Est05).			
Est25	Email	BRUCE Project Advisory Group	S1, S2, S3
The BRUCE project is one of the four JISC RIM2 projects (another is IRIOS, see ERA43, that I led) looking at the use of CERIF in the UK. I provided some informal advice in the generation of the project proposal which contributed to its success and was subsequently invited to join the project advisory board of nine people to help define the draft sector benchmark reports for research activity.			

#### 4.4 Esteem Portfolio Items

(follow on the next page)

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**Mr Simon Kerridge**

Head of Graduate Research Support  
Academic Services  
University of Sunderland  
Edinburgh Building  
City Campus, Chester Road  
Sunderland  
SR1 3SD

5<sup>th</sup> February 2010

Dear **Mr Kerridge**,

**RESEARCH ORGANISATION CONSULTATION GROUP**

On behalf of the Research Councils UK, I am writing to thank you for your services as a member of the Research Organisation Consultation Group (ROCG).

As you are aware no formal meetings are due to take place before your memberships ceases on the 31<sup>st</sup> March 2010. We would however very much like to continue to include you in any email correspondence concerning the group until your appointment ends.

I know that over the period of your membership we have made demands on your time and I would like to say how much your assistance has been appreciated.

Yours sincerely,

Phil Sooben, Chair of Operational Strategy Group

Invitation to join HEFCE LGM funded PI Project Steering Group - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Mail

Write

Address Book

Tag

from Jane Wellens

subject Invitation to join HEFCE LGM funded PI Project Steering Group

to You

reply

reply all

forward

30/03/2010 11:48

other actions

Dear Simon,

I am project manager for the HEFCE LGM funded project 'Leadership Development for PIs'. The project started as a collaboration between Leicester, Loughborough and Cambridge and resulted in the development of the website [www.le.ac.uk/researchleader](http://www.le.ac.uk/researchleader) in 2006. A second bid for funding was successful and this is to further develop web resources to support PIs. Following lots of staff changes etc (which I won't bore you with) the project has now transferred to the University of Nottingham and we will be working with Vitae to develop the web resources which will be hosted on the Vitae website in the area for supervisors/Pis. The project will run to 31 December 2010.

An initial Steering Group meeting was held last month involving those people who had been in the earlier project. I have attached the notes of that meeting for your information. At that meeting it was suggested that you would be an excellent person to invite to join the project steering group because of your role in ARMA. I am writing to ask whether you would consider joining the Steering Group for the project. This will involve attending two Steering Group meetings and providing advice and expert input on the development of the web-resources. The next Steering Group meeting will take place on Thursday 20<sup>th</sup> May 2010 from 11.00 – 13.30 at the University of Nottingham.

I would be very happy to have a telephone conversation if this would be helpful in providing further information about the background to the project and what joining the Steering Group will entail.

I look forward to hearing from you.

With best wishes,

Jane

Jane Wellens  
Head of Researcher Development  
Graduate School  
University of Nottingham  
University Park  
Nottingham NG7 2RD  
UK

Telephone (44) (0)115 8467944

PI Project Ste...s 240210.docx

## Leadership Development for Principal Investigators

### Steering group meeting - notes

24 February 2010

University College, London

#### Present:

Rosie Beales (RCUK), Richard Churcher (UCL), Denise Dear (University of Cambridge), Ross English (Vitae), Eleanor Forward (University of Nottingham), Janet Metcalfe (Vitae), Jane Wellens (University of Nottingham), Andy Wilson (Loughborough University)

**1. Welcome and introductions:** Thanks were expressed to Richard Churcher for hosting the meeting at UCL. Jane Wellens chaired the meeting and Eleanor Forward acted as note-taker.

#### **2. Project background:**

Jane Wellens explained the project background to date. The project had been in response to a HEFCE report, which noticed a gap in provision for PI development. Originally led by Leicester, Cambridge and Loughborough, Phase 1 of the project involved a needs analysis exercise in 2006 and subsequently a range of activities at the three lead institutions. The results of this were that five broad thematic areas of support for PIs had been identified.

During phase 2, UCL came on board as Project Director (with Cambridge and Loughborough as Project Partners). Nottingham Trent was approached as a further partner but there had been no take-up to date. The aims were to continue the development of the web resources and pilot action learning sets in order to provide a set of generic resources which would be available for each institution to customise.

Jane Wellens took over as Interim Project Director following the retirement of John Doig (Leicester). The project was then transferred from Leicester to Nottingham in January 2010. It was agreed that, six years on, the website in its current format didn't meet the intended requirements and there was now a need to revalidate the scope of the project.

#### **3. Vitae involvement**

Janet Metcalfe confirmed that Vitae were happy to become involved in the project and that there were strong synergies with their work. She outlined the Vitae website section for PIs & supervisors, which includes information on supporting researchers. Vitae are keen to expand this and include more developmental resources for PIs, i.e. supporting PIs to support researchers. Janet Metcalfe reported that she was due to meet with Iain Cameron and Kate Reading to discuss this development further.

It was confirmed that Ross English would act as the main Vitae point of contact for the project and that Vicky Wilby would also need to be involved.

Janet Metcalfe questioned the functionality of the proposed web resources – were they intended for individuals to develop themselves or for institutions to develop PIs? Vitae would not wish to compete with institutional resources. Jane Wellens confirmed that the web resources were targeted at individual PIs.

#### **4. Budget**

Jane Wellens outlined the budget and revised project structure. Eleanor Forward will work as the Web Project Officer based at the University of Nottingham to develop the resources. Jane confirmed that there is some funding available for content development. The project runs until 31 December 2010.

#### **5. Review and Revisions of existing materials**

i. It was agreed that the existing modules would need to be updated (some more than others). Jane Wellens reported that there had been some development of content for all themes except for 'Research Finances'. All content had been developed with the original 'Breeze' format in mind but some of this content would be suitable for re-formatting. It was agreed that prior to the next Steering Group, a review/audit of the existing web content ([www.le.ac.uk/researchleader](http://www.le.ac.uk/researchleader)) and the materials already developed, but not yet on the web, should be undertaken. This should identify what materials require updating/revising/abandoning.

**Action Jane Wellens & Eleanor Forward**

ii. Janet Metcalfe agreed to set up a Vitae Basecamp to facilitate sharing of materials

**Action Janet Metcalfe**

iii. The format of the website was discussed. It was agreed that the New PI resources would need to fit with the look and feel of the existing Vitae web resources. Janet Metcalfe explained that Vitae had a number of templates that were used for different audiences/types of pages and thus there was some flexibility. It was agreed that Eleanor Forward should liaise with Vicky Wilby to familiarise herself with the existing Vitae web templates/formats and processes.

**Action Eleanor Forward**

iv. Further discussion highlighted that the resources need to be relevant and easily accessible as PIs have limited time. The resources would also need to match the funding councils' requirements. Existing content had been developed before the introduction of the RDF and the re-launch of the Concordat so these must now be incorporated. The

following were identified as being the key characteristics required of the web resources for PIs

- Materials should be simple and avoid novel/clever functionality
- PIs are likely to access materials in different ways and non-linear ways. Flexibility to move through the resources is essential and this requires good navigation.
- An internal search tool is required within the resource.
- Materials are likely to be required in multiple ways so HTML materials should be available for download as PDF.

v. In addition the following points were raised:

- Denise Dear noted a gap in knowledge for PIs who haven't worked as research staff during their career, i.e. those who have moved straight into a lectureship.
- Rosie Beales suggested that RCUK Fellows might wish to contribute to the web resources.
- The web resources were for new and aspiring PIs but the content should also be relevant to those already working as PIs. Denise Dear reported that the PI Programme at Cambridge was split into three stages according to experience.
- Existing Virae templates such as the ability to post content and allow users to comment should be explored particularly in regard to the case studies/scenarios.

6. **Process for the development of Web Content**

The process and mechanism for reviewing and signing off new web content was discussed. The following process was agreed:

- Content to be written by technical authors who would send to Eleanor Forward
- Eleanor Forward to develop the content into draft web pages ensuring consistency of look, tone etc. and addressing the characteristics addressed in 5 (iv) above.
- Draft web pages to be forwarded to a nominated member of the Steering Group for a quick review. Any immediate problems/issues reported back to Eleanor Forward to address.
- Eleanor Forward sends draft pages to an identified expert reviewer.
- Expert reviewer asked to check content.
- Expert reviewer feedback returned and if acceptable nominated Steering Group member signs off content on behalf of the Steering Group.
- Sign off of content reported to the rest of the Steering Group

7. **Steering Group membership and meetings**

i. It was agreed that two further steering groups were likely to be required during the project lifespan. The next Steering Group should be held in May 2010 and focus on reviewing the findings of the audit of the existing materials and identifying content authors for additional materials. Jane Wellens to identify a date and location for the May meeting.

**Action Jane Wellens**

ii.

The membership of the Steering Group was reviewed. Due to the time elapsed since the original project and the changing nature of the researcher development agenda, it was agreed that the following people should be invited to join the Steering Group.

- **Simon Kerridge** (University of Sunderland)
- Ewart Wooldridge (Leadership Foundation)
- Anne Brook (University of Newcastle)
- Shella Gupta (University of Edinburgh)
- Tom Papworth (Concordat Implementation Officer, UUK)

**Action Jane Wellens**

iii.

Steering Group members should be asked to identify existing resources, materials and technical expertise in each of the thematic areas identified for resource development. A summary document should be developed for the next Steering Group meeting.

**Action Jane Wellens**

8. **AOB - none**

Re: Je-S Reference - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Mail

Write

Address Book

Tag

from Pete Dixon (RCUK, SSC Ltd)★

subject Re: Je-S Reference

to You★

reply

reply all

forward

15/04/2010 07:50

other actions

Pete

Great. Thank you and you are correct this is the Research Outputs Project.

Pete

----- Original Message -----

From: Simon Kerridge

To: Pete Dixon (RCUK, SSC Ltd)

Sent: Thu Apr 15 07:24:42 2010

Subject: Re: Je-S Reference

Yes that is absolutely fine Pete.

I guess this is for the Research Outputs Projects (formerly OOCs).

all the best

Simon

Pete Dixon (RCUK, SSC Ltd) wrote:

Simon,

The SSC have been invited to tender for a piece of work to allow research outcomes to be submitted electronically to the research councils. The SSC bid would propose using Je-S as an entry point to the research outcomes repository and would base the design around that used for Je-S. As someone from the external user community who has been closely involved with Je-S I was wondering if you would be willing to provide a reference for the Je-S team? If you are, I will forward your name and contact details to SSC procurement who will then get in touch and ask you for the reference.

Thanks,

Pete

10 August 2009

Dear UKRDS Steering Committee colleagues,

I thought you might appreciate an update on progress with the UKRDS work. As you know, HEFCE have given a further grant, with another contribution from JISC too, for what is being called the UKRDS Interim Project (IP). This started on 1 June 2009 and is due to finish in early 2010.

The IP involves working with the four original case study universities - Bristol, Leeds, Leicester and Oxford – to identify the data management needs of a representative set of researchers and research groups and to develop a sustainable approach to support provision of suitable infrastructure and skills at institutional level. This will mean working with the libraries, IT services, and research support services in the four institutions on the one hand and with some of the national providers such as DCC and the Research Council data services on the other. The work will dovetail with JISC's research data programme and will also tie in well with studies currently being undertaken by RIN and other bodies including RCUK.

The aim of the IP is to provide some proof of concept for a bid to HEFCE's Strategic Development Fund in early 2010 for the proposed Pathfinder phase for UKRDS. One of the issues of the highest importance is working towards a common understanding of the data management issues with the Research Councils. To this end, HEFCE and JISC staff have been working hard to draft a Memorandum of Understanding that can be signed with the Research Councils. Members of the RCUK's Research Outputs Group have had input into the drafting of the MoU, which is now with HEFCE for approval before going forward.

As chair of the UKRDS steering committee, I believe the role of the steering committee is still significant and I would very much like to keep us together so that we can receive regular updates electronically in the next few months. By the end of the year we would hope to have a draft SDF bid for HEFCE well under way and your input, advice and support will be very important. I hope that you will be willing to continue to engage with UKRDS over the coming months, and indeed we may decide to hold a meeting towards the end of the year to discuss the bid that should take UKRDS to the next, Pathfinder, stage.

As I am sure you know there is much international investment in the study of research data management needs and the UK must play its part to maintain its status as an important base for leading research centres.

With best wishes to you all.

John





before they are submitted. We found that the way in which this was used varied significantly across universities. As a generalisation, those universities with a large number of research proposals tended to allow the principal investigators to make the final cost submission, after agreement has been reached with the centre about the costs and prices to be applied. Universities with fewer submissions tended to submit from the centre. One interviewee noted to us that the upload system changes the relationships embodied within the workflow: the relationship of the J-eS system is with the principal investigator but the provision of the upload facility changes that relationship to one between the system and the research organisation. This is reflected for example in the question of data ownership, who owns the J-eS data on the principal investigator, RCUK or the research organisation employing the principal investigator<sup>4</sup>.

We received some comments on problems with the upload system and this serves to highlight institutional concern about communications with RCUK. One of our interviewees went so far as to say they had only recently become aware of the upload system. There was a widespread feeling that the UAT windows made available for testing were short and not necessarily appropriate to the timeables of universities, who may have had other priorities at those times. In particular, full economic costing was demanded of institutions at about the time that the testing of the upload system began; inevitably, university resources were diverted to dealing with this.

Outside the UAT windows, RCUK would only support testing on a best endeavours basis. It was also noted to us that there has been no meeting between RCUK and universities to discuss the software since a meeting in Swindon in 2004, a meeting described to us as "robust".

Most people we interviewed believed that opportunities for testing had ceased and there was a lack of understanding as to why this is. In fact, one institution is currently testing the system with a view to bringing a production piece of software into operation in the New Year. One interviewee suggested that the cessation of testing is something of a chicken and egg problem. Institutions ceased because they felt they were getting insufficient support from RCUK; RCUK ceased supporting UAT windows because they felt there was insufficient testing. The fact that RCUK would only speak to institutions and not to suppliers also caused difficulty for institutions, most of whom are using commercial software rather than developing the software in-house.

**Comment [SMK10]:** Of the PI themselves

**Comment [SMK10]:** The goal is a bit confused and difficult to follow

**Comment [SMK13]:** Don't agree, since then there has been an RO rep (Management Group) and now recently the RCUK Direct Submission Steering Group (then RO rep).

JISC FSD Programme  
Desk study into the J-eS costing upload service

3

Date & Version: V4  
December 2009

### 3.3 Information from Suppliers

Each of the software suppliers we spoke to had developed software that would link into the cost upload facility of the J-eS system. Only one of the suppliers suggested that their customers had not requested this facility; the other two indicated there was a keen demand for this. It is clear that the RCUK system has worked according to its specification and that therefore the software suppliers have been able to develop systems which work with it.

The suppliers felt that they had been kept at arms length from the RCUK developers of the upload system. RCUK had spoken only to the institutions and the suppliers had been obliged

to work through the institutions. This had caused frustration both within the suppliers and the institutions, which meant that there was declining enthusiasm for developing linkages into the upload system. This inevitably meant that resources were not being devoted to testing the linkage into the J-eS upload system. The suppliers we spoke to were not uniformly aware of the present state of the J-eS upload system. It was suggested to us that it had actually been switched off.

## 4 Information gathered about the use, both actual and potential, of the J-eS upload system

### 4.1 Information from Research Council and JISC sources

An early interviewee from the Research Council gave the view that J-eS has only a short lifetime and that a replacement system would be introduced within a couple of years or so. However, further investigation has supported the view that the future of J-eS, at least to a four year or so medium-term, is assured. A stated reason for this is that the shared service centre of RCUK has currently a huge investment programme under way and it would find difficulty in diverting resources to a replacement for J-eS.

It is clear that RCUK has used substantial resources in the development of the upload system and also that the system developed meets its specifications. RCUK is, however, concerned about planning for the continuing use of resources in supporting a system which currently is not used. They would only wish to invest further resources in supporting the testing of the upload system if they had a reasonable expectation of use of the system in production mode in the future.

If the use of CERIF were to be the cause of lack of use of the upload system, RCUK would be prepared to invest in adaptation of the upload system to handle CERIF, as long as this did not require a major re-engineering of the system. However, RCUK has no direct evidence that its lack of CERIF compliance is the cause of its lack of use.

It is clear that CERIF is of real importance and is the standard which should be followed by any system which deals with data exchange relating to research proposals. However, despite having been in existence since 1991 and with its development being managed by the euroCRIS organisation, CERIF does not yet provide all the answers. Additionally, two other research information system projects that we have identified that are based on CERIF have found it necessary to extend the standard to meet their needs. Several people we spoke with stated that it needed extensions and modifications but, as an EU recommendation to member states, it is the de facto standard. It is in use in a number of EU states.

The JISC has, however, recently undertaken a project titled "Exchanging Research Information in the UK", the intent of which is

- to identify and document scenarios, requirements and criteria for exchanging research information in the UK.

**Comment [SMK12]:** Needs a revised title

**Comment [SMK13]:** A bold statement. EXRI will propose a migration towards CERIF

<sup>4</sup> <https://www.jisc.ac.uk/info/48460/procurement/inf111/kerf-uk.aspx>

JISC FSD Programme  
Desk study into the J-eS costing upload service

4

Date & Version: V4  
December 2009

- b) To appraise the options for doing so and, specifically, whether any particular format for exchanging research information (eg CERIF) would be suitable.

The project was due for completion at the end of November. It is very probable that the outputs of this will be of value and available to RMAS and will place the importance of CERIF in context.

4.2 Information from institutional sources

The evidence we have suggests that institutional central administrations want the cost upload facility but that few at present want the RODES facility. Institutions do consider it important to have a clear understanding of the costs contained within proposals, not only to ensure that the costs are calculated according to the policies of the institution but also that the institution is in a position to address the financial risks implicit within any proposal. The principal requirement of institutions at present is for the cost upload facility to be brought into production.

Only one institution to whom we talked appeared to consider it unlikely that they would link into the J-eS upload system; this institution had a small number of research proposals and uses a spreadsheet as its institutional system

4.3 Information from Suppliers

There was no question but that the suppliers are enthusiastic to ensure that their software can link into the J-eS upload system and are prepared to commit resources to doing that. It is in the interests of the suppliers that their software is seen by users to provide a complete service: at present, this is not the case. It would seem that of the order of 30 to 40 institutions would wish to access the cost upload system if the suppliers we spoke to were enabled to embed access in their own systems. They would undoubtedly welcome a direct dialogue with RCUK in order to ensure that their testing is satisfactory: one suggestion is that they be given direct login accounts of their own for testing purposes on the J-eS upload system.

5 Discussion and Recommendations

5.1 Discussion

In the proposal for the study we identified a number of tasks to be undertaken and questions requiring answering. In the following paragraphs we discuss the answers to these questions. In this, we discuss the cost upload system only; we did not find the RODES facility to be a significant priority for any but a very small number of institutions.

- 1) What is the use of the current J-eS upload service?  
At present it appears that it is only being used by one institution for testing new institutional software. The institution is planning to move into full use in the New Year.
- 2) Is there a need for the J-eS upload service?  
There is ample evidence, both from the institutions we have interviewed (mainly the research intensive ones) and from the suppliers we have talked to, that there is a demand for this service. There are two principal reasons: one is that it removes the

Comment [SMK14]: ?

need for re-keying of data and the second is that it allows central administrations to have control over the costing process.

- 3) What were the barriers to adoption of the J-eS upload system by institutions?  
The principal issue seems to have been that institutions found the UAT windows too short and their position as go-betweens between RCUK and suppliers frustrating. The specification does not entirely meet the needs of institutions but it is clear from our discussions with software suppliers and with those institutions developing software that the failings are relatively minor.
- 4) Is the J-eS upload system still viable?  
J-eS itself appears to have a future stretching well into the medium to long term and, given that the demand for upload system exists, the J-eS upload software is therefore clearly viable.
- 5) What are the options for linking RMAS into the J-eS upload system in a sustainable form?

We have identified three suppliers who have developed interfaces to the J-eS upload system and at least one institution which has developed its own. Development of the software does not therefore seem to be a problem as long as the testing is adequately catered for by RCUK. RCUK have indicated their preparedness to invest in bringing the J-eS upload system to production status. We would suggest that this includes a continuing dialogue between RCUK and the suppliers. The development of a back-end for RMAS into the J-eS upload system is not of general applicability to the sector and should therefore be seen as part of the overall RMAS development.

- 6) Is adoption of the CERIF standards important?  
This is probably answered by the outputs of the JISC project entitled "Exchanging Research Information in the UK". We would suggest that the specification of RMAS allows for data exchange both with the J-eS upload system and in a CERIF format.
- 7) How should institutions that wish to interface the J-eS upload system with existing back-end systems be catered for?  
The linkages of the RMAS system backend which delivers data to the J-eS upload system should be published.
- 8) Are there any special issues for those institutions who are committed to the RMAS deliverables?  
If our recommendations (see section 5.2) are adopted, we see none.
- 9) Are there any management issues which need to be identified?  
In our view, it is absolutely vital that RMAS and RCUK have a close working relationship, so that the RMAS development can be tested properly against J-eS. Such a close working relationship might be achieved by having a steering committee for RMAS which includes RCUK representation and is chaired by an influential third party chairman. The steering committee should have available to it both technical and procurement skills and experience.
- 10) What are the possible timescales for use of the J-eS upload system by RMAS?

Comment [SMK15]: On re-reading this now makes sense. ... I was a bit confused to start with. ...

Comment [SMK16]: Probably need rewording. The definitions for J-eS upload (from the RC and) have been RMAS is "now a new term. NO?"

Comment [SMK17]: Chairperson! Also, all but the independent chair is in place on the RMAS Sd (although I suppose technically the RC rep is not RCUK, but does share the J-eS ID)

The J-eS upload system for costing data appears to be working now. To allow RMAAS to use it, RCUK needs to revise its programme for moving the system into production.

11) How can this development be brought into the FSD programme?

If this development were to be treated separately from the rest of RMAAS, it could be introduced into the FSD programme as a separate module under the SOA banner. This would require that the interfaces to the backend be published and be clear. In such a case, the module could be provided as a shared service to those institutions requiring it. Since the J-eS system is a shared service provided by RCUK for the use of the research community, and because the upload system enhances this service, it is arguable that FSD funding could be made available to encourage suppliers and institutions to complete the testing process and to encourage institutions to roll out use of the system. This could be facilitated by the appointment of a project manager.

12) What are the risks?

The principal risk is that institutions are not interested in such an SOA module as suggested in paragraph 11. Given that the principal suppliers have already developed their own interfaces to the J-eS upload system and their customer bases represent a sizeable proportion of institutions with an interest in the J-eS upload system, it is very likely that, in today's environment, there would be a low level of interest in such an SOA module.

### 5.2 Recommendations

#### 5.2.1 General recommendations

**Recommendation 1:** RMAAS is justified in investing in a backend into the J-eS cost upload system.

**Recommendation 2:** RMAAS should invest in the capability to share information with CERIF conformant systems.

**Recommendation 3:** To facilitate bringing the J-eS upload system into full production, we suggest that RCUK be encouraged to maintain a dialogue with both institutions and software suppliers.

#### 5.2.2 Recommendations for the JISC

**Recommendation 4:** Development of an RMAAS interface to the J-eS upload system should be seen as part of the overall development of RMAAS.

**Recommendation 5:** There is little justification for the JISC to provide funding specifically for the development of such an interface through the FSD programme.

**Recommendation 6:** Consideration should be given to FSD funding of a project manager within the programme to support institutions and their suppliers in developing fully tested upload capabilities and moving to production status.

**Comment [SRK18]:** Are they not? Or do you mean in a back end to the main module, or the J-eS system? I think the latter is what is being proposed. It is not another layer onto the J-eS direct submission CERIF2008 to J-eS 72?

**Comment [SRK19]:** agree

**Comment [SRK20]:** agree – if the CERIF recommendation is taken up

**Comment [SRK21]:** no convinced that this would achieve more than #3

JISC FSD Programme  
Desk study into the J-eS costing upload service

7

Date & Jordan LJ  
December 2019

**6 Acknowledgements**

We have had superb cooperation in gathering the material for this report. We are very grateful to employees of the research councils, to suppliers and to members of the HE community who have graciously given us their time and shared their wisdom.

JISC FSD Programme  
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8

Date & Jordan LJ  
December 2019



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**Starts on** 09/12/2010  
**at** 09:30

Ends on 09/12/2010

at 16:30

Category Workshop

**Location** The National Railway Museum, York

This workshop is being held in association with ARMA

UKJCE is deemed to be able to host this workshop association with ARMA to explore current issues in Research Management and Administration through guided discussions, exploration of case studies and sharing good practice. The workshops will consider the current issues experienced by the Research Office, in particular how research support can assist in the delivery of faculty and university strategies, doing more with less and exploring a joined up thinking approach with other university departments such as enterprise and knowledge transfer teams.

The workshop will also explore a common way forward for the development and career progression of Research Managers with the development of Professional Development Framework by ARMA. Delegates will have the opportunity to become more closely involved in the development of the framework

Throughout the workshop, participants will be actively encouraged to ask questions, debate the key issues, and reflect on what constrains effective research support. As a result, all participants will be better placed to understand how they can make a positive difference to the work of their own office.

In addition to a series of interactive workshop sessions and presentations, delegates will also have the opportunity to discuss the issues with colleagues from other institutions in order to understand and develop good-practice within the sector. This workshop will be of interest to Research Managers and Administrators from a variety of university settings including central and faculty research support offices, Research Registrars and Research Officers.

Speakers include

**Marie Garnett** – Professional Development Manager, ARMA

**Simon Kerridge** - Secretary, ARMA and Head of Graduate Support and Assistant Director (Research), University of Sunderland (tbc)

**Kathryn Brown** - UKCGE Executive Committee Member and Principal Officer in the Research Office, Leeds Metropolitan University

The cost of the Conference is £185 for UKCGE Members and £235 for non-members. This includes lunch and refreshments.

**+ Add to Booking Form**



27/10/2010 17:20  
From: Janet.Niven@ssc.rcuk.ac.uk  
Subject: FW: feedback on registration process for Je-S accounts  
To: Attili.Emecz@epsrc.ac.uk; Gerald.Owenson@bbsrc.ac.uk;  
Duncan.Ball@escrc.ac.uk; Carol.Catley@headoffice.mrc.ac.uk;  
Anne.McFarlane@ssc.rcuk.ac.uk; ANDREW.Lemasurier@stfc.ac.uk;  
Simon.Kerridge@sunderland.ac.uk; Susan.Morrell@epsrc.ac.uk;  
C.Nixon@hrc.ac.uk  
Cc: **Simon.Kerridge@sunderland.ac.uk**; **jesmanager@ssc.rcuk.ac.uk**;  
Pete.Dixon@ssc.rcuk.ac.uk

<Abridged>

At the Je-S Management Board meeting in September there was an action on me to follow up with **Simon Kerridge** the RO communicates view on changing the Je-S account verification process and to then circulate to the Management Board to consider approving any associated Development costs.

Simon has kindly provided feedback (attached) which I believe shows strong support for a change in the current account approval process.

The proposal to the community was for i) "registered" level account requests to go direct to the RO to approve and for basic level accounts to be automatically approved. There would be no Helpdesk intervention in either case.

ii) The ROs would be able to view account information (Helpdesk received three requests for more account level visibility at the Je-S Cost Upload event earlier today).

iii) The registered level account validation be removed for Schemes/Calls for research councils that do not require applicants to satisfy eligibility requirements. This would reduce the number of registered accounts being created.

Je-S Dev have provided an estimate of 3-4 weeks based on the following work:

- i) Proc/middle tier code change and change to admin tool (to remove profanity 'queue').
- ii) Email notification + admin tool management + pool admin (style) management
- iii) new configuration/code if the requirement is at a scheme level, rather more complex if it's at call level (as suspect DFID was/is)

Account processing now requires 0.8FTE Band B effort but the number of account requests will grow next year when MRC and NC3R users set up accounts following the MRC publicity campaign in February so the level of resource to support accounts could easily increase to 1.5FTE for 2011.

There would still be a requirement for Band B effort to manage any duplicate accounts created but these would be managed through existing Admin Tool Queues for CDR maintenance and the FTE required would drop to less than 0.2FTE at current levels and less than 0.4FTE in February/March.

If Management Board members agree the development costs then Pete and myself would take the User Requirement to the Je-S System Group to agree the detail.

It would be helpful if you could respond by 5 November but if you require any further information then please let me know.

Regards  
Janet

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-----Original Message-----  
From: lists@arma.ac.uk [<mailto:lists@arma.ac.uk>] On Behalf Of **Simon Kerridge**  
Sent: 13 October 2010 10:31  
To: undisclosed-recipients:  
Subject: [eta #00SV] Je-S user registration process

Dear all,  
the Je-S HelpDesk are considering changing the process for registering users on Je-S.

Any comments on the following are welcome and I'll feedback to Janet.

**Simon**  
**Hi Simon**

There was an action on me following the Management Board to discuss with you options for streamlining the Je-S ?registered? level accounts.

Basic Level accounts: anybody can have a basic level account.

Je-s-registered level accounts: only Principal, Col and Researcher Co Investigators on research and Outline proposals require registered level accounts.

Current process for ?registered? accounts is:

Helpdesk receives account request through a Queue. The applicant is able to create and prepare a proposal whilst the account is being processed but unable to submit until account confirmed.

In the meantime the Helpdesk sends the account request to the RO. For UK HEIs and IROs the contacts are known, for non UK ROs this can be a problem as the emails are not regularly monitored and the RO contacts may no longer be appropriate. For Self Registered Organisations there is no contact to provide verification.

Some ROs are better at responding than others, some have to be chased up to 3 times, on a weekly basis, after which if there is no response the Helpdesk will change the request to a basic level.

When the RO responds, currently by email, with verification the Helpdesk accepts the account at registered level and the user is informed and at this point they can then submit.

Basic level accounts come into the Helpdesk, they are checked for duplicates and profanities and then accepted (we have not yet come upon a profane account request!)

Some Proposals on how we could reduce the burden on the Helpdesk:

Instead of the registered level account requests coming initially into the Helpdesk before being redirected to the RO they should go instead directly to the RO with no intervention from the Helpdesk. The RO would have the option to either accept at registered level or reduce to basic level through the system rather than by email as is done currently.

We could give ROs access to lists of users and account status to enable the RO to manage the accounts for their applicants if this would be useful. I think that we should also be able to set up automatic reminders when an account request has been waiting a while.

For schemes that are open to ROs which do not have to go through the Eligibility process for IRO status or are not Je-S registered eg applicants from overseas organisations to DFID then we set the validation on the proposal forms to only requiring a basic level account so no intervention would be required by the Helpdesk.

Some research Councils do not have eligibility requirements for Co Investigators ie ESRC/MRC and NC3Rs so we could remove the validation for registered level accounts for all CoIs. The PI would still require a registered level if at a Je-S registered RO.

We should stop the profanity checks on basic level accounts and automate them as far as possible so that there is no delay from the point of requesting an account to waiting for the helpdesk to process it.

The Helpdesk would still be responsible for managing the quality of data so we would need to ensure that duplicate person records were not being created which we currently do as part of accepting the account request so merging duplicates and checking quality of data would have to be monitored regularly. The advantage to the Helpdesk is that this is not so time dependent as it is to process accounts.

It would be very helpful to get your thoughts on the proposals above, and hopefully endorsement, before going back to the Management Board If you need anymore info or clarification or if you have a better solution then please let me know.

Regards

Janet

Simon Kerridge  
Head of Graduate Research Support  
& Assistant Director (Research), Academic Services University of Sunderland Room 21.2 Edinburgh Building  
Chester Road Sunderland  
SR1 3SD  
UK

and a Director of ARMA  
The Professional Association of Research Managers and Administrators (UK)  
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Tel: +44 191 515 2285  
Fax: +44 191 515 2257  
Email:

Simon.Kerridge@sunderland.ac.uk<<mailto:Simon.Kerridge@sunderland.ac.uk>>  
Web: <http://www.gfs.sund.ac.uk/gfshomepage.cfm>  
-----  
This is an automated email from the ARMA Mailing List Manager sent by Simon Kerridge.  
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=====

RE: [era #00SV] Je-S user registration process, eml  
Subject: RE: [era #00SV] Je-S user registration process  
From: Hazel Wallis<[H.M.Wallis@bath.ac.uk](mailto:H.M.Wallis@bath.ac.uk)>  
Date: Fri, 15 Oct 2010 09:43:58 +0100  
To:  
Simon Kerridge<[simon.kerridge@sunderland.ac.uk](mailto:simon.kerridge@sunderland.ac.uk)>

H Simon,

My team seem to think this shouldn't cause much extra work over and above what we already do - as long as the 'acceptance' or 'rejection' of requests takes no longer than at present, ie no more time than sending an email to JeS as we currently do.

This is what one of my team said

"1) Account requests coming to us will only increase the workload to the extent that the "accept or reject" procedure takes longer than sending an email, as we'll still have to validate the person in the usual way. If JeS can devise a highly streamlined procedure for this, I'd be quite happy to take over from them. Ideally, there would be something in the email to click, rather than having to log into JeS, but I appreciate that this could be technically difficult.

2) If they do pass over this responsibility to ROs, we will definitely need access to listing and any other relevant admin functions to help us manage it."

Alternatively, leave things as they are, and if the chasing is the main problem, JeSHelp could tell everyone they will no longer chase unanswered requests but will reduce to basic after, say, a week - after all, it is the responsibility of the institution to respond (having just received two seven-day reminders ourselves this morning!) To be honest I am amazed this is a manual process, I had imagined the emails were all automated.

Not sure about this bit:

"Some research Councils do not have eligibility requirements for Co Investigators ie ESRC/MRC and NC3Rs so we could remove the validation for registered level accounts for all CoIs. The PI would still require a registered level if at a Je-S registered RO." But what about the ROs which DO have eligibility requirements for co-Is - eg EPSRC, BBSRC?

Best wishes

Hazel  
\*\*\*\*\*  
Hazel Wallis  
Head of Research Support & Funding  
Research Development & Support Office (RDSO)  
University of Bath  
Bath  
BA2 7AY  
Tel 01225 386822  
Fax 01225 383276  
E-mail [H.M.Wallis@bath.ac.uk](mailto:H.M.Wallis@bath.ac.uk)  
<http://www.bath.ac.uk/rds/>



=====

RE: [era #00SV] Je-S user registration process.eml  
Subject: FW: [era #00SV] Je-S user registration process  
From: "Thompson, Paul J" <P.J.Thompson@hw.ac.uk>  
Date: Wed, 13 Oct 2010 12:07:32 +0100  
To:  
Simon Kerridge <simon.kerridge@sunderland.ac.uk>

Hi **Simon,**

I remember suggesting this years ago to Serena Cooper at a meeting down in Swindon. I still think it's a good idea.....!

Regards

paul

--  
Heriot-Watt University is a Scottish charity  
registered under charity number SC000278.  
=====

RE: [era #00SV] Je-S user registration process.eml  
Subject: [era #00T1] Je-S user registration process  
From: Mary Anderson <Mary.Anderson@bhsc.ac.uk>  
Date: Wed, 13 Oct 2010 11:36:04 +0100

Agreed. More than happy to handle the account management as suggested.  
Removes a step in the process.

Best wishes

Mary

=====

RE: [era #00SV] Je-S user registration process.eml  
Subject: [era #00SZ] Je-S user registration process  
From: Maggy Taylor <M.H.Taylor@mmu.ac.uk>  
Date: Wed, 13 Oct 2010 11:23:04 +0100

Dear **Simon,**

This looks fine to me, and would actually help to speed things up when academics are a little last minute.

Maggy

Maggy Taylor  
Research Grants Support Officer - EU Funding  
Research Enterprise and Development  
Student and Academic Services  
Manchester Metropolitan University  
Ormond Building  
Lower Ormond Street  
Manchester  
M15 6BX  
United Kingdom

Tel. +44 (0)161-247 1059  
Fax. +44 (0)161-247 6823  
[Email:m.h.taylor@mmu.ac.uk](mailto:m.h.taylor@mmu.ac.uk)

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=====

RE: [era #00SV] Je-S user registration process.eml  
Subject: RE: [era #00SV] Je-S user registration process  
From: Raymond Kent <R.W.Kent@horo.ac.uk>  
Date: Wed, 13 Oct 2010 10:41:58 +0100  
To:  
Simon Kerridge <simon.kerridge@sunderland.ac.uk>

Simon

This is very sensible and long overdue. I give it my vote. Three cheers for the Je-S Helpdesk: Hoorah! Hoorah! (etc.) ...

Ray

=====

RE: [era #00SV] Je-S user registration process.eml  
Subject: [era #00SX] Je-S user registration process  
From: Sarah Taylor <staylor@brookes.ac.uk>  
Date: Wed, 13 Oct 2010 10:38:04 +0100

Dear Simon

We try to respond punctually to the helpdesk requests. Where we don't its because we genuinely don't know who the person is and have to ask the School involved. Often they don't know as the research function isn't necessarily linked to the HR function and they don't know. I would say we respond to 90% of requests within a day.

However, we are very happy to have the registration process within our hands, so long as the instructions on how to manage this are clear

Regards, Sarah

Sarah Taylor  
Research Support Manager  
Research and Business Development Office  
Oxford Brookes University  
Gipsy Lane  
Oxford OX3 0BP  
+44 (0) 1865 484064  
[staylor@brookes.ac.uk](mailto:staylor@brookes.ac.uk)

**Subject:** Research Info Mgmt

**From:** Neil Jacobs <n.jacobs@jisc.ac.uk>

**Date:** Tue, 17 Nov 2009 16:30:08 +0000

**To:** 'Anna Clements' <akc@st-andrews.ac.uk>, 'Steve Bailey - JISC infoNet' <steve.bailey@northumbria.ac.uk>, 'Stuart Bolton' <stuart@stuartbolton.com>, "'Cox, Mark'" <mark.cox@kcl.ac.uk>, "'Davies, Mary'" <mary.davies@kcl.ac.uk>, 'Nicky Ferguson Ferguson' <nicky@therightplace.net>, alan.green@stfc.ac.uk, "'Dale Heenan (ESRC, CID)'" <Dale.Heenan@esrc.ac.uk>, amanda.hill@manchester.ac.uk, daniel@symplectic.co.uk, 'Bill Hubbard' <Bill.Hubbard@nottingham.ac.uk>, 'Lesly Huxley' <Lesly.Huxley@bristol.ac.uk>, 'Simon Kerridge' <simon.kerridge@sunderland.ac.uk>, "'McCormick Ian Mr (ACAD)'" <Ian.McCormick@uea.ac.uk>, "'Pamela Macpherson-Barrett [7471]'" <P.Macpherson-Barrett@hefce.ac.uk>, nikki.rogers@bristol.ac.uk, 'Sally Rumsey' <sally.rumsey@ouls.ox.ac.uk>, 'Scott RUTHERFORD' <s.rutherford@hefce.ac.uk>, 'Dominic Tate' <Dominic.Tate@nottingham.ac.uk>, execsec@ucisa.ac.uk, 'Paddy G Walker' <paddywalker@talk21.com>, "'Vasanthi WALLER [7369]'" <V.WALLER@hefce.ac.uk>, "'Welland, Deborah'" <D.Welland@exeter.ac.uk>, Andy.Youell@hesa.ac.uk, Victoria.Cassely@epsrc.ac.uk, Chris.Hale@UniversitiesUK.AC.UK, keith.jeffery@stfc.ac.uk, 'Michael Mertens' <Mike.Mertens@rluk.ac.uk>, dath@nerc.ac.uk, gela@nerc.ac.uk, 'Alexander HAWKER' <a.hawker@jisc.ac.uk>, 'Myles Danson' <m.danson@jisc.ac.uk>, m.day@ukoln.ac.uk, lac@ecs.soton.ac.uk, neil.jefferies@sers.ox.ac.uk, 'Frederique Van Till' <f.vantill@jisc.ac.uk>

Colleagues with an interest in research information management,

You may have noticed that the JISC call for proposals in the area of research information management is now out:

[http://www.jisc.ac.uk/fundingopportunities/funding\\_calls/2009/11/1109rim.aspx](http://www.jisc.ac.uk/fundingopportunities/funding_calls/2009/11/1109rim.aspx)

Once we have bids, in mid January, we would like to ask experts to help us mark them. If you are happy to mark a few of these bids, please reply to Frederique Van Till ( [f.vantill@jisc.ac.uk](mailto:f.vantill@jisc.ac.uk) ), who is assuming responsibility for this area of work at JISC.

Please could you also keep 21<sup>st</sup> January free for a possible meeting, in part to review the EXRI recommendations? We will confirm this as soon as possible.

Best wishes

Neil

**Subject:** RMAS project

**From:** "Welland, Deborah" <D.Welland@exeter.ac.uk>

**Date:** Fri, 09 Oct 2009 17:19:36 +0100

**To:** "Simon.Kerridge@sunderland.ac.uk" <simon.kerridge@sunderland.ac.uk>

Simon

I know that you are aware of the HEFCE funded RMAS project as I believe you responded to the questionnaire late last year. Details of the work to date can be accessed at <http://as.exeter.ac.uk/rmas/> and I attach the Part 1 report.

During our discussions with Atti Emecz at RCUK about the Je-S interface and links to RMAS, Atti mentioned your name and involvement with ARMA and Je-S, and following further discussion with the RMAS Steering Group it was decided to invite you to join the Steering Group because of the experience that you have in the sector and the contribution that we believe you can make to the project. I realise that this invite has come out of the blue but I would be more than happy to discuss in more detail with you next week if you were interested.

Current Group membership is as follows

Shereen Anderson - Essex  
Amanda Burgess - LSE  
Gerry Collins - Queen Mary  
David Coombe - Kent  
Atti Emecz - RCUK  
Alex Hawker - JISC  
Paddy Walker - HEFCE  
And myself

Best wishes

Deborah

Deborah Welland  
Assistant Director (BISS)  
Academic Services  
Laver Building  
North Park Road  
University of Exeter  
EX4 4QE  
d.welland@exeter.ac.uk, 01392 725390

RMAS FINAL as submitted v4 6 040609.doc

Re: Thanks for the invite

**Subject:** Re: Thanks for the invite  
**From:** Ehsan Masood <ehm@researchresearch.com>  
**Date:** Thu, 29 Apr 2010 18:44:46 +0100  
**To:** Simon Kerridge <simon.kerridge@sunderland.ac.uk>  
**CC:** Jeska Harrington Gould <jhg@researchresearch.com>

Simon,

I'd really like you to write for the pre-conference issue, which will appear on Wed 2 June. We'd need copy about 10 days earlier. 800-words, op-ed style. Let me have a think on the all important issue of angle/slant. You gave us a lot of food for thought today, and we'll need you to focus on one big thing.

More soon!

Ehsan

On 29/4/10 18:30, "Simon Kerridge" <simon.kerridge@sunderland.ac.uk> wrote:

Yes, well, I shall try and avoid the dance floor... if the photographer is around!!!

Simon  
PS While I think, I shall be writing up the findings of the survey for a journal (I hope) article in any case, would you like me to submit something for consideration for RF... and if so, what sort of slant... how many words...? If its not of interest, just say so, I'm thick skinned...! And as I say I'll be doing an 'academic' version anyway (probably for the Journal of Research Administration [the SRAS journal in the USA]).

Ehsan Masood wrote:  
Yes, thanks so much for today, Simon, and hope to catch a glimpse of you at the ARMA gala!

On 29/4/10 17:16, "Jeska Harrington Gould" <jhg@researchresearch.com> wrote:

Lunch was a pleasure, although we certainly made you work for it! See you soon  
Jeska

On 29/4/10 17:08, "Simon Kerridge" <simon.kerridge@sunderland.ac.uk> wrote:

Jeska, Ehsan,  
many thanks for the invitation to give a presentation to the staff at ResearchResearch about Research Managers and Administrators, ARMA, and Electronic Research Administration.  
I hope that they found it useful.  
If you have any feedback or questions then please do send them on, or I'm happy for people to contact me directly.

Re: Thanks for the invite

Best regards, see you in Manchester at the ARMA conference.  
Simon  
PS And thanks for lunch!  
Jeska Harrington Gould  
Managing Director

t: +44(0)20 7216 6507  
f: +44(0)20 7216 6501  
e: jhg@researchresearch.com  
a: Unit 111, 134-146 Curtain Road, London EC2A 3AR

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**Subject:** [Fwd: Universities UK position statement: Access to research publications, March 31st]  
**From:** Simon Kerridge <simon.kerridge@sunderland.ac.uk>  
**Date:** Sat, 06 Mar 2010 13:53:49 +0000  
**To:** ARMA-COMMITTEE@JISCMAIL.AC.UK

Page 1

Dear all,  
Further to my previous email on this, I'm not available on the 31st (I will actually be on holiday!) and so will definitely not be able to make it.  
If you would like to take the opportunity to be on a UK Expert Advisory Group, then let me know (say by Wed 10th) and I'll pass on the name of the lucky winner to Naomi...

For info the other invitees are:

Astrid Wissenburg (ESRC) Robert Kiley (Wellcome Trust) Paul Ayriss (UCL academic library) Stephane Goldstein (British Library) Bill Hubbard (SHERPA) Neil Jacobs (JISC) Dominic Tate (SHERPA) Sally Rumsey (Oxford University Library Services)  
The current position statement is at:  
<http://www.universitiesuk.ac.uk/PolicyAndResearch/PolicyAreas/Documents/Research/OpenAccessUKPolicyStatementSept2005.pdf>

Universities UK position statement: Access to research publications, March 31st.eml

**Subject:** Universities UK position statement: Access to research publications, March 31st  
**From:** Naomi Drinkwater <Naomi.Drinkwater@UniversitiesUK.ac.uk>  
**Date:** Tue, 02 Mar 2010 09:42:41 +0000  
**To:** r.kiley@wellcome.ac.uk, Stephane.Goldstein@rn.ac.uk, Bill.Hubbard@nottingham.ac.uk, n.jacobs@jisc.ac.uk, Dominic.Tate@nottingham.ac.uk, [simon.kerridge@sunderland.ac.uk](mailto:simon.kerridge@sunderland.ac.uk), catriona.cannon@ouls.ox.ac.uk, "Hide, Branwen" <Branwen.Hide@rn.ac.uk>, Christopher Hale <Chris.Hale@UniversitiesUK.AC.UK>

Universities UK position statement: Access to research publications

Dear Colleague,

I am delighted to confirm that the expert advisory group for updating the Universities UK position statement on open access will be taking place at 2pm on Wednesday 31<sup>st</sup> March 2010.

The meeting is being held in **Meeting Room 2** at Woburn House Conference Centre, 20 Tavistock Square, London, WC1H 9HQ. Please [click here](#) for a map and directions to the venue. Lunch will be provided. If you need to be contacted during the afternoon messages can be taken on 020 7419 4111 and you can collect these at the main reception desk.

To view the 2005 position statement please click here  
<http://www.universitiesuk.ac.uk/PolicyAndResearch/PolicyAreas/Documents/Research/OpenAccessUKPolicyStatementSept2005.pdf>

I look forward to welcoming you to Woburn House but in the meantime if you have any queries please contact me on 020 7419 5412 or by e-mail: [Naomi.Drinkwater@UniversitiesUK.ac.uk](mailto:Naomi.Drinkwater@UniversitiesUK.ac.uk)

Many Thanks

Naomi Drinkwater, Policy Officer (Acing), Universities UK [www.UniversitiesUK.ac.uk](http://www.UniversitiesUK.ac.uk)  
Tel: +44 (0)20 7419 5481 Email: [Naomi.Drinkwater@UniversitiesUK.ac.uk](mailto:Naomi.Drinkwater@UniversitiesUK.ac.uk)

Address: Policy Development Group, Woburn House, 20 Tavistock Square, London, WC1H 9HQ  
Switchboard tel +44 (0)20 7419 4111 Fax +44 (0)20 7383 4236

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## Introduction

Developing world-class researchers is an important priority for government. Research Councils UK and higher education institutions (HEIs). The researcher development agenda and associated ring-fenced funding from RCUK, has been critical in moving this aim forward. However this funding has not been confirmed beyond April 2011.

This report examines a range of possible future funding strategies for researcher development. Its aim is to provide clear and concise summaries of the advantages and disadvantages of different funding options and associated challenges for the development of postgraduate researchers and for research staff. It draws primarily on the presentations, discussions and outcomes from the Vtiae policy forum<sup>1</sup>, January 2010 and pre-2010 policy forum information supplied as part of the registration process. It also draws on information gathered during 2009, primarily the references to sustainability in the 2009 institutional reports to RCUK.

The Vtiae policy forum 2010<sup>2</sup> brought together people from the higher education sector who have a strategic role in researcher development, as well as staff from the Research Councils, for open and constructive discussion on the extent to which the skills agenda is embedded in institutional strategies, structures and practice, and the implications of possible changes in funding options in the short and long term. Participants were acutely aware of the significance of decisions about future funding mechanisms at a time of recession, cuts in HE funding, and university concerns about the full costs of postgraduate researcher training<sup>3</sup>.

The intention is that RCUK will find this report, alongside the outcomes of the postgraduate review and the independent assessment of the impact of the Roberts' investment, helpful in informing their decisions on their strategy, policies and processes for researcher development beyond April 2011<sup>4</sup>.

It is also anticipated that HEIs will find this report useful in informing senior management decisions on immediate and long term strategies for sustaining and embedding researcher development within their institutions.

The report highlights key issues and suggests recommendations to RCUK and HEIs to increase the potential of a successful and sustainable transition from ring-fenced funding in its current form to any future funding options.

<sup>1</sup> The Vtiae policy forum is an annual event focusing on policy developments and the implications relating to skills and career development for researchers who can speak on behalf of the institution in relation to institutional strategies and implications of possible future funding mechanisms for researcher development. It is an invitation-only event aimed at PkAs or equivalent staff.

<sup>2</sup> This report only covers aspects of the Vtiae policy forum relating to future funding. Full details of the event can be found on the Vtiae website at [www.vtiae.ac.uk/policyforum2010](http://www.vtiae.ac.uk/policyforum2010). Video recordings, presentation summaries and slides are available for the plenary presentations, panel discussion and workshops.

<sup>3</sup> See 'Costs of training and supervising postgraduate research students', February 2006, HEFCE [www.hefce.ac.uk/Policy/Reports/2005/0601\\_05/](http://www.hefce.ac.uk/Policy/Reports/2005/0601_05/)

<sup>4</sup> Subsequent to the policy forum the Research Councils have issued a statement of expectation regarding researcher development. [www.vtiae.ac.uk/policyforum2010/25-229641Statement-by-Research-Councils-UK-RCUK-regarding-researcher-development.htm](http://www.vtiae.ac.uk/policyforum2010/25-229641Statement-by-Research-Councils-UK-RCUK-regarding-researcher-development.htm)

- the importance of maintaining progress in support for the research staff agenda and the Concordat. There is widespread concern at the vulnerability of the research staff agenda, where progress has been more recent

- it is time for the Roberts agenda to come of age. Part of the embedding process should be seeing researcher development as a holistic process and maybe it is time to drop the use of 'Roberts' and its association with developing 'transferable skills'.

**At HEI level:**

- the importance of aligning researcher development with individual HEI strategies and mission statements. Whatever the funding route ahead, it is critical that senior management support and thus allocate funding to continue the agenda

- the importance of maintaining the broader employability focus for researcher development within the environment of undertaking research. For example, there is a danger that embedding funding in research grants and fees could lead to more focus on research-related training.

**At researcher level:**

- there is still a need to raise the value of researcher development with researchers, supervisors and principal investigators

- The Concordat and QAA Code of Practice both highlight the importance of researchers taking ownership for their own professional and career development.

There are advantages and disadvantages of all future funding mechanisms. However, if funding mechanisms are changed, an appropriate managed and funded transition period is of critical importance. Research staff provision and Roberts' role HEIs are particularly vulnerable to a sudden cessation of funding. It is a complex decision-making context, but one where early decisions by RCUK on funding mechanisms are important to enable HEIs to plan and minimise further attrition of experienced and effective researcher development staff and to successfully sustain and embed researcher development in normal business. This report has aimed to assist this decision making process.

## Vtiae policy forum 2010: Stakeholder voices

**Professor Mary Bowmes**, Vice Principal, University of Edinburgh, illustrated the crucial role that Roberts funding had played in enabling the university to dramatically and quickly increase the breadth and depth of its skills provision, be innovative, and offer flexible options, all the while trying to embed researcher development by giving all stakeholders a voice in the nature of provision and how it is developed. 'It is vital to think through the implications of different funding scenarios very carefully; it is hugely important for our researchers, research base and international standing.'

**Professor Broniek Wedzicha**, Pro-Dean for Research, Enterprise, and Knowledge Transfer, University of Leeds, described the 'transformational effect' of Roberts funding at the University of Leeds. The nature and form of future provision would clearly be funding dependent and the sector needs to be more imaginative in working towards a broader funding base. 'How we view the success (or otherwise) of the Roberts agenda depends on how we view the doctorate. If the primary outcome of running a doctoral programme is the flow of trained people resulting from that programme, the Roberts agenda has fundamentally changed the landscape for the better. If the primary outcome of running a doctoral programme is the research output those students generate, the impact is far more modest. In terms of the people we produce the Roberts agenda is now firmly embedded and we must not go back to the pre-Roberts mode of PhD education.'

**Mr Simon Kerridge**, ARMA and University of Sunderland, emphasised the importance to research managers of being able to plan. 'It is critical to know what money is coming in, for what purpose. All alternative funding mechanisms discussed would need carefully worked out transitional arrangements. We should work towards postgraduate researchers being included in FEC.'

**Mr David Sweeney**, Director – Research, Innovation and Skills, HEFCE, argued that 'volume is the biggest challenge we face and we should be aiming for excellence, not growth'. It is questionable how the strategies of universities who are pursuing volume will be sustained – government funding is not growing. On funding mechanisms, the sector should be clear about its principles. It has long expressed a wish for hypothecated funding to be the exception to the rule (usually for setting up new initiatives such as Roberts), preferring the freedom to manage block funding from funding councils to meet local needs.

**Dr Ian Lyne**, Head of Skills and Careers, BBSRC, expressed his concern that a desire for ring-fencing sends negative messages to government about how committed universities are to pursuing the agenda on their own. Furthermore, the very visibility of ring-fenced funding could make it more vulnerable to being cut. If Research Council budgets come under pressure in the current economic climate, 'The Research Councils have undiminished commitment to the researcher development agenda but the agenda is changing. It is now part of the broader impact agenda. A core government aim is that researchers take their expertise out of academia into other sectors in various ways.'

**Dr Patrick Hardie**, Research Fellow, University of Edinburgh, described how support from Roberts funding had been instrumental in setting up research staff societies, leading to a range of benefits. Ring-fenced Roberts funding has been a visible sign of commitment to researcher development by the Research Councils and the university and the symbolic importance of this should not be underestimated. It is a significant factor in encouraging participation among often isolated and marginalised groups such as research staff and should be retained.



# UKRDS: The UK Research Data Service

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## About the UKRDS

As a national shared digital research data service, UKRDS would form a crucial component in the UK's e-infrastructure for research and innovation, adding significantly to the country's global competitiveness.

The UKRDS Project tested the feasibility of providing a framework of standards and procedures to encourage researchers to submit their valuable data to curation services, confident that it would be held securely for the long term. Where appropriate it would be made available to others under a set of conditions, agreed by the original producer of the data.

The project established the feasibility of an approach based on embedding skills and infrastructure within HEIs supported by a national framework for policy and service development, training and advocacy. The project has now built on the original business case and developed detailed recommendations and plans for a possible Pathfinder service implementation based on selected projects from the Case Study HEIs at Bristol, Leicester and Oxford working with JISC and the DCC.

## Project Governance

### Steering Committee

#### Terms of Reference

1. To provide strategic oversight of the Feasibility Study (the project) from the appointment of the Consultants to the completion of the project.
2. To provide advice and guidance to the Project Director and the Project Manager on stakeholder priorities in relation to research data.
3. To facilitate access by the Consultants to key stakeholder communities.
4. To receive and approve the initial briefing, and regular progress reports from the Project Manager.
5. To receive and approve the final report of the project.
6. To play a leading role in the implementation of the project communications and advocacy plan.
7. To participate in the dissemination of outcomes from the project and to be advocates in implementing the recommendations of the study.

### Members

Professor John Wood ( <i>chair</i> )	Principal of Engineering, Imperial College
Professor Ian Diamond	Chief Executive of ESRC and chair of RCUK
Tim Marshall	Chief Executive, Janet UK

Paul Hubbard	Head of Research Policy, HEFCE
Malcolm Read	Executive Secretary, JISC
Professor David Ingram	Director of the Centre of Health Informatics and Multiprofessional Education, University College London, and member of RIN Advisory Board
Richard Boulderstone	Director of e-Strategy, British Library
Professor Chris Rawlings	Head of Biomathematics and Bioinformatics, Rothamsted Research, BBSRC
Jean Sykes	Chief Information Officer, LSE
Stephen Pinfield	Chief Information Officer, University of Nottingham
Neil Geddes	Director eScience, Rutherford Appleton Laboratory
Martin Lewis	Director of Library Services and University Librarian, University of Sheffield
Wendy Pratt	Director-General, Russell Group
Linda Bradley	Head of Research Policy Dept of Employment and Learning
Maro Campolargo ( <i>Corresponding member</i> )	Head of Unit for Research Infrastructure European Commission
John Coggins	Research Information Network
David Gani	Director of Research Policy and Strategy Scottish Funding Council
David Grant	Vice-Chancellor Cardiff University
Michael Jubb	Director, Research Libraries Network
Simon Kerridge	ARMA
David Lynn	Head of Strategic Planning and Policy Wellcome Trust
Liz Lyon	Director, UKOLN
John Milner ( <i>Secretary</i> )	UKRDS Project Manager
Tim Phillips	Director of Information Systems and Computing University of Bristol
Linda Tiller	Senior Strategic Projects Manager HEFCEW
Anne Trefethen	University of Oxford e-Research Centre
Astrid Wisenburg	Director for Communication and Information ESRC

### Project Management Board

#### Terms of Reference

1. To ensure that appropriate project plans and documentation are in place.
2. To ensure compliance with the terms of the HEFCE grant under the Shared Services initiative.
3. To receive and approve regular progress reports from the Project Manager.
4. To provide advice and guidance to the Project Manager on a regular basis.
5. To approve the progress reports for submission to the Steering Committee.
6. To liaise with the Consultants.
7. To liaise with HEIs participating as case studies.
8. To play a key role in the implementation of the project communications and advocacy plan.

<b>Members</b>	
Jean Sykes	Chief Information Officer, LSE
Martin Lewis	Director of Library Services and University Librarian, University of Sheffield



Tim Phillips	Director of Information Systems and Computing, University of Bristol
Stephen Pinfield	Chief Information Officer, University of Nottingham
Lynne Tucker	Deputy Director of ISS and Chief Technology Officer, Kings College London
Mathew Dovey	Programme Manager (e-Research), Joint Information Systems Committee (JISC)
Simon Hodson	Programme Director, e-Research JISC Executive
Suzanne Wilson	Senior Higher Education Policy Adviser HEFCE
Dr Gina Woodward ( <i>secretary</i> )	Associate Director, Information Services, Cardiff University



**researchers**  
for research staff and postgraduate researchers

**Breadcrumbs**

## Vitae policy forum 201006 January 2010 - 07 January 2010

### Programme

#### Programme aims

- Provide a platform for open discussion between the HE sector and funding organisations on the extent to which the agenda is embedded in the strategies, policies and operations of universities and the impact of a range of long term funding models.
- Identify the range of evidence to best inform the funding strategies for researcher development for the next spending review period from April 2011
- Share knowledge, approaches and practice in evidencing, evaluating and improving the impact of researcher development activities.

### Day 1 - Future funding: Wednesday 6 January 2010

11.30

#### Registration opens

12.00

#### Buffet lunch available

13.00

#### Introduction

Dr Janet Melcalfe - Chair and Head, Vitae  
Dr Iain Cameron - Head of Research Careers and Diversity, RCUK

13.15

#### Future scenarios for researcher development 1

Prof Mary Bowries - Vice-Principal, Research Training and Community Relations and Professor of Developmental Biology, University of Edinburgh

13.30

#### Future scenarios for researcher development 2

Prof Bronck Wedzicha - Pro-Dean for Research, Enterprise, and Knowledge Transfer, University of Leeds

14.00

#### Stakeholder panel: discussions and questions

Prof Mick Fuller - Head of Graduate School, University of Plymouth  
Mr David Sweeney - Director - Research, Innovation and Skills, HEFCE  
Dr Ian Lyne - Head of Skills and Careers, BBSRC  
Dr Paddy Hadzke - Research Fellow, University of Edinburgh  
**Mr Simon Kempster** - Assistant Director, University of Sunderland  
Ms Helen Thorne - Head of Policy and Operations, The Russell Group

15.30

#### Tea and coffee available

16.00

#### Workshop session A

17.30

#### Plenary feedback and conclusions

18.30

#### End of day 1

19.15

#### Drinks reception

20.00

#### Dinner

### Day 2 - Moving forward: Thursday 7 January 2010

09.00

#### Introduction

09.05

Dr Janet Melcalfe - Chair and Head, Vitae

#### Achieving the aims of the Concordat

Prof David Gani - Deputy Principal for External Affairs and Advancement, University of Strathclyde

09.20

#### Future opportunities and challenges for Graduate Schools

09.35

Ms Tessa Payne - Head of Graduate School, University of Nottingham

#### Building an evidence base of the impact of researcher development activities

Dr Tony Bromley - Senior Training and Development Officer, Vitae Yorkshire and North East Hub Co-ordinator, University of Leeds

09.50

#### Vitae priorities for 2010

10.00

Ms Ellen Pearce - Director, Vitae

#### Question and answer session

10.30

#### Tea and coffee on the run

10.30

#### Workshop session B

11.30	Workshop session C
12.30	Plenary feedback and way forward
13.00	Lunch and finish

**Subject:** Invitation to join HE sector FP8 sounding board

**From:** Christian Yeomans <Christian.Yeomans@europeunit.ac.uk>

**Date:** Mon, 08 Nov 2010 11:31:55 +0000

**To:** michelle.marshall@sunderland.ac.uk, [simon.kerridge@sunderland.ac.uk](mailto:simon.kerridge@sunderland.ac.uk)

Dear [Mr Kerridge](#)

I write to invite you to become part of a sounding board to provide expert advice that will underpin the work of Universities UK and the UK HE Europe Unit in preparing the way for the next phase of the European Union's Framework Programme for Research.

Your expertise on the Framework Programme in the UK institutional context mean that your advice on how the next phase of the Programme should be taken forward would be invaluable. We would be delighted if you were able to become a member of the sounding board of experts.

Details of the sounding board are included below. Please do not hesitate to get in touch, should you have any questions.

Best wishes, and we look forward to hearing from you.

Chris Hale (UUK) and Chris Yeomans (International and Europe Unit)

#### **The UK HE sector FP8 Sounding Board, 2010**

As you will be aware, the current iteration of the EU's Framework Programme comes to an end in 2013, and discussions about the future of the Programme are already well underway. It is crucial that the UK HE sector is a strong voice in these discussions so as to ensure the next phase of the Programme, FP8, reflects the interests of UK HEIs.

As part of its programme of activities to support UK involvement in influencing the shape of FP8, Universities UK and the UK HE Europe Unit are developing a 'sounding-board' of Framework Programme experts from within UK HEIs. The sounding board will number around 15 individuals from across the UK HE sector, and will comprise mainly of Directors of European Research and experienced European Funding Managers. The function of the sounding board will be to provide UUK and the Europe Unit with expert advice to support sector-wide efforts to shape FP8. For example, the Board will be asked to provide comments on an early draft of the UK HE sector position on the future of the Framework Programme, before it is submitted to the European Commission and used by UUK and the Europe Unit in direct lobbying of the European institutions. It is expected that the Board's activities will take place mainly by email, though the necessity to meet in person may arise at a later date.

**Dr Christian Yeomans**, Policy Officer (Europe), UK HE International and Europe Unit

**Tel** +44 (0)20 7419 5537 **Email** [christian.yeomans@europeunit.ac.uk](mailto:christian.yeomans@europeunit.ac.uk)

**Europe** [www.europeunit.ac.uk](http://www.europeunit.ac.uk) **International** [www.international.ac.uk](http://www.international.ac.uk)

**Address** Woburn House, 20 Tavistock Square, London, WC1H 9HQ

**Switchboard tel** +44 (0)20 7419 4111 **Fax** +44 (0)20 7383 5766

**Subject:** JISC Grant Funding call: e-Content Programme Strand A Enriching via Collaboration.

**From:** "Sarah DUNNE [7252]" <s.dunne@JISC.AC.UK>

**Date:** Thu, 13 Jan 2011 10:24:37 +0000

**To:** ENRICHINGVIACOLLABORATION@JISCMail.AC.UK

Dear **markers**

Thank you for your efforts in marking the bids for the JISC Grant Funding call: e-Content Programme Strand A Enriching via Collaboration. We will be holding a panel meeting to discuss the marks and comments at **10.30 am – 1pm on 19th January 2011 at the JISC Offices, Brettenham House, London** <http://www.jisc.ac.uk/contactus/findus/london.aspx>. Please can you reply to this message to confirm your attendance.

Copies of the bids are available from the JISCMail website. In order to access the files please click on the following url: <https://www.jiscmail.ac.uk/cgi-bin/>

██  
████████████████████ Please note that paper copies of the bids will not be available unless specifically requested. Please notify me by 12 noon on Monday 17<sup>th</sup> January if you require a paper copy of the bids. A briefing paper with collated marks and comments will be circulated tomorrow.

Many thanks

Sarah

Sarah Dunne  
JISC  
Northavon House  
Coldharbour Lane  
Bristol  
BS16 1QD  
Tel: 0117 931 7252  
Fax: 0117 931 7255  
[www.jisc.ac.uk](http://www.jisc.ac.uk)

acceptance as RO

Subject: Je-S 1: Steering Group  
Date: Wed, 03 Mar 2004 11:19:14 +0000  
From: BOB INNES <BOB.INNES@pparc.ac.uk>  
To: [simon.kerridge@sunderland.ac.uk](mailto:simon.kerridge@sunderland.ac.uk)

Simon,

Ian Carter has told me the good news that you're willing to be the RO representative on the Je-S 1 Steering Group. We're pleased to have you aboard.

I thought that I better contact you to confirm that you're the rep although I can't offer much information about when the group is likely to meet for the first time. I can tell you that Serena Cooper (of EPSRC but moving to PPARC) will be taking up the post of Je-S 1 System Manager on 22 March. Serena will be keen for the Steering Group to meet as soon as possible but it's unlikely that it'll be before the end of April. Once I've received nominations from the four Councils (one Council has yet to respond) someone will be in contact regarding availability.

In the meantime, if you have any queries, please give me a call.

Regards,

Bob

Dr R A Innes  
Head, ERA/Je-S 1 Project Manager  
PPARC Swindon Office  
Polaris House, North Star Ave  
Swindon SN2 1SZ  
UK  
Tel: (0)1793 442048  
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RA Programme Web Site: <http://www.rcuk.ac.uk/je-s/>  
PPARC Web site: <http://www.pparc.ac.uk/>

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Je-S Management Board

Agenda for 1<sup>st</sup> Meeting  
25 September 2006, 11.00am – 1.00pm, Room A, Polaris House, Swindon

Agenda items:

Details	Name	Doc Ref
1. Welcome and Introductions	AE	
2. Terms of Reference and Mode of Operation	AE	090601
3. Je-S Projects Highlight Report	AD	090602
4. Je-S Service Highlight Report	RH	090603
5. Je-S Reporting	AD/RH (All)	-
• Highlight report		
• Risk & Issue Log		
• Finances		
6. Small Development Projects List	JBD	090604
7. Security Report	RH	090605
8. Any other business	AE	
9. Date of next meeting	AE	

Documents included for review:

Appendix A – Je-s Steering Group Terms of Reference  
Minutes of the last meeting  
Je-S Service Budget Position

Appendix B – Research Administration Programme Board Terms of Reference  
Minutes of the last meeting

Appendix C – Je-S Steering Group Risk Log  
Research Administration Programme Board Risk Log  
Example Risk log

Attendees:

Atti Emecz - Meeting Chair  
Andy Gibbs (ESRC)  
Catherine Nixon (AHRC)  
Ann Dumiat (Je-S Projects Manager)  
Gareth MacDonald (BBSRC)  
Clive Hayer (EPSRC)  
Jerry Folkson (MRC) – Carol Catley  
Jo Booth-Davey (Je-S Development Manager)  
Andrew Lemasuner (PPARC)  
Nikola Lucas (Je-S System Manager)  
Anne McFarlane (NERC)  
Rich Horton (PPARC)  
Simon Kerridge (University of Sunderland)



Ref: 090601

Title: Je-S Management Board Terms of Reference and Mode of Operation

Details: Background OMG information

**Purpose:** Recommendations from the Research Councils UK Operational Management Group (OMG) in June 2006.

**RESEARCH COUNCILS UK OPERATIONAL MANAGEMENT GROUP - 21 June 2006  
POST RA PMB GOVERNANCE ARRANGEMENTS**

**Issue**

1. This paper proposes terms of reference and membership for a successor body to the RA PMB and Je-S Steering Group.

**Action**

2. The Operational Management Group is invited to:

- APPROVE**, subject to any amendments identified, the terms of reference and membership template for the Je-S Management Board
- IDENTIFY** possible candidates for the Chair of the group
- NOMINATE** Council representatives on the group

**Further information**

Contact: Bob Innes  
Phone: 01793 442048  
Email: [bob.innes@pparc.ac.uk](mailto:bob.innes@pparc.ac.uk)

**RESEARCH COUNCILS UK OPERATIONAL MANAGEMENT GROUP  
21 June 2006  
POST RA PMB GOVERNANCE ARRANGEMENTS**

**Issue**

1. This paper proposes terms of reference and membership for a successor body to the RA PMB and Je-S Steering Group.

**Context**

2. OMG agreed in March 2006 that the responsibilities of the RA PMB should be shared between two new bodies, one overseeing the JGPF and NGBD projects, and the other overseeing the remaining (ie. outward-facing) RAP activities. It was agreed that the Je-S Steering Group, suitably amended, should assume the latter set of responsibilities.

3. Work is well progressed on establishing the Joint Grants Processing Management Board (JGP MB) which has assumed responsibility for the JGPF and NGBD projects. Nick Winterton chaired the first meeting of the JGP MB on 8 June and will update OMG.



4. The demands of the Shared Services Roadmap study have slowed progress on the reconstitution of the Je-S Steering Group. To avoid planning blight and delays to aspects of some Je-S activities, it will be important for the new body to meet within the near future.

Je-S Management Board

5. It is proposed to rename the Je-S Steering Group as the Je-S Management Board, reflecting that the group will be responsible for all aspects of Je-S (ie. operations and development). As such it will inherit ongoing issues from the Je-S Steering Group and the RA PMB. Hence, ensuring some common membership between the new Board and its two predecessors will be important (membership is considered below).

6. Draft terms of reference for the new board are attached. They reflect a merging of the terms of reference of the existing Je-S Steering Group and the RA PMB and represent a significant increase in the level and breadth of responsibility.

Board Membership

7. The template for membership of the Board is included in the draft terms of reference. Given the increase level of responsibility, it is proposed that the membership differ from that of the Je-S Steering Group in a few regards, namely:

- a. The Chair of the Board should be at Director level, reflecting the continued importance that the Councils place on developing the Je-S system and delivering a high quality service to the research community and research organisations
- b. RDG should be represented on the Board, reflecting the importance of Je-S to the delivery of Councils' programmes
- c. The Research Organisation Consultation Group be formally represented on the Board, continuing the importance given by the RA Programme to RO representation

Action

2. The Operational Management Group is invited to:
- i. **APPROVE**, subject to any amendments identified, the terms of reference and membership template for the Je-S Management Board
  - ii. **IDENTIFY** possible candidates for the Chair of the group
  - iii. **NOMINATE** Council representatives on the group

**Title:** Je-S Management Board Terms of Reference and Mode of Operation  
**Details:** Je-S Management Board - Draft Terms of Reference and Mode of Operation (updated 9/6/06)

**Action:** The Je-S Management Board is invited to review, discuss and approve:

1. The Group is responsible for the development, implementation and management of the Research Councils' strategy for electronic interactions with research organisations in a research administration context.
2. The group includes a representative of each grant-awarding Research Council, a representative of the Research Organisation Consultation Group, the Je-S System Manager and the Je-S Projects Manager. It is chaired by a senior member of the Research Councils' staff.
3. The specific terms of reference are:
  - To oversee, develop and refine the Research Councils' strategy for electronic external processes across the complete grant, fellowship and studentship life cycles so that the processes are efficient and effective
  - To commission and oversee the projects necessary to implement the strategy
  - To identify and help acquire the staff and other resources necessary for the agreed portfolio of projects.
  - To manage the budget delegated by OMG
  - To own the Je-S Framework, ensuring that it reflects the latest range of electronic processes available through the Je-S system
  - To approve the publication of revisions to the Je-S Framework
  - To oversee and monitor the delivery of Je-S service levels (hosting, maintenance and helpdesk)
  - To agree the content and priority of changes to all services provided through the system
  - To resolve issues on which agreement has not been reached amongst the Research Councils.
  - To forward issues on which the Board cannot reach agreement to OMG
  - To provide monthly highlight reports to OMG

Mode of Operation

- The Board will normally meet every two months
- Meetings will be held in Swindon Office
- Members who are unable to attend a meeting may send an alternate but should inform the Secretary (Je-S System Manager) in advance
- If the Chair is unable to attend a meeting, he/she will nominate a deputy.
- Papers will be distributed by e-mail, one week before each meeting

Membership Template

Chair	RC Director
AHRC	Catherine Nixon
BBSRC	Gareth MacDonald
EPSRC	Clive Hayer
ESRC	Andy Gibbs
MRC	Jerry Folkson
NERC	Anne McFarlane
PPARC	Andrew Lemasurier/Rich Horton
ROCG representative	Simon Kerridge
Je-S System Manager	Nikola Lucas
Je-S Projects Manager	Ann Dumlat
Je-S Development Manager	Jo Booth Davey

[Reply](#)[Reply All](#)[Forward](#)**Je-S Management Board****Atti Emecz (EPSRC,C&I) [Atti.Emecz@epsrc.ac.uk]**

Flag for follow up. Start by 25 February 2011. Due by 25 February 2011.

**Sent:** 25 February 2011 13:18**To:** **Simon Kerridge****Cc:** **Pete Dixon (RCUK, SSC Ltd) [Pete.Dixon@ssc.rcuk.ac.uk]**Dear **Simon,**

As we have now had the final meeting of the Je-S Management Board I would just like to take this opportunity to thank you your contributions over the years.

You will know that the Research Councils place a great deal of importance in ensuring their joint electronic submission system (Je-S) remains close to the community who are using it on a day to day basis. You have been involved in the management of the service since September 2006 and before that you were a member of the steering group that was responsible for introducing the system.

Throughout this period you have very much impressed us with your ability to provide pragmatic and constructive comments in terms of the governance arrangements and in relation to the service itself. Your ability to get to the crux of an issue without the background that the other members of the Board (who of course are all from the Research Council) can draw upon was particularly noteworthy. We have also relied upon you to form networks within the research community so that you can represent the wider view. As we all know, the research community is incredibly diverse and it can have been no easy feat to synthesise the inputs you have received into a form that Research Councils can then readily respond to. I think a measure of the success you have had in this respect must be the high regard that the community have of the system. We are aware of this from the more formal feedback processes (such as user surveys) that we have instituted.

I know also the value the staff actually running the service place upon your advice and input and as a result of your comments we have been able to prioritise our workloads more effectively e.g. by focusing on developments regarding password resetting, by strategically allowing some slippage to service standards (e.g. call answering targets) when resources could be best deployed elsewhere. I do appreciate that we have not always been able to respond to the developments that the research community (e.g. double deadlines) have wanted but have always remained impressed by the way you have made the case for such developments and your good grace when we have had to disappoint you.

Through other work (such as with RMAS), I have been able to see the effective way in which you integrate your knowledge of the wider context and the opportunities and risks that exist in that context to the benefit of specific projects. Your ability to horizon scan and make the necessary linkages between issues and projects have been very valuable to those responsible for the work you have been helping in.

I would finish by particularly thanking you for the advocacy role you have played on behalf of Je-S and the Research Councils more generally. I know that you have offered us much support often to audiences who can be somewhat sceptical in outlook and that has been much appreciated.

Thank you once again and I do look forward to working with you on other projects in future

Yours sincerely

Atti Emecz  
Chair, Je-S Management Board  
Director; Communications, Information & Strategy  
EPSRC

From: [Josh BROWN](#)  
To: [Simon Kerridge](#)  
Subject: Research Identifiers work  
Date: 22 March 2011 10:20:44

---

Dear [Simon](#),

This is to follow up from conversations at and since the last RIMG meeting.

JISC would like to formally invite you to be a part of an official JISC advisory 'task and finish' group. The "task to finish" in this group is to help advise JISC on the most 'efficient and effective ways by which researchers can be assigned identifiers'. We hope to achieve this task over the course of five meetings (an average of one per month, mostly teleconference). The first two meetings are proposed for the 15<sup>th</sup> of April and the 18<sup>th</sup> of May.

JISC is keen to get clear guidance from ARMA in this work, and you are well-versed in the issues, which means that your input would be particularly appreciated. If you won't be able to join the group, we would really appreciate it if you could nominate a colleague to represent ARMA on the group, as the association is a crucial stakeholder group for this work.

For each of the meetings JSIC will co-ordinate recommendations from independent consultants on key topics which require your guidance, for example: current institutional practices for assigning identifiers (e.g. staff profile pages, email handles), research information management system requirements, international identifier proposed solutions (Orcid, academia.edu, etc), third party identifiers (e.g. Thomson Reuters' Researcher ID and OpenID), National name identifier services (i.e. BL-Names catalogue), subject specific identifier services (i.e. Arxiv, Lattes), etc.

Your recommendations will help guide JISC with how and where it should take action with regards to Research Identifiers.

Kind regards, and see you soon.

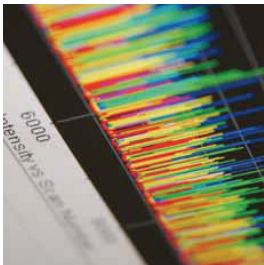
Josh

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## Foreword

THE DATA IMPERATIVE: MANAGING THE UK'S RESEARCH DATA FOR FUTURE USE | PAGE 1



The 2008 Research Assessment Exercise has confirmed that the UK's higher education research base remains world-class and in many respects world-leading. How are we to ensure that this national capacity for knowledge generation and innovation remains competitive, and that our researchers can continue to benefit from a high quality research infrastructure?

The challenge, however, is not just about storage. Data must be structured to allow retrieval, preservation and re-use. This is the hardest part. It requires procedures for effective data management to be in place from the beginning of the research process, ensuring, for example, that appropriate metadata (data about the data) are generated and formatted.

Part of the answer lies in the effective management of the rich haul of research data captured on a continuing basis by those researchers. Over recent years, the availability, development and application of advanced computing and information technologies have led to huge growth in the volumes of research data being generated. Research data have become a valuable resource that needs to be maintained for future access and re-use if we are to reap the full benefits of the UK's investment in research.

Few research projects can escape this challenge on account of size or discipline. Although the data deluge has been most apparent in large-scale research projects that have exploited grid computing, some of them linked to the UK e-Science programme, small projects also generate important data that need effective management. And advances in technology are transforming research in the arts and humanities and the social sciences just as much as in the physical and biological sciences.

The rewards of managing this resource effectively include:

- The ability to share research data, minimising the need to repeat work in the laboratory, field or library, thus saving time and effort
- The ability to retrieve and compare data from multiple sources easily, leading to powerful new insights

Research funders in the UK and elsewhere are increasingly recognising the value of making research data widely available. Many now require researchers to manage their data outputs proactively and deposit them for future access. The Organisation for Economic Co-operation and Development's (OECD) recent statement<sup>1</sup> on access to the outputs of publicly funded research resonates with this trend.

- The identification of new research areas for collaborative study: research data will increasingly be the starting point for new research as well as a key output

<sup>1</sup> OECD principles and guidelines for access to research data from public funding  
Paris: OECD, 2007 <http://www.oecd.org/dataoecd/9/6/38500813.pdf>

PAGE 2 | THE DATA IMPERATIVE: MANAGING THE UK'S RESEARCH DATA FOR FUTURE USE

The UK government has also acknowledged the issue. The far-seeing report *Science and Innovation Investment Framework 2004-14*<sup>2</sup> put the development of our national e-infrastructure centre stage, and the subsequent 2007 report from the then Office for Science and Innovation (OSI), *Developing the UK's e-infrastructure for science and innovation*<sup>3</sup>, scoped it in more detail. Crucially, the development of national capability and capacity for the management of digital research data emerged as a key component of the e-infrastructure. Since these reports were published, other advanced economies have started to make significant investments in this area.

In 2007, the Higher Education Funding Council for England (HEFCE) funded the UK Research Data Service feasibility study under its Shared Services programme, to show how the UK can turn the OSI's vision of a coherent data infrastructure into reality by building on existing investment and good practice. This document outlines the study's main findings and recommendations.

We believe the study has shown conclusively that investment in a national approach to the management and exploitation of our research data will add significantly to the value of our research effort and strengthen our research base in a cost-effective way.

- For the researcher, who may fear that the demands of data management will distract them from the core business of research, the national data service we propose will provide access to advice about data management and to data storage and curation facilities

- For UK higher education, the service will be cost-effective. It will leverage existing expertise and provision and avoid duplication of effort. Our existing data centres, such as the UK Data Archive and the network of Natural Environment Research Council (NERC) data centres, will be able to contribute their knowledge to the development of a truly national approach

We hope that this document will draw the attention of stakeholders and policy makers throughout UK higher education and government to the study, and encourage them to act on its recommendations.

The choices we make in the next few years about the management of our digital research data assets will help to determine how competitive the UK remains in the global knowledge economy.

The full report will be available at [www.ukrds.ac.uk](http://www.ukrds.ac.uk)



**Professor John Wood CBE FREng**  
*Professor of Engineering, Imperial College  
Chair, European Research Area Board  
Chair, UKRDS feasibility study Steering Group*

**Jean M. Sykes**  
*Librarian and Director of IT Services  
London School of Economics  
Project Director*

<sup>2</sup> Science and Innovation investment framework 2004-2014, Her Majesty's Stationary Office, London, 2004

<sup>3</sup> OSI e-infrastructure Working Group, 2007, *Developing the UK's e-infrastructure for science and innovation* <http://www.nesac.ac.uk/documents/OSIreport.pdf>

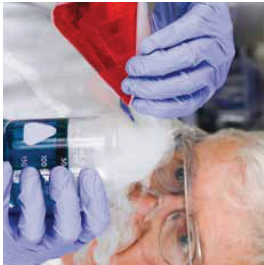
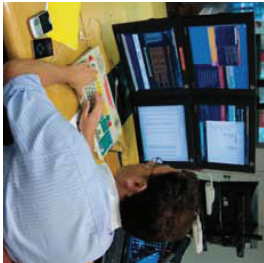


THE DATA IMPERATIVE: MANAGING THE UK'S RESEARCH DATA FOR FUTURE USE | PAGE 3

Data must be structured to allow retrieval, preservation and re-use. This is the hardest part. It requires procedures for effective data management to be in place from the beginning of the research process, ensuring, for example, that appropriate metadata (data about the data) are generated and formatted.

PAGE 4 | THE DATA IMPERATIVE: MANAGING THE UK'S RESEARCH DATA FOR FUTURE USE

The UK Research Data Service (UKRDS) study was set up to test the feasibility of a national shared service for managing research data that would build on existing investment and good practice, fill gaps and develop capacity for the long term.



### INTRODUCTION

The UK Research Data Service (UKRDS) study was set up to test the feasibility of a national shared service for managing research data that would build on existing investment and good practice, fill gaps and develop capacity for the long term.

The project team identified three principal options for the future management of the UK's research data outputs:

- 1. No change** The current situation would remain in place with some disciplines well provided for and others not. A UKRDS would not be established, and any additional capacity for managing research data would be provided by individual universities
- 2. Highly centralised** A new, centralised agency would be created, with responsibilities in every area of data management, and with direct responsibility for the provision and management of all new capacity
- 3. Cooperative service** On this model, a UKRDS would be an enabling framework, working with the many UK stakeholders. It would act as a catalyst for new services and partnerships, as a centre of

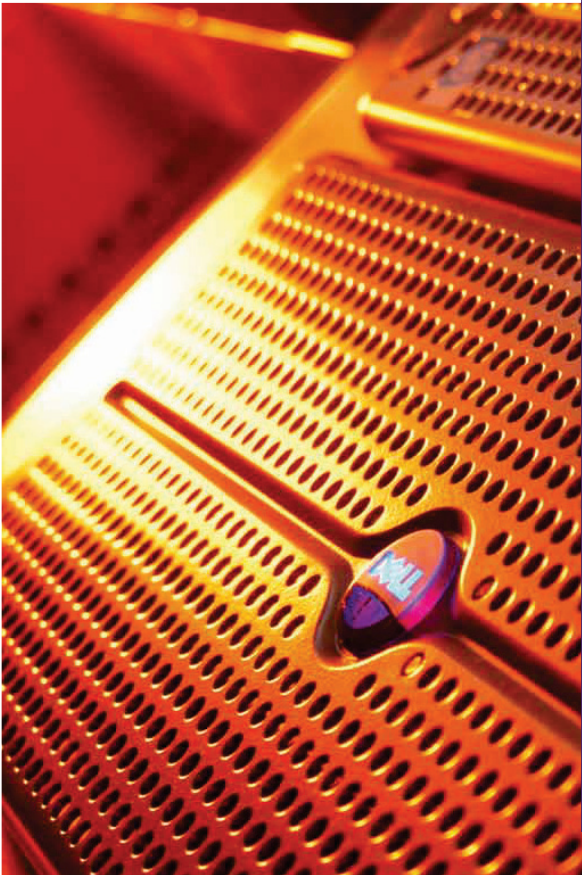
excellence, as a standards-guiding body and as a source of expertise and information about data management and repositories, commissioning additional capacity and building on current best practice and facilities

The study embarked on three key areas of work to inform its recommendations:

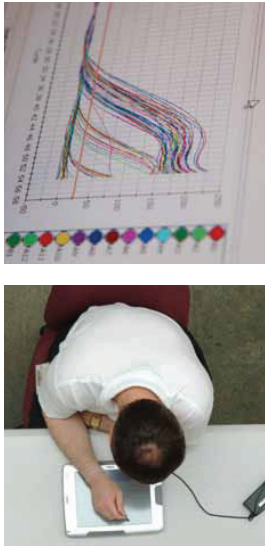
- 1.** It identified four case study universities (Bristol, Leeds, Leicester and Oxford, which were considered to be representative of research-intensive UK universities) and assessed researchers' requirements through the use of questionnaires, interviews and workshops
- 2.** It engaged with a wide range of stakeholder groups including: major funding bodies, archives and libraries, existing facility and service providers, and others including those involved in this work internationally
- 3.** Wide-ranging desk research was undertaken, aimed particularly at assessing the UK provision in an international context

## What researchers said

- ➔ An increasing number of disciplines are producing electronic research data
- ➔ Research data is difficult to retain and manage once the funding associated with the project ceases
- ➔ Most researchers share data – only about 12% do not make their data available in any way. Informal peer exchange networks within research teams and with collaborators are predominant
- ➔ 21% of researchers use a national or international facility
- ➔ Most research data is stored at faculty or department level
- ➔ Only about 18% deposit data with a data centre. However, a much higher percentage (about 43%) expressed the need to access other researchers' data
- ➔ Those who did not have access to an established facility were particularly keen on a UKRDS







KEY FINDINGS

A number of issues emerged from consultations with groups representing approximately 700 researchers at the four case study universities (see findings from researchers' opposite).

The engagement with stakeholders and desk research indicated that although there is substantial infrastructure and expertise in the UK, it exists in 'islands' with limited coherence and cross-communication because each island was established independently to address a particular problem. These include: significant investments in JISC activities, for example, JISC Services and Collections, the JANET network, federated access management, the Digital Curation Centre and institutional repositories; facilities such as the data centres already operated by some of the Research Councils; and the Research Information Network, which is providing an increasingly important evidence base of researchers' needs.

It is clear that the UK has a sound basis on which to build, but it needs to act soon if it is to maintain its competitive position. Work is already under way in Europe, the USA, Canada and Australia. The study found that the cooperative service model (the third option identified) offers the optimum solution for effective management of the UK's research data output.

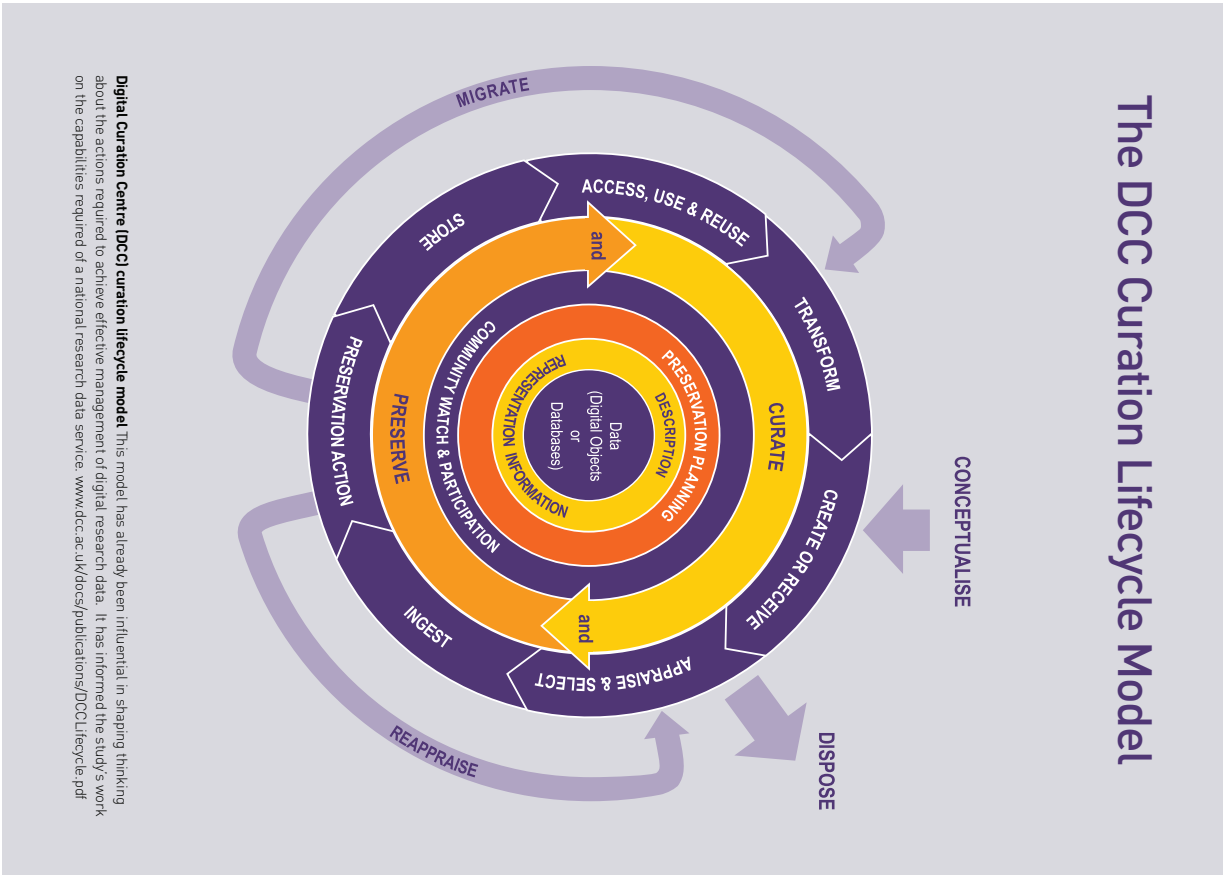
THE FEATURES AND BENEFITS OF THE COOPERATIVE SERVICE MODEL

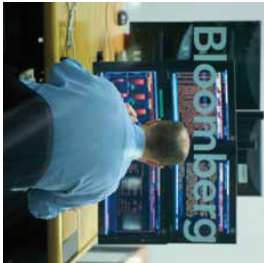
Research costs are growing, and the management of research data is a significant cost. A shared service approach to data management holds promise of minimising the long-term impact and adding value through better exploitation of research data.

Central to the cooperative service model is the development of data management plans by researchers, based on the data life cycle as described by the Digital Curation Centre (DCC) (see over), and the development of a central registry of such plans. This approach would allow a UKRDS to maximise exploitation of existing facilities within the UK, and to identify and fill gaps in current provision.

A cooperative service model would have a number of benefits. It would help to:

- Protect and extract greater value from research investment
- Preserve opportunities for future research
- Promote the work of the institution and researcher
- Inform the strategic development of the research infrastructure
- Reduce research data duplication, re-creation and errors, and unplanned data loss





→ Plan volume growth/capacity more effectively

→ Provide more opportunity for re-use, cross-reference and dataset integration

→ Target retention and disposal more appropriately

→ Share skills, giving better coverage and productivity in both service providers and researchers

→ Provide an effective focus for best practice in data curation

Additional direct benefits to the institution, to the researcher and to funders could include:

→ Guidance on which repository to get research data from and a gateway to approved service providers

→ Help with the use of data management plans to facilitate life cycle management of datasets

→ The opportunity to inform strategic development of the research infrastructure at local and national levels, and work with stakeholders to inform policy and resourcing of post-project long-term data management

→ The opportunity to commission new services to fill gaps in data management provision

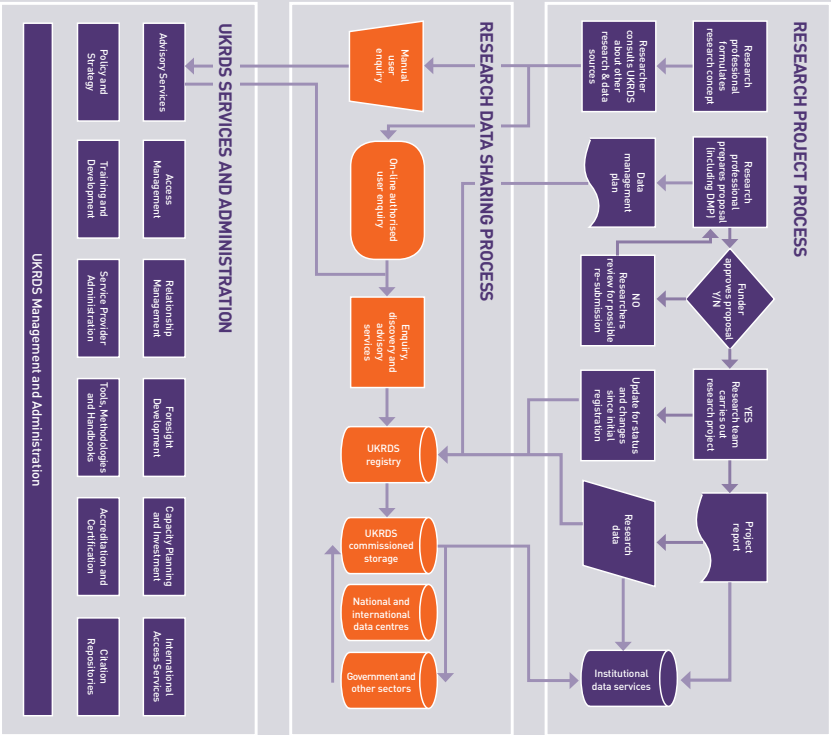
### COST-BENEFIT ASSESSMENT

The study developed a model for a phased implementation that would enhance the knowledge base required to scale to a national service.

This is based on an initial Pathfinder phase, lasting two years, and involving a relatively small group of key stakeholders, including universities, one or more research funders, and at least one existing national data service. The Pathfinder concept represents an integrated approach rather than a pilot, and implies that a complete service can be implemented with a limited set of stakeholders to test the practical implications of the service delivery infrastructure before scaling up to the whole sector. Scale-up will be driven by demand and constrained by available resources.

The costs and benefits analysis in the full report shows how cost-benefit will build up from the foundations laid in the Pathfinder stage. This analysis shows that, even on the basis of conservative assumptions, a scaled-up UKRDS based on the cooperative service model would generate significant savings to the sector compared with the costs of developing the necessary capacity at each individual institution.

## UKRDS Basic Processes



**UKRDS process diagram** Developed by the UKRDS consultants, this diagram places UKRDS capabilities into a fuller context, including the role played by data management plans (DMPs)



GOVERNANCE

The study recommends that the most effective long-term structure is likely to be a Company Limited by Guarantee with a Board made up of stakeholder representatives. Development of the most appropriate governance model will be progressed further during the Pathfinder phase in consultation with funders and other stakeholders.

CONCLUSIONS

The UKRDS feasibility study has clearly established:

- 1. The need for a UK-wide approach to research data management
- 2. The existence of significant gaps in provision that require filling
- 3. That there are significant building blocks in place with which to develop a UK-wide shared service for maximum cost-effectiveness and efficiency
- 4. That other countries are making considerable efforts to surface and exploit research data on a national or regional scale

5. That a UKRDS based on the cooperative service model (option 3 above) is feasible and would offer the following strategic benefits:

- Capitalising on existing investments by providing coherence to extract maximum value from infrastructures and services already in place
- Providing a shared service across the dual support system and thereby supporting Department for Innovation, Universities and Skills (DIUS) strategies
- Achieving leverage of research value and output, and increasing the UK's global competitiveness in research
- A cost-effective approach to the delivery of additional capacity to fill gaps in existing provision
- Avoiding the opportunity costs of leaving individual higher education institutions to manage rapidly increasing volumes of research data

Conclusion

A UKRDS based on the cooperative service model (option 3) is feasible and would offer the following strategic benefits:

- Capitalising on existing investments by providing coherence to extract maximum value from infrastructures and services already in place
- Providing a shared service across the dual support system and thereby supporting Department for Innovation, Universities and Skills (DIUS) strategies
- Achieving leverage of research value and output, and increasing the UK's global competitiveness in research
- A cost-effective approach to the delivery of additional capacity to fill gaps in existing provision
- Avoiding the opportunity costs of leaving individual higher education institutions to manage rapidly increasing volumes of research data

Key Recommendation

A UKRDS based on the cooperative service model should be considered for funding over a period of at least five years. In the first instance a 2-year Pathfinder phase should be funded.

### UKRDS Steering Committee

**Richard Boulterstone**  
Director of e-Strategy and Information Systems, The British Library

**Linda Bradley**  
Head of Research Policy, Department of Employment and Learning (DEL NI)

**Mario Camplongo** (Corresponding member)  
Head of Unit for Research Infrastructure, European Commission

**John Coggins**

Vice Principal of Life Sciences, Clinical Medicine and Veterinary Medicine, University of Glasgow, and member of Research Information Network (RIN) Advisory Board

**Ian Diamond**

Chief Executive of Economic and Social Research Council (ESRC), and Chair of Research Councils UK (RCUK)

**David Gani**

Director of Research Policy and Strategy, Scottish Funding Council (SFC)

**Neil Geddes**

Director of e-Science, Science and Technology Facilities Council (STFC)

**David Grant**

Vice-Chancellor, Cardiff University

**Paul Hubbard**

Head of Research Policy, Higher Education Funding Council for England (HEFCE)

**David Ingram**

Director of the Centre for Health Informatics and Multiprofessional Education (CHIME), University College London, and member of Research Information Network (RIN) Advisory Board

**Michael Jubb**

Director, Research Information Network (RIN)

### Simon Kerridge

Head of Graduate Research Support and Assistant Director (Research), Academic Services, University of Sunderland, and Secretary to The Professional Association of Research Managers and Administrators (UK) (ARMA) Board of Directors

**David Lynn**

Head of Strategic Planning and Policy, Wellcome Trust

**Liz Lyon**

Director, UK Office for Library Networking (UKOLN)

**Tim Marshall**

Chief Executive Officer, JANET (UK)

**John Milner** (Secretary)

UKRDS Project Manager

**Wendy Platt**

Director-General, The Russell Group of Universities

**Chris Rawlings**

Head of Biomathematics and Bioinformatics, Rothamsted Research

**Malcolm Read**

Executive Secretary, Joint Information Systems Committee (JISC)

**Linda Tiller**

Senior Research Manager, Research Business and Communities, Higher Education Funding Council for Wales (HEFCW)

**Anne Trelethen**

Director of the Oxford e-Research Centre, University of Oxford

**Astrid Wissemburg**

Director of Communications and Information, Economic and Social Research Council (ESRC)

**John Wood** (Chair)

Professor of Engineering, Imperial College London

### UKRDS Project Management Board

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Programme Director, e-Research Joint Information Systems Committee (JISC)

**Marin Lewis**

Director of Library Services and University Librarian, University of Sheffield

**John Milner**

UKRDS Project Manager

**Tim Phillips**

Director of Information Systems and Computing, University of Bristol

**Stephen Pinfield**

Chief Information Officer, University of Nottingham

**Jean Sykes** (Chair)

Librarian and Director of IT Services, London School of Economics and Political Science

**Lynne Tucker**

Chief Technology Officer, King's College London

**Gina Woodward**

Associate Director Strategy/Information Services, Cardiff University

### We'd like thank all those who have contributed to this work

- Our principal funder, the Higher Education Funding Council for England (HEFCE)
- Our supporting funders, the Joint Information Systems Committee (JISC), Research Libraries UK and the Russell Group IT Directors Group (RIGIT)
- Sero plc, who undertook much of the detailed research
- Our four case study institutions, the universities of Bristol, Leeds, Leicester and Oxford
- The Project Steering Group and Project Management Board listed above
- Many other researchers, data managers and policy makers who gave their time generously

[Reply](#)[Reply All](#)[Forward](#)**BRUCE Project Advisory Group - Sample Reports**[Lorna Mitchell \[Lorna.Mitchell@brunel.ac.uk\]](#)

Flag for follow up. Start by 15 April 2011. Due by 15 April 2011.

**Sent:** 15 April 2011 14:28**To:** 'valerie.mccutcheon@glasgow.ac.uk'; 'jnortham@bournemouth.ac.uk'; 'staylor@brookes.ac.uk'; **Simon Kerridge;**  
's.a.puzey@aston.ac.uk'; 'g.fairbairn@surrey.ac.uk'; 'jab9@le.ac.uk'; 'jenny.ogrady@bristol.ac.uk';  
Bethan Adams [badams@sgul.ac.uk]**Cc:** Rosa Scoble [Rosa.Scoble@brunel.ac.uk]**Attachments:**  BRUCE - Report examples.xlsx (61 KB) [Open as Web Page]

Hello,

Please find attached an Excel file that contains 2 sample reports that illustrate the sort of reports that we at Brunel would like to be able to produce via BRUCE.

We would be grateful if you could have a look at these and then let us know:

- a) Would these reports also be useful for your institution?
- b) If so, is there additional / different information that you would like to be able to include in the reports? (please note that personal information has been removed from the attached reports but would be included in the institution-specific reports generated via BRUCE)
- c) If not, what sort of reports would be more useful, i.e. what types of research information management do you find it most problematic to collect?

Any other comments or thoughts on what you would like to see included in the reports would also be welcomed.

If you could let us have your comments on these by Friday 13<sup>th</sup> May that would be very helpful.

Please let us know if you have any questions or if you have any problems opening the attachment.

Thanks for your help with this.

Regards,

*Lorna Mitchell**Assistant Director (Academic Support)**Brunel University Library**Brunel University, Uxbridge, Middlesex UB8 3PH**Tel: 01895 266 146**Website: <http://www.brunel.ac.uk/library>**BRUCE Project: <http://bruceatbrunel.wordpress.com/>*

5 FOCUS GROUP PORTFOLIO ITEMS

Portfolio items are grouped into these seven areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- ERA Questionnaire (ERAQ)
- Esteem (Est)
- **Focus Group (FG)**
- Historical Items (Hist)
- Profession (Prof)

This section contains the items pertaining to the **FG** area.

5.1 Focus Groups (FG)

I undertook a systematic review of two elements of ERA systems that were being replaced at Sunderland and the work related to that is listed here, see section 5.4 and the case study chapters 7 and 8 of the doctoral report. This work was based on a series of Focus Groups that I instigated.

After this introduction there is an index table of items in this section (an example is shown below), and the portfolio items themselves follow the index table.

Table 8: Sample Portfolio Index Table (FG)

Ref	Type	Description	Outcome(s)
FGxx	<type>	<title>	Kx, Sx
A short description of item FGxx with its relevance and importance in order to demonstrate the learning outcomes Kx & Sx that they address (K1-2; S1-5, see below for explanations of the learning outcomes). <type> is the type of the item, for example: report, email or presentation. <title> is the title of the item, for example: Invitation to join Steering Group. FGxx is the unique identifier for the portfolio item (xx is a two digit number) which is used to reference it in the doctoral report, or indeed from another portfolio item.			



Each item is described in the table, with two rows of information. The first row of the pair has the portfolio reference, type of document, short description and learning outcome(s) claimed. The second row describes the context and importance of the item, in order to substantiate the claim towards the learning outcomes listed in the first row. The actual portfolio items follow after the index table.

Note that the numbering is not contiguous as the items presented as evidence have been selected from a larger possible portfolio of items. So for example item FG04, a one page summary report from the Focus Group work, is not included as the full 10 page report (FG03) provides better context for the work.

## 5.2 Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner



- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of the seven learning outcomes above, in most cases the listings are restricted to just those outcomes which are the main foci of the item, normally 2 or 3 learning outcomes at the most.

### 5.3 Focus Group Portfolio Index

Table 9: Portfolio Index Table for Focus Group (FG) Items

Ref	Type	Description	Outcome(s)
FG01	Report	Questionnaire developed from Sunderland Focus Groups	S2
In 2010 I ran a series of Focus Groups (see FG02) to look at the issues with two specific elements of the ERA systems that I developed at Sunderland (costing and pricing and publication information, see chapters 7 and 8 respectively) with the aim of providing user feedback input into the replacement systems being implemented. This is the questionnaire that was developed from that work and used in a University wide survey, the results of which are in (FG03).			
FG02	Report	Summary of the Focus Group Activities	S2
In 2010 I ran a series of Focus Groups (see FG03) to look at the issues with two specific elements of the ERA systems that I developed at Sunderland. The work of the groups informed the questionnaire (FG01) that was rolled out to all staff at Sunderland. This report was shared with and agreed by the Focus Group members.			
FG03	Report	From Focus Groups and resulting Questionnaire Analysis	S2, S3, S4
This (10 page) report was created from the work of the Focus Group (FG02) and evidence from the analysis of the [n=155] responses to the questionnaire (FG01) that it advocated. The report with its 13 specific recommendations was submitted to and accepted by the University Business Systems Strategy Group in Nov 2010.			
FG05	Slides	Used in the 2010 Focus Groups	S2, S3, S4
These slides show the structure and content of the focus groups (FG02) that I organised to look at the costing & pricing (see chapter 7) and publication information systems (see chapter 8) that I developed. Thanks are owed to (now Dr) Paul Andrew and Dr Mark Proctor who acted as neutral facilitators for the administrative and academic groups respectively.			

### 5.4 Focus Group Portfolio Items

(follow on the next page)

ERA Focus Group Questionnaire (Sunderland)

1. Introduction

The questionnaire should only take about **10 minutes** of your time to complete and the responses will be kept confidential with the analysis being anonymous.

As you may know the University has recently upgraded its costing and pricing system and is in the process of upgrading its research publications system. In order to try and learn from the good and bad points of the old systems in order to make the new systems best meet your needs we are undertaking a systematic review. A series of focus groups were run in July which have raised some issues, we would now like to draw upon evidence from a wider base to inform these new developments. We would therefore really appreciate it if you could take the time to complete this anonymous survey. As well as asking about your opinion on the issues that the focus groups have raised we would also like you to comment on the utility of these systems in general in terms of what benefits (if any) can be gained from using them. At the end there are some classification questions to allow for further statistical analysis.

The Questionnaire has three parts:

Part A: Costing and Pricing for externally funded projects

Part B: Research Outputs (Publications) Information

Part C: Simple classification (for statistical analysis)

**The survey really should only take about 10 minutes in total.** The results will be used to help us make the new systems better meet your needs so that you can work more effectively on your research. Thank-you for taking the time to look at this survey.

ERA Focus Group Questionnaire (Sunderland)

2. Part A: Costing and Pricing

**Costing and Pricing** – here we are talking about the electronic system that you use to help work out the cost of doing a piece of research so that you know how much to ask for from the funder. It also handles the approval by the Faculty and University that you need before submitting your proposal.

**\* 1. Have you heard of (and if so, used) the on-line GrAppl (Grant Applications) approval system?**

☐ No ☐ Yes (but I have not used it) ☐ Yes (and I have used it)

**\* 2. Have you heard of (and if so, used) the on-line FECAF (Full Economic Costing Approval Form) system?**

☐ No ☐ Yes (but I have not used it) ☐ Yes (and I have used it)

**\* 3. Have you heard of (and if so, used) the on-line pFACT (Full Economic Costing Approval) system that replaced FECAF in August 2010?**

☐ No ☐ Yes (but I have not used it) ☐ Yes (and I have used it)

**\* 4. Thinking about the FECAF system, please rate the following aspects of the system:**

	Very Good	Good	Neither Good Nor Bad	Bad	Very Bad	No Opinion
Overall Usability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transparency of Estates and Indirect Cost calculation:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transparency of other cost calculations:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accuracy of the costings:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Help text:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training Availability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps to think about costs needed:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps to think about non financial aspects of the proposal:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streamlined the approval process:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsiveness (speed) of the system:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from GRS in usage:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall the system was:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ERA Focus Group Questionnaire (Sunderland)

\* 5. Thinking about the fECAF system (if you used it) would you rate it as being better or worse than using generic IT tools (for example spreadsheets and email) to achieve the same end result?

☐ Much Better

☐ Better

☐ The Same

☐ Worse

☐ Much Worse

☐ Don't Know

\* 6. Thinking about the fECAF system, do you think that using it did affect or could have affected the QUALITY of research undertaken. You might consider whether using the system allowed you to undertake a better quality research project as a consequence of thinking about the costs, or doing the risk assessment may have helped you reflect on your project design. Or conversely it may have negatively impacted the quality of the research proposal by being too restrictive.

☐ Greatly Increased

☐ Increased a little

☐ No effect

☐ Decreased a little

☐ Greatly decreased

☐ Don't know

\* 7. Thinking about the fECAF system, do you think that using it did affect or could have affected the QUANTITY of research undertaken. You might consider whether using the system increased or decreased your chances of receiving funding, or indeed impacted on the level of funding that you were awarded.

☐ Greatly Increased

☐ Increased a little

☐ No effect

☐ Decreased a little

☐ Greatly decreased

☐ Don't know

\* 8. In terms of the costing and pricing systems that you have used how would rate them:

	Very Good	Good	Neither Good Nor Bad	Bad	Very Bad	No Opinion
Manual system:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreadsheets and email:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GrApl:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
fECAF:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
pFACT:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other System (perhaps at a different University)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ERA Focus Group Questionnaire (Sunderland)

9. Finally in this section on costing and pricing, do you have any other comments about the fECAF or pFACT systems? Perhaps things that you liked in fECAF that you would like to see in pFACT, or things that you didn't like that you would like to see done a different way (or not at all). Please do not be shy - all feedback is welcome, we really want to make pFACT as easy to use as possible.

ERA Focus Group Questionnaire (Sunderland)

3. Part B: Research Output (Publications) Information

Now please answer a similar set of questions, but this time about the systems used to collect information about your research outputs (publications).

\* 10. Have you heard of (and if so, used) the GRS on-line Publications database system, which stores publication reference information?

☐ No ☐ Yes (but I have not used it) ☐ Yes (and I have used it)

\* 11. Have you heard of (and if so, used) SURE (the University's new Institutional Repository) which stores publication information and where possible the full text as well?

☐ No ☐ Yes (but I have not used it) ☐ Yes (and I have used it)

\* 12. Thinking about the GRS on-line Publications system, please rate the following aspects of the system:

	Very Good	Good	Neither Good Nor Bad	Bad	Very Bad	No Opinion
Overall Usability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of Data Entry:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Help text:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training Availability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reports from the system (eg for a CV or an Annual Report):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-use of the data (eg for the RAE):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsiveness (speed) of the system:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from GRS in usage:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall the system is:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 13. Thinking about the GRS on-line publications system (if you used it) would you rate it as being better or worse than using generic IT tools (for example spreadsheets and email) to achieve the same end result?

☐ Much Better ☐ Better ☐ The Same ☐ Worse ☐ Much Worse ☐ Don't Know

ERA Focus Group Questionnaire (Sunderland)

\* 14. Thinking about the GRS on-line publications system, do you think that using it did affect or could have affected the QUALITY of research undertaken. You might consider whether using the system allowed you to find potential collaborators within the University or elsewhere that you otherwise would not have known about. Or conversely it may have negatively impacted the quality of your research in some way.

☐ Greatly Increased ☐ Increased a little ☐ Increased a lot ☐ No effect ☐ Decreased a little ☐ Decreased a lot ☐ Greatly decreased ☐ Don't know

\* 15. Thinking about the GRS on-line publications system, do you think that using it did affect or could have affected the QUANTITY of research undertaken. You might consider whether using the system (or perhaps others finding your publications on the website because of the system) increased or decreased your chances of receiving funding, or indeed enabled others to find you and invite you to join a consortium.

☐ Greatly Increased ☐ Increased a little ☐ Increased a lot ☐ No effect ☐ Decreased a little ☐ Decreased a lot ☐ Greatly decreased ☐ Don't know

\* 16. Please give an overall rating to the research outputs (publications) information systems that you may have used:

	Very Good	Good	Neither Good Nor Bad	Bad	Very Bad	No Opinion
Manual system:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreadsheets and email:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Static webpages:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GRS on-line (Publications section)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SURE:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other System (perhaps at a different University)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Finally in this section on publication information, do you have any other comments about the Publications section of the GRS on-line system or the SURE system? Perhaps things that you liked in the GRS system that you would like to see in SURE, or things that you didn't like that you would like to see done a different way (or not at all). Please do not be shy - all feedback is welcome, we really want to make SURE as easy to use as possible.

ERA Focus Group Questionnaire (Sunderland)

4. Part C: About you – for statistical classification

To enable statistical analysis, please answer some questions about yourself. You will be given the option to add your contact details at the end if you would like to receive a copy of results directly or would be interested in any potential follow up to this survey. Your answers will however be kept anonymous.

\* 18. You are:

☐ Female

☐ Male

\* 19. Your age is (in the range):

☐ 16-25

☐ 26-35

☐ 36-45

☐ 46-55

☐ 56-65

☐ 66+

\* 20. Thinking about your current role, you would categorise yourself

as being:

☐ A Senior Manager

☐ An Academic

☐ A Researcher

☐ A Research Student

☐ A Research Manager

☐ A Research Administrator

☐ Other

21. If you are a researcher or an academic member of staff, how would describe yourself:

☐ Submitted to the last RAE

☐ Research Active

☐ Early Career Researcher

☐ Would like to be Research Active

☐ Not Research Active

☐ I am not an Academic or Researcher

\* 22. My department (or service):

My Department/Service

is:

\* 23. Thinking about your current role, how long have you done this for (in total, not just your current job):

☐ Never

☐ 0-23 months

☐ 2-5 years

☐ 6-10 years

☐ 11-15 years

☐ 16-20 years

☐ 21-25 years

☐ 26+ years

\* 24. Please note that we are asking this only as a proxy for your seniority, like all other data it will be kept entirely confidential and used for statistical analysis only. Your current (or last) salary level [or full-time equivalent if you were employed part time] is (was):

☐ Up to £19,999

☐ £20,000-£29,999

☐ £30,000-£39,999

☐ £40,000-£49,999

☐ £50,000-£59,999

☐ £60,000-£69,999

☐ £70,000 or more

☐ Prefer not to say

25. Do you have any comments about the questionnaire?

ERA Focus Group Questionnaire (Sunderland)

26. Do you have any further comments about Costing and Pricing systems or Publications systems or other Research Support systems or indeed any general comments about IT systems in the University?

27. Please note that it is intended that the anonymised results of this questionnaire will be reported to Research Sub Committee (RSC), Business Systems Strategy Group (BSSG), GRS, Projects Finance Team and the Library, so that the University can endeavour to make the new pFACT and SURE systems meet your needs in a user friendly way.

If you would like to receive a copy of results directly or would be interested in any potential follow up to this survey please complete the following.

These questions are all optional and will only be used to contact you in relation to the above.

Name:

Email Address:

Phone Number:

ERA Focus Group Questionnaire (Sunderland)

5. Thank-you!

Many thanks for taking the time to complete this questionnaire. It is intended that the anonymised results of this questionnaire will be submitted to various University committees and services so that it can inform future Research Support Systems development: pFACT and SURE in particular. If you would like to access [pFACT](#) then [click here](#), or to see more information on SURE, [click here](#). To visit the [Graduate Research Support Pages](#), [click here](#) Once again, many thanks.



Focus Groups

In order to review two of the GRS systems that were scheduled to be replaced a series of focus groups were run in the latter half of 2010. The idea was to look at the good and bad parts of the current systems so that the good parts might be retained in the new systems and the bad parts could be improved upon.

Initially it was planned to have 3 focus groups for the various different types of staff using the systems.

- A – Senior Managers
- B – Academic Staff
- C – Research Administrators

However group A was not managed as a formal focus group but rather as a round table discussion (held Wed 7<sup>th</sup> July). The A group agreed that a series of focus groups was a sound approach and that some follow up interviews might be desirable. An open email invitation to all research active and all research support staff had been sent on Jun 26<sup>th</sup>. Due to the popularity of the proposal group B was run twice (and will be referred to as B1 and B2). The plan is to gather the groups again, about 6 months later to repeat the process in the context of the new systems.

The overall structure of the group sessions was as follows:

- Intro (SK) 5 mins
- System 1: the fECAF system (due to be replaced by pFACT)
- Then SK leaves and facilitator (PA or MP) takes over
- Discussion groups (2-3 people) (10-15 mins)
- Transfers questions onto the (6?) themes (15 mins)
- Coffee and vote (with 7 blobs) on the most important questions (10 mins)
- SK returns and presents a ‘do you agree with these’ (5 mins)
- System2: the Publications system (due to be enhanced by SURE)
- Then SK leaves and facilitator (PA or MP) takes over
- Discussion groups (2-3 people) (10-15 mins)
- Transfers questions onto the (6?) themes (15 mins)
- Coffee and vote (with 7 blobs) on the most important questions (10 mins)
- SK returns and presents a ‘do you agree with these’ (5 mins)

Group C met first on Thur 8<sup>th</sup> July in the morning with 8 attendees facilitated by Paul Andrew.

Groups B1 and B2 met on the morning and afternoon, respectively, of Fri 9<sup>th</sup> July and the 6 in each group were moderated by Mark Proctor. All ran for 90 minutes, although some discussions carried on after the allotted schedules. For the nominal groups (for each of the two topics) each person was given 7 blobs to vote with (except for group Cs second topic of publications for which the facilitator only allowed 4 blobs per person).

The first (fECAF) part of the session will be referred to as ‘a’ and the second (Publications) as ‘b’. Hence B1a refers to the morning group of academic staff discussion about the fECAF system.

During the summary sessions at the end of each session part the following issues were raised:

B1a (Academic staff: fECAF)

The higher costs from the system could price us out of the market  
It could negatively affect quantity as having to use the system can be a barrier to submitting proposals

Could be positive on quantity if the system was easier to use; it would help in making proposals. However new and infrequent users found the system to be difficult to understand.

It was felt that some approvers did not understand the system  
In terms of quality of research undertaken there was felt to be little impact; although use of the system could inform future proposals.

There could be a negative impact on quality as it focuses people on externally funded research and sometime own funded research can be better.

It was felt that deadlines could be missed if sufficient time for approval was not left.  
In general people did not feel in control of the software.

B1b (Academic staff: Publications)

There was no perceived impact by the system on quality or quantity of research.  
Some perceived that the database lost information.

The information should be available on individual staff pages (and each should have a unique URL – a personal research URL). \*

Publications need to be able to be found easily. \*

Should have some static pages that are more search engine friendly. \*

Should have pages / groups of publications listed by research groups. \*

Should be able to re-order authors (rather than having to delete and re-add).

B2a (Academic staff: fECAF)

If the system were good it could positively impact quantity by helping proposers to come up with sensible costings.

Negatively it was thought that the time taken to use the system could cause deadlines to be missed. However it could help with the overall planning and hence mean that the right amount of funding is requested.

No real affect on quality although perhaps this could be helped by having the right amount of funding (ie not running out during the project).

The form appears to be designed for research and did not suit reach-out proposals

B2b (Academic staff: Publications)

The system is just an internal one – why can’t externals see the data. \*

Research is not encouraged (until recently) this has affected research culture and hence negatively impacted quality and quantity of research.

Different types of publications cannot be separated. \*

Should have an individual staff URL. \*

Need to have a sensible website – it should be automatically updated and contain research, reach-out and teaching information; all integrated. \* (partially)

Maybe should do a quarterly email to remind people to update it.

Maybe do a ‘these are the things that have recently been added – are there any more?’ email.

All University data should be in data warehouse so that it can be properly accessed and integrated.

C1a (Support staff: fECAF)

Needs to be less complex and more user friendly.  
There are issues for occasional users.  
The procedures need to be clearer.  
Working and help needs to be better.  
Should be able to use it how you want to (customisation).  
It has things in it that are never used.  
Should look at how other Universities do it.  
In terms of research quantity it can have a positive effect – if you ask for a realistic amount, you are more likely to be funded.  
It can also have a negative effect, being difficult to use it can put some people off applying for funding.  
In terms of quality it has a positive effect as you should not run out of money during the project.  
Also it helps you to plan the project (in order to produce the detailed costings) and so the quality of the research should be better.

C1b (Support staff: Publications)

Perhaps only the best work should be recorded, but the database should contain it all so there may be a negative impact on research (or perceived) quality. \* [can select which to show]  
Training for new staff should be provided.  
Update training should also be available  
Will the new institutional repository (SURE) replace or stand alongside the existing system. A single interface is better, a single system would be ideal.  
Communication on the new system and how to use it is crucial.

Note that items marked star are in fact available, so there must be some usability and/or communication problems.

Results from the nominal group processes

For the fECAF system the top 5 issues (from 131 votes) were categorised as:

Votes	Aspect	%
28	Not User Friendly	21%
24	Information	18%
13	Unclear	10%
10	Lack of help	8%
8	Helps costing	6%

For the Publications system the top 5 issues (from 94 votes) were categorised as:

Votes	Aspect	%
21	Function that User did not know about	22%
13	Good idea	14%
10	Not User Friendly	11%
10	Data Entry	11%
8	Linkages	9%

It can clearly be seen that the systems are both deemed to be Not User Friendly, with fECAF faring much worse than the Publications system. However for the Publications system the highest proportion of suggestions for improvement were in fact for things that currently exist, so clearly both systems are problematic for users in a number of ways.  
Other common themes include (for fECAF and Publications): Communication (10% and 6%); Data Entry (2% and 11%); and Linkages (2% and 9%).

Summary

For fECAF, associated with the Not User Friendly system was Unclear Information and a Lack of Help; with Communication also being a related issue. Overall it is clear that the fECAF system is not well understood, is difficult to use and is short on help and support. However the overall idea of the system and the support that is available was understood and appreciated.

For Publications, the system is not being used to its full potential, which it seems is due to communication and environment issues, coupled with the system not being as user friendly as it might be. There was also clear support for having the system as well linked as possible with other systems and for SURE to be seamlessly integrated.

See the appendix for the full list of categorisations and actual issues raised in the groups.

## Questionnaire Feedback on Research Support Systems Executive Summary

This executive summary should be read in conjunction with the main report. The report concerns two elements of the University's research support systems:

- Costing and pricing approval for bids for external funding
- Publications information

The main report outlines the background of developments in these areas at Sunderland over the past ten years or so and focuses on the transition to the two new systems that have been procured to cover these areas of research information. It also describes the outcomes of some focus group work from July 2010 and a subsequent University wide questionnaire (Oct-Nov 2010) looking at the existing / previous systems and the new systems. The questionnaire was sent to 486 academic and administrative staff across the University and elicited 155 responses, a 31.9% response rate.

### Costing and Pricing Approval

pFACT has replaced the fECAF system. Initial signs are the new system is being much better received than the old system. However, there are some issues with pFACT that need addressing and a number of recommendations are made

### Research Outputs

The current GRS publication system will be superseded later this academic year with the SURE institutional repository system. There are many lessons that can be learnt from the way the current system is used and some recommendations are made

### Summary of Recommendations

- Recommendation 1:** some additional awareness raising of pFACT should be undertaken.
- Recommendation 2:** These data are used as the benchmark for a survey on pFACT to (hopefully) demonstrate improvement in costing and pricing.
- Recommendation 3:** create a pFACT user group including academic staff.
- Recommendation 4:** the approval process for pFACT should be reviewed.
- Recommendation 5:** some additional awareness raising of SURE should be undertaken.
- Recommendation 6:** These data are used as the benchmark for a survey on SURE to (hopefully) demonstrate improvement in publication information recording.
- Recommendation 7:** A user group for SURE should be created and should include academic staff.
- Recommendation 8:** SURE should allow partial information to be submitted and then the additional required data can be sourced
- Recommendation 9:** pFACT is reviewed after 6 months of operation
- Recommendation 10:** pFACT is reviewed after 12 months of operation and annually thereafter
- Recommendation 11:** SURE is reviewed after 6 months of operation
- Recommendation 12:** SURE is reviewed after 12 months of operation and annually thereafter
- Recommendation 13:** SURE and pFACT should be considered as business systems of the university and supported and maintained in an appropriate manner

## Questionnaire Feedback on Research Support Systems Main Report

### Background

The Graduate Research Support section of Academic Services has over the years developed a number of integrated research support systems [ref]. The current plan, approved by BSSG, is to update and mainstream these systems into the central IT service. Two elements of the research support system (costing and pricing approval; publications database) have recently been implemented. As part of the process of to ensure that these new systems will meet the needs of academic staff going forward GRS is undertaking a before and after review. This was initiated in a series of focus groups in July 2010 and had been followed by an online questionnaire across the University in October and November 2010. It is anticipated that follow-up focus groups and perhaps interviews will also be conducted to further explore issues.

This report provides a quick summary of the initial focus group feedback and presents initial findings from the questionnaire.

### Costing and Pricing Approval

Prior to bids for external funding being submitted the University requires that the proposals is properly costed and priced and that the proposal is authorised for submission. In 1999 an online version of the GrAppl costing and pricing 'white form' was introduced for research project proposals. This was replaced in 2005 with the fECAF system due to the introduction of Full Economic Costing (fEC) and it was extended to include non-research proposals. In 2006 use of fECAF rather than the paper based alternative was mandatory. In 2008 pFACT was purchased and so development on fECAF was suspended and pFACT was rolled out in August 2010.

### Publication Information

Research Outputs (publications) are extremely important to the University both in terms of esteem and indeed monetarily in terms of QR allocation from the Research Assessment Exercise (RAE; REF in the future). For example, in the 2008 RAE each publication that the University submitted was worth on average around £11,000 in QR over the six year funding period. In 1996 a publications (preferences) area was added to the GRS online database. This allows for publication information from members of staff to be added to the database and then utilised for a number of purposes such as mini CV generation, KPIs and submissions to the RAE. The system does not (in general) however hold the full text of the publications themselves (normally just the bibliographic data). In 2008 it was agreed that a full text institutional repository should be procured and EPrints was purchased in 2009, it is due to be rolled out later this academic year.

### Focus Group Feedback

Six focus groups were conducted. Four were with academic staff, comprising two looking at costing and pricing, and two looking at publication information. Two were with administrative staff, one looking at each of the two systems. The focus groups were conducted before the new systems were on-line and focussed on the good and bad aspects of the current systems in order that lessons learnt

might be utilised in the new systems. The focus groups also contributed to the questions to be asked in the online questionnaire.

Results from the nominal group processes

For the fECAF system the top 5 issues (from 131 votes) were categorised as:

Votes	Aspect	%
28	Not User Friendly	21%
24	Information Unclear	18%
13	Communication	10%
10	Lack of help	8%
8	Helps costing	6%

For the Publications system the top 5 issues (from 94 votes) were categorised as:

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13	Good idea	14%
10	Not User Friendly	11%
10	Data Entry	11%
8	Linkages	9%

It can clearly be seen that the systems are both deemed to be Not User Friendly, with fECAF faring much worse than the Publications system. However for the Publications system the highest proportion of suggestions for improvement were in fact for things that currently exist, so clearly both systems are problematic for users in a number of ways.

Other common themes include (for fECAF and Publications): Communication (10% and 6%); Data Entry (2% and 11%); and Linkages [lack of integration] (2% and 9%).

Focus Group Summary

For fECAF, associated with the Not User Friendly system was Unclear Information and a Lack of Help, with Communication also being a related issue. Overall it is clear that the fECAF system is not well understood, is difficult to use and is short on help and support. However the overall idea of the system and the support that is available was understood and appreciated.

For Publications, the system is not being used to its full potential, which it seems is due to communication and environment issues, coupled with the system not being as user friendly as it might be. There was also clear support for having the system as well linked as possible with other systems and for SURE to be seamlessly integrated.

Questionnaire Initial Findings

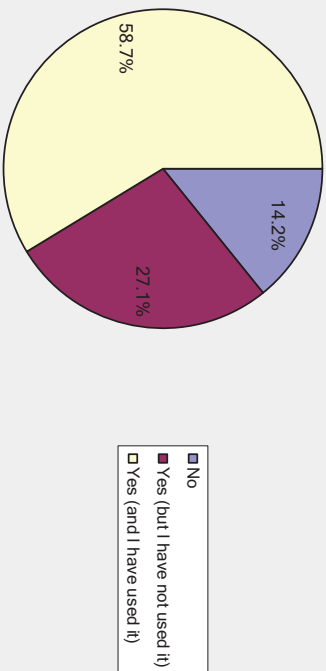
A questionnaire about the costing and pricing, and the publications systems at Sunderland was developed based on feedback from the focus groups and trialled with them. The questionnaire (see Annex A) was developed in Survey Monkey and individual email invitations sent to members of academic staff and selected members of administrative staff on 25 Oct 2010. A reminder was sent to those that had not responded on 1 Nov, with a final reminder sent on 15 Nov, the survey was closed on 19 Nov. In all [n=155] responses were received from 486 possible, giving a middling response rate of 31.9%.

Of the 155 respondents 86.5% completed all of the mandatory questions, so the comparison of responses to different questions is valid. In terms of the types of people who responded; 52% were female and 48% male; 75% were academic staff, with 19% administrative and 5% senior managers. The breakdown by faculty was a little uneven, but perhaps reflects the size and research activity (35% Applied Sciences, 24% Arts and Design, 21% Education and Society, 11% Business and Law, with 9% from services).

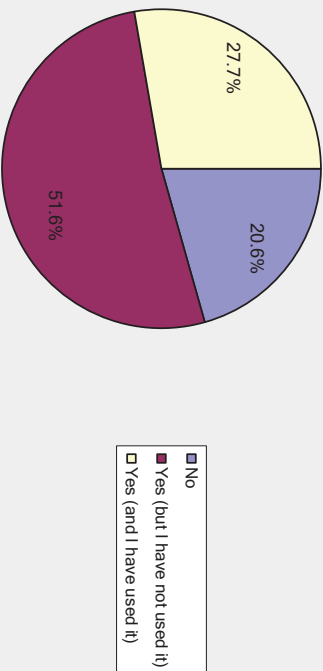
Costing and Pricing Initial Findings

Knowledge of the systems

Have you heard of (and if so, used) the on-line fECAF (Full Economic Costing Approval Form) system?



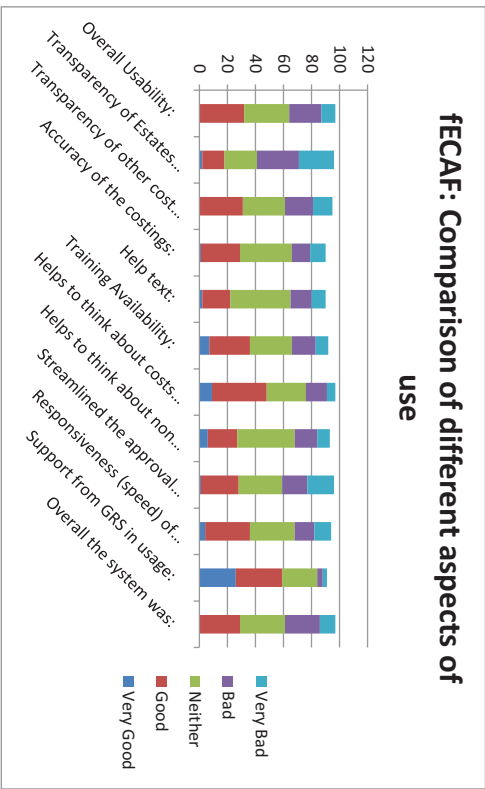
Have you heard of (and if so, used) the on-line pFACT (Full Economic Costing Approval) system that replaced fECAF in August 2010?



Given only 3 months of possible usage it is unsurprising that only around half as many staff have used pFACT as compared to fECAF. It is perhaps a little worrying that almost 50% more people have not heard of pFACT as compared to fECAF.

**Recommendation 1:** some additional awareness raising of pFACT should be undertaken.

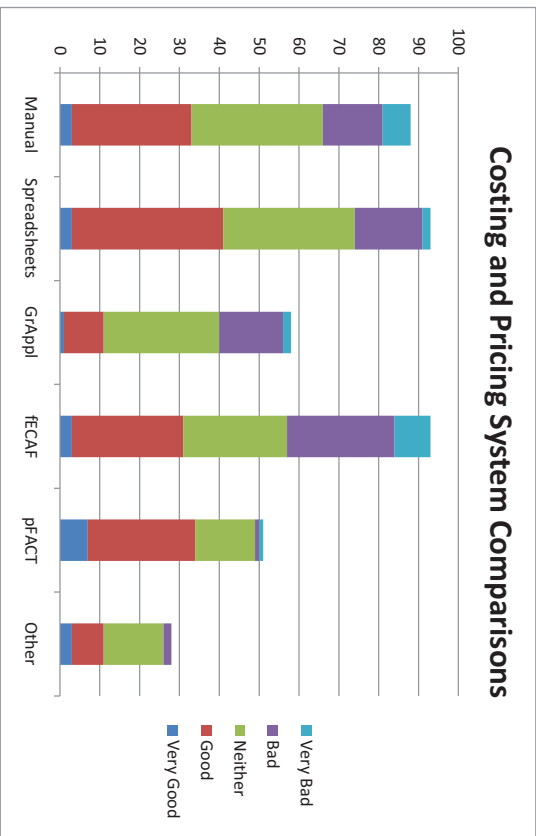
fECAF Overall



This graph excludes 'No opinion' responses. It can be seen that overall the fECAF system was not well liked, which is perhaps not surprising for a system that is now 11 years old and was not developed over the past two years. This gives the replacement, pFACT, system an excellent opportunity to create a good impression. One area that fared particularly badly was the transparency of the estates and indirect cost calculations, which is much improved in pFACT.

**Recommendation 2:** These data are used as the benchmark for a survey on pFACT to (hopefully) demonstrate improvement in costing and pricing.

Comparisons of costing and pricing systems



It can clearly be seen that pFACT has made a good early impression, with an excellent overall position of 67% positive and only 4% negative responses. The extremely low negative feedback is a good sign and needs to be maintained.

**Recommendation 3:** create a pFACT user group including academic staff.

Some specific textual feedback about the costing and pricing systems

"I think the fecaf and pfact systems are very similar, although the reports that can be downloaded from pfact are very useful. I like the fact that pfact breaks down the overheads so you can tell how they've been calculated. However, Pfact doesn't show the amount an academic will receive for their PPA which I think may put some academics off applying for external funding as this was seen as an incentive. I think it would be worthwhile adding this feature into the Pfact system."

"Problem of sequential approval circuit followed with pFACT - better if approval is in parallel (as with fECAF I think). When status change happens would be good if the email pFACT sends to you started with "Principal Investigator: No action needed OR Action needed" rather than as at current when it isn't clear what you are meant to do."

"Far too complicated, you cannot simply get a price for a room to run a course without filling in a ridiculous amount of unnecessary detail (so I go elsewhere). Totally unrealistic costing, the University would rather a room remained unused (at a cost) than hire it out at a reasonable rate"

"Previous paper forms were a nightmare & avoided by staff the automation of this in eg GrAppl made the task easy. How costs were derived in GrAppl/fECAF was far from clear. (In detail) though the basic operation (eg select from salary options) made it OK. Neither system allows the appropriate costing for an Academic Tutor/VL - staff often use a proportion of their salary and generally this does not provide the full cost of a VL and they then cant fund replacement staff for their duties."

"Very steep learning curve for something many academics would use only rarely. It is hard to remember the intricate details of a complex process used once or twice a year at most."

"I need training on pFact but there are so many levels of approval. Can this be streamlined?"

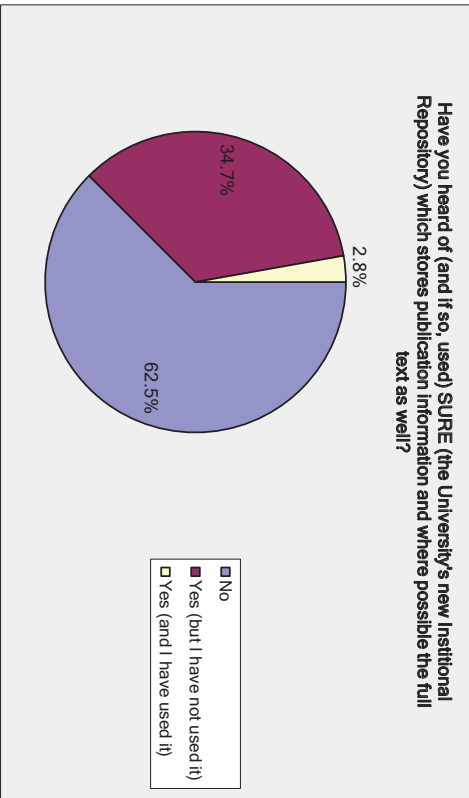
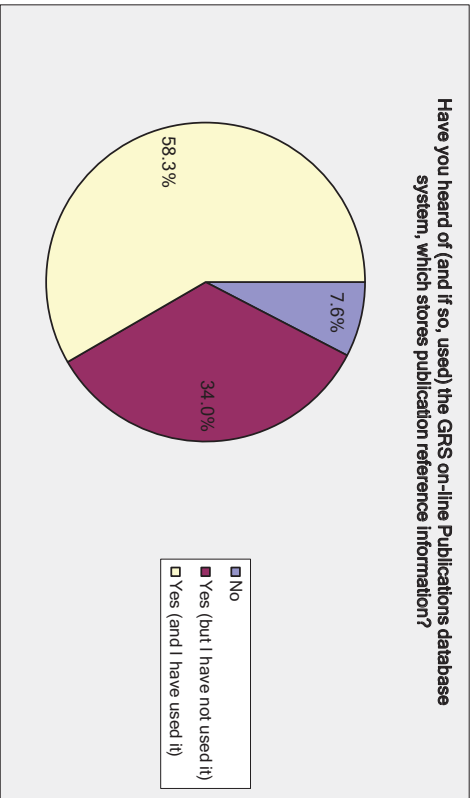


"pFACT is workable once the system's teething problems were overcome. However - the amount of people that the system requires to authorise is inordinate..."

Recommendation 4: the approval process for pFACT should be reviewed.

Publication Information Initial Findings

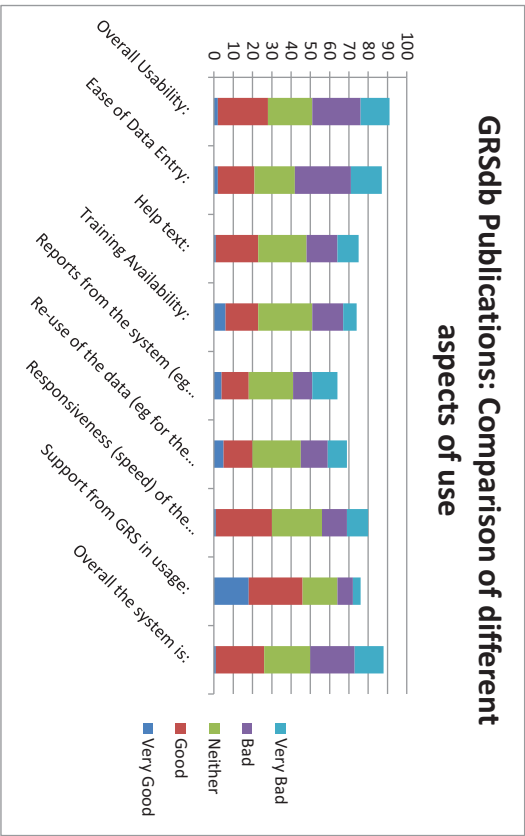
Knowledge of the systems



Whereas almost all staff have heard of (and most have used) the GRS publications database, almost two-thirds of staff have not yet heard of the new (soon to be rolled out) institutional repository system, SURE.

Recommendation 5: some additional awareness raising of SURE should be undertaken.

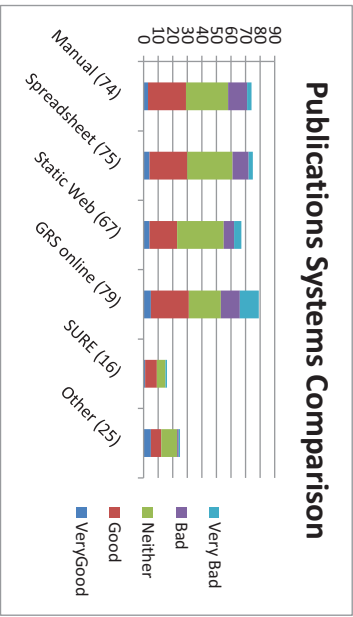
GRSdb Publication Overall



Again, these figures do not look very healthy, with over 40% of respondents (who expressed an opinion) being negative about the system – slightly worse than for the fECAF system. Again, addressing the negative feedback from the survey on the publications system should allow the implementation of SURE to learn from these mistakes.

Recommendation 6: These data are used as the benchmark for a survey on SURE to (hopefully) demonstrate improvement in publication information recording.

Publications Systems Comparison



It is interesting to note that the benefits of having a University-wide database seem, in the minds of the survey respondents, to be outweighed by the lack of usability of the system. It is imperative that SURE is easy to use; it may even be preferable to have data input by a central resource rather than locally by academic staff or faculty administrators.

**Recommendation 7:** A user group for SURE should be created and should include academic staff.

**Some specific textual feedback about the publication systems**

"As someone new to all these systems my opinion should be taken with a pinch of salt as I haven't used them enough yet, however since I spend large parts of my life frustrated with online forms of varying degrees of eccentricity I say find the thing that is easiest. Since we all have to create publications lists in harvard on word -- why not just use that and as we all update it periodically for our CV why not just use that and each person submit their own and perhaps just separate published from unpublished work - or is that too easy."

"I do not currently have a research profile page with the University - nor do I know how to go about setting one up. Again, this is something I would be keen to do and it would be helpful if GRS could provide me with some communication/ support on the issue."

"I would rather be doing research than entering in reference data - surely this should be an administration role"

"Real issues with the ISBN number - when inputted incorrectly the system seems to refresh and you have to input further data again. Very limited in terms of disallowing certain characters when inputting information (especially in titles)"

"It would be good to be able to use standard bibliographic file formats (Endnotes) and be able to upload them, saving much duplication."

"Not been told about SURE, maybe someone could contact the academics? It is often difficult to include publications without ISBN numbers"

"It would be useful if the GRS online Publications system could feed directly into staff web pages on research centre sites, in order to avoid duplication of entry."

"I think GRS on-line system could be potentially very important tool for general exchange of research information and could serve for enhancing the research output. However because the system has limited me in correct information given, I think there is a room for improvement."

"Terminology generally does not fit ART outputs. It feels like loading info onto a foreign template."

"I work in the arts and design area and the nature of research in this area is difficult to quantify, I often wonder how to make/shape outputs to fit the categories the system acknowledges, I experience this as a limitation on the kinds of work I might contribute to the university."

**Recommendation 8:** SURE should allow partial information to be submitted and then the additional required data can be sourced

**Generic Recommendations**

In addition to the specific recommendations above a few more generic ones are also made:

**Recommendation 9:** pFACT is reviewed after 6 months of operation

**Recommendation 10:** pFACT is reviewed after 12 months of operation and annually thereafter

**Recommendation 11:** SURE is reviewed after 6 months of operation

**Recommendation 12:** SURE is reviewed after 12 months of operation and annually thereafter

**Recommendation 13:** SURE and pFACT should be considered as business systems of the university and supported and maintained in an appropriate manner

**Summary of Recommendations**

**Recommendation 1:** some additional awareness raising of pFACT should be undertaken.

**Recommendation 2:** These data are used as the benchmark for a survey on pFACT to (hopefully) demonstrate improvement in costing and pricing.

**Recommendation 3:** create a pFACT user group including academic staff.

**Recommendation 4:** the approval process for pFACT should be reviewed.

**Recommendation 5:** some additional awareness raising of SURE should be undertaken.

**Recommendation 6:** These data are used as the benchmark for a survey on SURE to (hopefully) demonstrate improvement in publication information recording.

**Recommendation 7:** A user group for SURE should be created and should include academic staff.

**Recommendation 8:** SURE should allow partial information to be submitted and then the additional required data can be sourced

**Recommendation 9:** pFACT is reviewed after 6 months of operation

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**Recommendation 11:** SURE is reviewed after 6 months of operation

**Recommendation 12:** SURE is reviewed after 12 months of operation and annually thereafter

**Recommendation 13:** SURE and pFACT should be considered as business systems of the university and supported and maintained in an appropriate manner



## Simon Kerridge

Head of Graduate Research Support  
and Assistant Director, Academic Services  
University of Sunderland  
(and DProf candidate)

## Overview

- Current Systems
  - fECAF & Publications (GRSdB references)
- Focus Groups (& possible follow up interviews)
- Questionnaire
- New systems
  - pFACT & Institutional Repository (SURE)
- Focus Groups (& possible follow up interviews)
- Improved new systems...

## Today: Focus Group Sessions

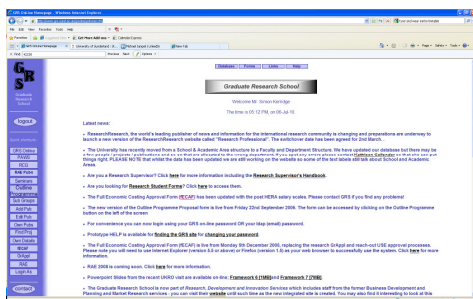
45 mins: fECAF (costing and pricing)

45 mins: publications database (references)

## Focus Group Process

- Intro [this is it!] [5 mins]
- Brainstorm issues (in groups of 2 or 3) [10 mins]
- Collect issues into themes [15 mins]
- Coffee
- Use blobs to vote for key issues [10 mins]
- Summary of key issues [5 mins]
- Repeat for the next topic

## Costing and Pricing

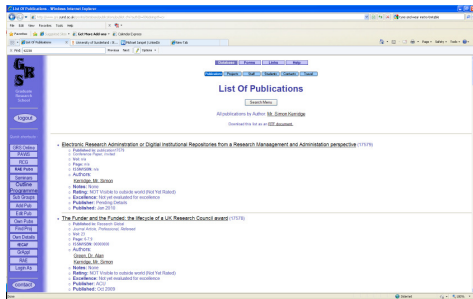


## Costing and Pricing

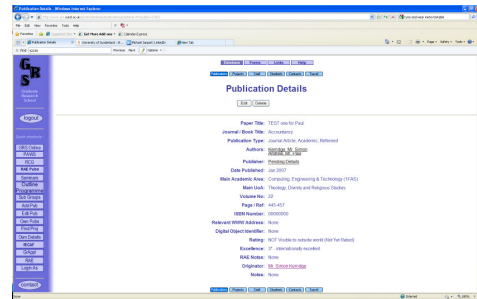
- fECAF



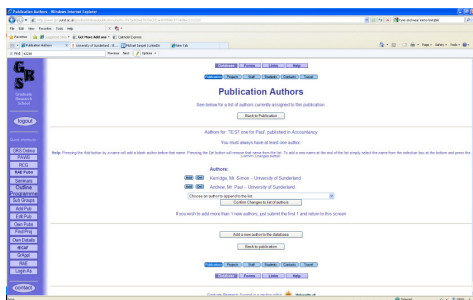
## Publications Database



## Publications Database



## Publications Database



## Publications Database: Nominal Groups

- 10 minutes
  - One issue / feature per post-it
- 15 mins
  - Allocation post-its into themes
- 10 mins
  - Coffee and voting with blobs

## Publications Database - Summary

- The GRSDb Publications and Seminars system:
  - Affects quantity of research
  - Affects quality of research
  - (other) Negative issues
  - (other) Positive issues
  - Wish list of features

## Questions



6 HISTORICAL PORTFOLIO ITEMS

Portfolio items are grouped into these seven areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- ERA Questionnaire (ERAQ)
- Esteem (Est)
- Focus Group (FG)
- **Historical Items (Hist)**
- Profession (Prof)

This section contains the items pertaining to the **Hist** area.

6.1 Historical Items (Hist)

I have included a small number of items which either pre-date the main body of the work described (1996-2011) or for one reason or another fall outside the main thrust of the doctoral report. They are provided as additional evidence, with particular reference to learning outcome element S5 in terms of defending my own work.

After this introduction there is an index table of items in this section (an example is shown below), and the portfolio items themselves follow the index table.

Table 10: Sample Portfolio Index Table (Hist)

Ref	Type	Description	Outcome(s)
Histxx	<type>	<title>	Kx, Sx
A short description of item Histxx with its relevance and importance in order to demonstrate the learning outcomes Kx & Sx that they address (K1-2; S1-5, see below for explanations of the learning outcomes). <type> is the type of the item, for example: report, email or presentation. <title> is the title of the item, for example: Invitation to join Steering Group. Histxx is the unique identifier for the portfolio item (xx is a two digit number) which is used to reference it in the doctoral report, or indeed from another portfolio item.			

Each item is described in the table, with two rows of information. The first row of the pair has the portfolio reference, type of document, short description and learning outcome(s) claimed. The second row describes the context and importance of the item, in order to substantiate the claim towards the learning outcomes listed in the first row. The actual portfolio items follow after the index table.

## 6.2 Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner
- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of the seven learning outcomes above, in most cases the listings are restricted to just those outcomes which are the main foci of the item, normally 2 or 3 learning outcomes at the most.

### 6.3 Historical Items Portfolio Index

Table 11: Portfolio Index Table for Historical Items (Hist)

Ref	Type	Description	Outcome(s)
Hist01	Paper	Journal article about the SupplyPoint project (2000)	S2, S5
I was the main author for this article (and presented the paper at the Electronic Commerce and Web Technologies conference from which the journal article was drawn) on the SupplyPoint project (see Hist04). The article is available (by subscription) online at <a href="http://www.springerlink.com/content/vuqmghtyh74h62ch/">http://www.springerlink.com/content/vuqmghtyh74h62ch/</a> (accessed 25 <sup>th</sup> April 2011) and at <a href="http://imu.ntua.gr/Papers/J30-ECWeb-SPP.pdf">http://imu.ntua.gr/Papers/J30-ECWeb-SPP.pdf</a> (accessed 25 <sup>th</sup> April 2011). I was also the principal investigator for the project, see (Hist04).			
Hist02	Paper	Journal article about the SupplyPoint project (1998)	S2, S5
This article that I co-authored about the EU Framework project SupplyPoint (see Hist04), that I was the project manager and principal investigator for, was the most downloaded article from the International Journal of Electronic Markets in 1998. It is available online at: <a href="http://www.electronicmarkets.org/issues/volume-8/volume-8-issue-3/supplypoint0.pdf">http://www.electronicmarkets.org/issues/volume-8/volume-8-issue-3/supplypoint0.pdf</a> (accessed 25 <sup>th</sup> April 2011).			
Hist03	Report	List of my academic and professional publications	K1-2, S2, S5
This is the list of my academic and professional publications over the period 1992-2010. Together they show a consistent ability to publish subject to peer review in areas that I have been active in, specifically computer science, research management and administration, and the confluence of those two areas, Electronic Research Administration. The report itself is an export of a standard report from the GRS On-line system that I developed (see <a href="http://www.grs.sunderland.ac.uk">http://www.grs.sunderland.ac.uk</a> , accessed 21 <sup>st</sup> April 2011), see section 4.5 and chapter 8.			
Hist04	List	Final deliverable from the ESPRIT SupplyPoint Project	S2, S3, S5
In 1996 I led the writing of a proposal to the EU ESPRIT4 programme for a project (SupplyPoint) to develop a proof of concept demonstrator of a system to support companies coming together to form virtual consortia to bid for contracts in the construction sector (see Hist01, Hist02). The project was funded by the European Commission to the value of €1.4M and ran from 1997-2000 with me as the Principal Investigator leading the consortium with academic and commercial partners from the UK, Denmark, France, Germany and Greece. This is a list of the final deliverables from the project that were made available to interested parties on the internet (the website is now defunct) and compact disc.			

### 6.4 Historical Portfolio Items

(follow on the next page)

## Virtual Tendering and Bidding in the Construction Sector

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**Abstract.** The tendering/bidding process is vital for companies in the construction sector. This sector includes a number of actors performing at each stage of the process three different roles (client, info provider, provider). Based on e-commerce technologies numerous systems have been developed, aiming at the electronic support of this process. A short review of those systems indicates that they mainly focus on providing information about tenders. However, they don't cover much of the bidding process, where the formation of a virtual consortium is often required and the preparation of the final bidding document requires bids from subcontractors and suppliers. SupplyPoint is an innovative European-wide research and development effort partly funded by the European Commission under the ESPRIT Programme. The SupplyPoint system will support the whole tendering and bidding process, electronically providing - in addition to what existing systems provide - services for forming virtual consortia that bid for construction projects.

### 1 Introduction

The rapid evolution of e-commerce in the past few years has introduced new ways for organizations to perform tendering processes and participate in biddings. The term tendering is used to describe all the actions performed by the awarding authority to produce, publish and manage tendering documents, while bidding incorporates the effort of interested organisations to win contracts by responding to tenders. In this context, the value adding functionalities related to e-commerce technologies include for example electronic publication of tenders, electronic search of tenders as well for partners and suppliers, electronic submission of biddings, electronic notification of award and so on.

Those abilities are especially important for industries, where business is performed on a project-by-project basis and in many cases by consortia formed especially for the project. This is the case of the construction sector, where timely opportunity identification and adequate consortium formation are the key factors for winning a contract. As a result the main actors of the sector, i.e. tendering authorities,

K. Bauknecht, S. Kumar Madria, and G. Pernul (Eds.): EC-Web 2000, LNCS 1875, pp. 379–388, 2000.  
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construction companies, suppliers of materials, and manufacturers can gain substantial benefits, by using these new electronic mechanisms.

### 1.1 Aims of the paper

- To analyse the opportunities (and risks) of electronic commerce for electronic tendering and bidding in the construction sector, by examining the chain of business processes and reviewing the pros and cons of existing systems;
- To present SupplyPoint, an innovative European-wide research and development effort (SUPPLYPOINT: *Electronic Procurement using Virtual Supply Chains* is partly funded by the European Commission under the ESPRIT Programme - project EP-27007 - see [1]). The SupplyPoint system (which is currently under the final stage of development and testing) will support the whole bidding process electronically providing - in addition to what existing systems provide - services for forming virtual consortia that bid for construction projects.

### 1.2 Structure of the paper

The next of the six sections presents the value chain actors and processes in the construction sector and reviews the pros and cons of existing tendering/bidding systems. Section three presents the rooms concept used. The fourth section covers the main functionalities and the technical architecture of the SupplyPoint system, while the fifth section presents the way the SupplyPoint system facilitates the formation of virtual consortia [VCs] with the use of alternative business scenarios. Finally some concluding remarks and outlines for further research directions are given.

## 2. Managing Virtually the Tendering/Bidding Process in the Construction Sector

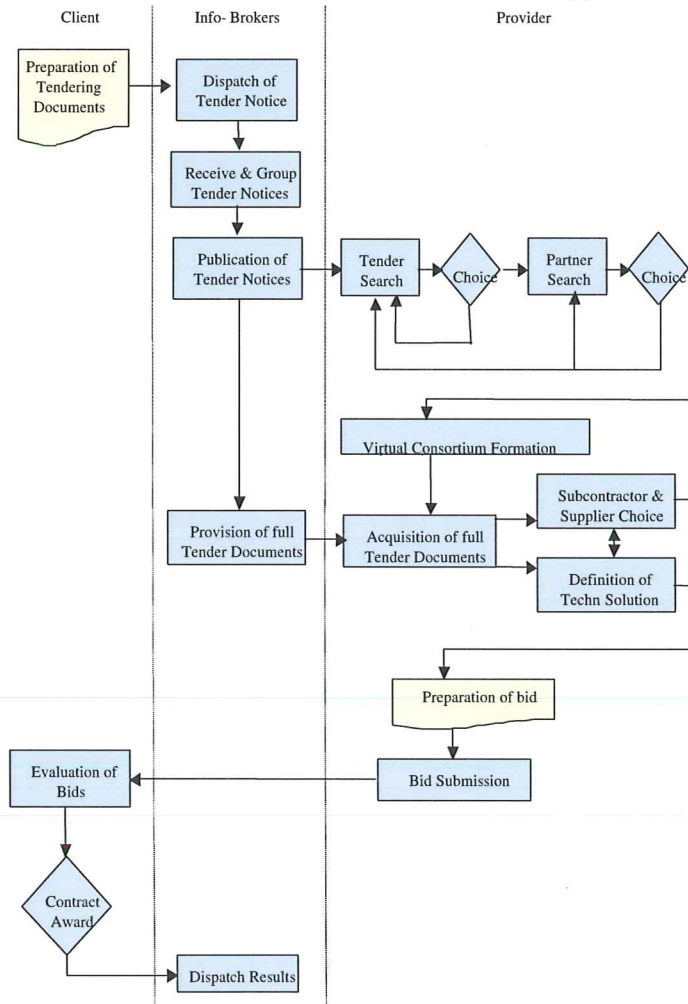
The tendering/bidding process in the construction sector is characterised by the involvement of a large number of actors and requires a substantial investment of time and effort often with a limited success ratio. The set of actors involved includes the contracting authority, architectural and engineering firms, general contractors, specialised contractors, suppliers, manufacturers etc.

Those actors perform different roles during the tendering/bidding procedure. Based on the nature of the activities three roles have been identified:

- Client,
- Info Broker and
- Provider.

As shown in figure 1 the main subject of the Client role is the successful completion of the tendering/bidding procedure. The Client prepares tender documents, evaluates bids and assigns the contract to the winner of the tender. This role is performed by the contracting authority but also by any other actor who wishes

to purchase services or products for the implementation of their work within a project. An example would be a general contractor searching for suppliers or subcontractors.



**Fig. 1.** Breakdown of tendering/bidding process by roles.

The role of Info Broker is to collect, organise, amalgamate and dispatch information about tenders in progress, potential partners, contract awarded and so on. As well as the above mentioned typical Info Brokers, this role is also performed by the contracting authority and occasionally by any of the actors when for example passing information to partners or subcontractors.

A typical provider could be a general contractor, who after searching for tenders and choosing one to bid, forms with others a Virtual Consortium (VC – see [6]). The VC then prepares and submits a bid to the client. However, this is also the case when specialised contractors, suppliers or manufacturers send their bids to a general contractor that is preparing a bid for a tender.

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Managing virtually the tender/bidding process consists of supporting electronically the execution, partially or in total, of the activities executed by the above roles. From the client point of view it is important to develop a module providing the ability to upload tender notices and tender documents making them directly available to interested parties and eliminating lead times. Since very often after the publication of the tender, clarifications are made, the module should in more advanced systems provide the ability to amend clarifications to tender documents after they are uploaded and to notify providers who have already downloaded the tender documents. This functionality is provided in some systems (for example ELPRO), see [5] for further details of the European environment.

Having made all the tender documents electronically accessible, focus is now on the way to access them. Thus a sophisticated search engine is required. This engine should enable quick multi-parameter search of tenders and flexible presentation of results. Additionally this module could automatically send e-mails informing the user of any new tenders that match a predefined profile(s). This profile is defined by the user and contains priorities and interests, which are the basis for the screening of new tenders. Another important issue is the ability to search for and gather information about potential partners, subcontractors and suppliers as well as to have a secure environment ensuring on-time and quick communication with them.

Virtual support also has to deal with the need for exchanging documents and messages within the VC after the its formation, when the bid preparation bid begins. An effective solution is the commitment of adequate space in a web server dedicated to the consortium, managed by the consortium leader and accessed by all partners (depending on rights). Towards the end of the tender/bid process, virtual management should support the electronic submission of the bid, the communication between client and provider and the electronic dispatching of the results. If this is accomplished in a way that does not endanger confidentiality of the bids, substantial advantages can be gained in the minimisation of the response times to tenders.

In this context many electronic tendering/bidding systems have already been developed and are currently in use, supporting the tender/bid process in the construction sector. Outside Europe most of the systems operate in the USA (Transport Expedite™, Bid Express, Bid Line), in Canada (MERX, BIDDs) in Australia (DCIS System) and in Hong-Hong (ETS). In Europe a very important factor in the tendering process is the obligation of public bodies to publish calls for tender in the Official Journal of the European Union (Supplement S), when their values exceed the established thresholds. Thresholds vary, depending on the subject of the tender (e.g. services, procurement, works). In the case of public works the threshold is set at 5.000.000 Euro. In other words Europe has developed a database of medium and high value tenders fed daily by member states. This has resulted in the development of two categories of systems supporting the tendering/bidding process in the construction sector; pan European systems based on TED (Tenders Electronic Daily, the electronic version of Supplement S) and national systems fed by tenders published by national and local authorities.

Functionalities provided by these systems vary from system to system and include:

- electronic search of ongoing or assigned tenders,
- tender documents download,
- search for partners in the systems database

- e-mail exchange between primes, subcontractors and suppliers,
- automatic search of new tenders based on defined user profile and user notification
- electronic creation and submission of bids

Most of the non-European systems are initiated by and focus on the support of tendering authorities, whereas systems in Europe aim more often to support companies, including the construction sector. The main scope of most existing systems is to support the search for tenders and the acquisition of tender documents. Few of them provide also the ability to search for potential partners through a database containing companies validated by the authority, or members of local official construction companies records.

Some systems offer also ability to submit electronic documents after appropriate registration. With the exception of systems operated by tendering authorities, where services are provided for free, the most common pricing policy is to provide free tender search and requiring subscription to the service before providing access to the full service package. However, many of the systems covering the national level in European countries require subscription before providing any service.

Closing this section, it is important to note that none of the systems reviewed provide a solid collaboration platform that can support - in a virtual manner - the formation of a consortium. Another area that these systems lack is the integration and automation of the whole tendering/bidding process. Such integration could be obtained by incorporating technologies like workflow management systems; see for example [3], [4], [7] & [9].

### 3 Rooms

The concept of "Rooms" (e.g. BSCW, see e.g. [2]) has been developed and this provides the users with a readily comprehensible metaphor for their "location" within the SupplyPoint system. A Room is a place in the system, where information (documents) and users that have access to those documents are stored. Rooms can contain rooms and documents in a hierarchical manner analogous to most computer directory tree structures. Similarly each room has rights for visibility and access. Again, documents have rights for view, edit and delete. A top level Room is automatically created when an organisation is registered to SupplyPoint. This is the "Home Room" of the organisation. Users can create (and subsequently edit and delete) new Rooms and store information (e.g. contracts and potential partners) concerning the formation of Virtual Consortia. They can also add, edit, view and remove both documents and user access from the Rooms. The GUI representing the notion of rooms is currently implemented as a tree structure in much the same way as for example windows explorer (see Figure 3 in section 4).

Each entity (a subscribing organisation or a virtual consortium) in the system owns a top level home room, which by default contains two sub rooms: "Bookmarked Organisations" and "Bookmarked Contracts". These Rooms help to organise information that concerns contracts and organisations and will be used for the formation of a Virtual Consortium.

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4. SupplyPoint Architecture

Figure 2 shows the main components of the SupplyPoint (SPP) architecture. The system consists of two main parts, the SPPClient and the SPPServer. It also allows for integration with external systems (ELPRO is shown as an example).

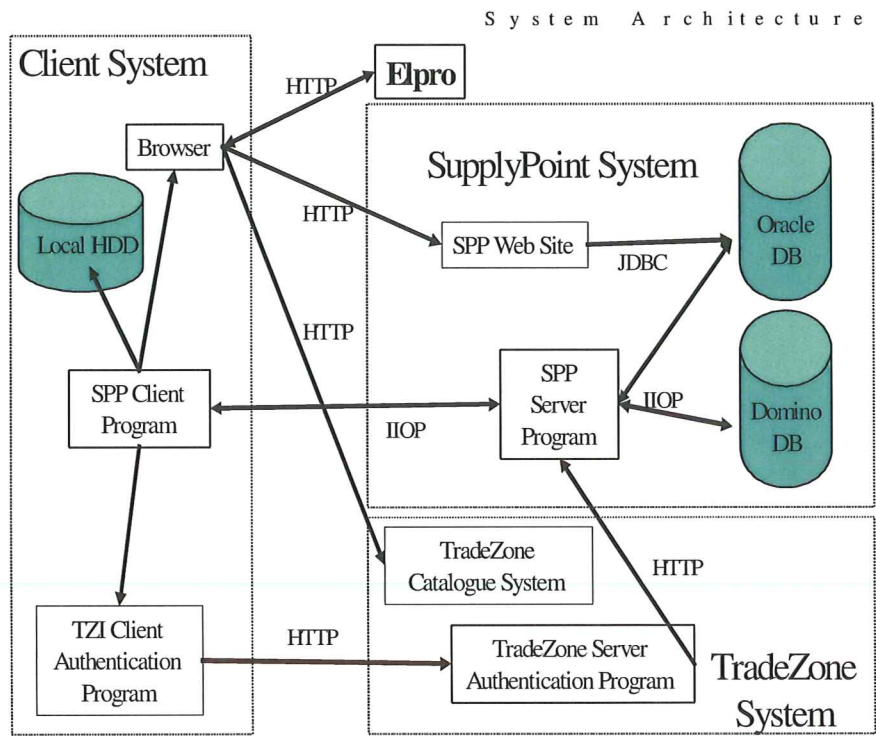


Fig. 2. SPP Architecture

It should be noted that the Common Object Request Broker Architecture (CORBA) is used to provide a communications protocol. The SPPClient establishes a connection with the SPPServer via IIOP. The Lotus Notes Domino Server is used to provide the basic workflow components and infrastructure. The visual element is mirrored in the client using a Java GUI thus providing a high degree of integration.

4.1 SPPClient

The SPPClient delivers services to the users of the SupplyPoint system. It provides a Graphical User Interface developed in Java 1.2 that allows the user to access the required functionality from almost any workstation. Within the SPPClient the user is able to communicate with other SupplyPoint system users via a communication/E-mail system developed (or rather integrated) for that purpose. The Rooms concept (see Section 3 above) provides the users with a readily comprehensible metaphor for



their “location” within the SupplyPoint system. Both documents and users are associated with Rooms. The GUI representing the notion of rooms is a tree view similar to windows explorer as shown in Figure 3 below.

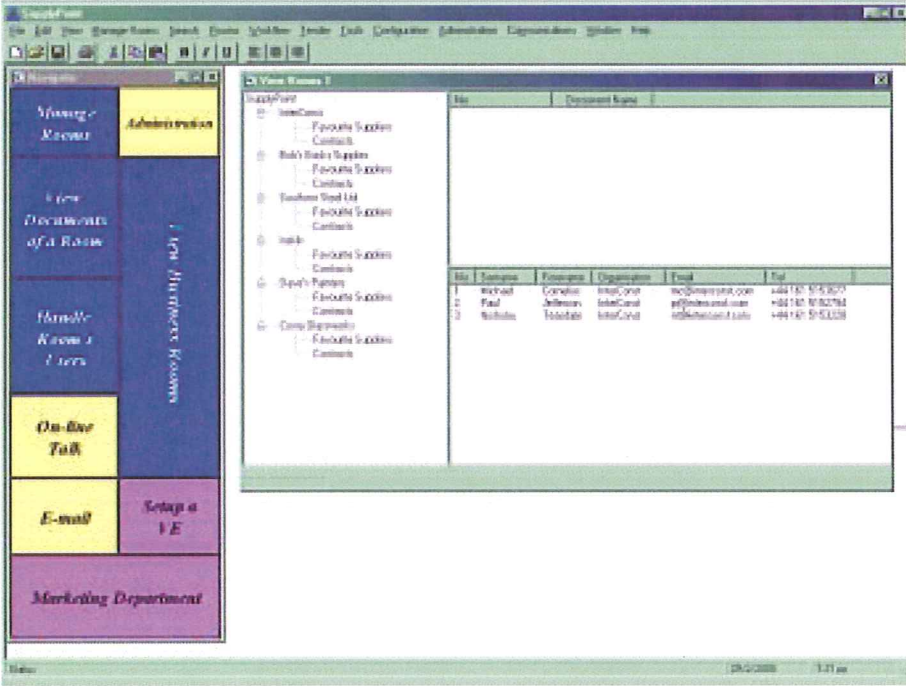


Fig. 3. The SPP Client Graphical User Interface

Using the SPPClient the user is able to handle documents belonging to those rooms depending on the permissions that have been set for the specific documents / rooms. A number of external facilities are also access via the SPPClient including: an Electronic catalogue that enables the users to purchase through the world wide web and an electronic procurement system that enables users to look for available contracts on the web and prepare tenders.

The SPPClient is installed on the user’s machine but it invokes methods, through IIOP, that are implemented on the SPPServer. This thin client approach has been followed in the SupplyPoint system thus offering a minimal footprint for the client program and reducing the computing requirement on the SMEs computer system.

4.2 SPPServer

The server provides all the functionality for querying, inserting and updating the database for permissions, documents, user details, etc. The SPPServer connects to the Oracle database via a Thin JDBC driver in order to be able to query the database. Requests from the SPPClient are received via the IIOP and the SPPServer executes a specific method related to the request and queries the database via the JDBC driver.

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As indicated, the connection between the SPPServer and the SPPClient is via IIOP for CORBA objects, however in order to provide support for workflow and authentication, an XML (see for example [3] & [9]) wrapping technique for documents is used. XML is used as a transport mechanism since it can carry any (Base64 encoded) document within it and also any associated document management or state information. The wrapper may be considered as a persistent object serialisation and, when de-serialised, has several useful properties and methods. Properties may be read-only - such as its 'unique-id', write-only - such as an individual's electronic signature of the document, and read-write - such as the document itself (which becomes a read-only property once it has been signed). Typical methods of this object are 'sign' and 'verifySignature' and others may be used to change the state of the document's associated workflow state.

The SPPServer provides an Administration tool in order to be able set-up new users and organisations in the system. It can also monitor the database and the system logs. The required configuration tools are also available to initialise the SupplyPoint system properties such as the ORB and the database connection.

SupplyPoint has **interfaces** to the following external services and systems:

#### **4.3 TZI Authentication Package**

The TradeZone International authentication service is being utilised to provide secure and reliable authentication of both the server application and the user. In the prototype system the authentication is by a simple UserID / PIN method. Having authenticated the user the server will then hold a token for the duration of the users session.

#### **4.4 TZI Payment Package**

Within the SupplyPoint project the TradeZone payment service is being developed as a means of on-line payment for registration fees. It is envisaged that as a stand alone plug-in service this can be utilised for other payment requirements at a future date.

#### **4.5 ELPRO Public Procurement System**

Under EU Legislation, public bodies are obliged to invite tenders from across Europe for [Works] contracts over 5.000.000 Euro, and give notice of this in the Official Journal of the EU (sometimes referred to as the OJ). Tenders are also currently announced electronically via TED (Tenders Electronic Daily) – see [5] for further details. The ELPRO system provides support to the entire procurement cycle for both procurers and suppliers, starting with the announcement of intention to invite tenders through to the award of the contract. There is an interface to the ELPRO system.



## 5 Formation of Virtual Consortia (VCs) Using SupplyPoint

The formation of virtual consortia within the SupplyPoint system involves the direct interaction and collaboration between potential partners, who enter into discussions, through the system, to form a collaboration to deal with a specific tender/project. The concepts behind this process are described in [6].

An organization can identify potential partners using various searches or through suppliers/partners already known to them (bookmarked). Discussions with these potential partners can be carried out and agreements made to form a virtual consortium by creating a shared work area containing various collaboration sections.

Within this on-line business area, or virtual company building, the partners are given access to discussion rooms, data storage rooms and workflow procedures to facilitate in the collaborative processes to prepare and submit a bid for tender.

In creating the virtual consortium (and virtual company building), information needs to be supplied including; the VC name, a list of partners, access rights (for partners and individuals from the partners), a management structure and of course a "contract" of interest to the VC (i.e. that it intends to tender for).

From this a virtual company building containing a room of partner details and a contract room for the contract of interest to the VC is formed.

Once formed, anything that a single company can do within the SupplyPoint system can be done by the VC. However, internal workflow will be required to ensure that all the relevant parties have agreed on a particular action. For example, the partners must electronically agree any tender documents before they can be submitted as a bid. To prepare a bid a workflow procedure is used allowing all partners to contribute and agree to the bid before it is sent to the awarding body. This workflow procedure includes:

- From within the contract room a workflow procedure can be initiated
- A tender bid document is created and circulated to all partners in turn
- Tender details are entered into the document by each partner
- After each partner has contributed the final document is prepared for submission
- Each partner must access the final document and approve or modify it
- If a document is modified the approver list is reset and all partners must re-approve
- A manager must ensure that a document is fully approved before submission

These processes are supported by the workflow facilities of SupplyPoint.

## 6. Conclusions and further research

Tendering and bidding in the construction sector is a very important process involving a large number of actors in three different roles. In order to support the process taking advantage of e-commerce technologies numerous systems have been developed. The majority of those systems support search for tenders and the acquisition of tender documents and few of them provide additional services such as search for potential partners, electronic submission and so on. However, existing systems do not provide a solid collaboration platform that can support the formation of a virtual consortium.

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That was the opportunity for the development of SupplyPoint, a new system aiming to support the whole bidding process.

The SupplyPoint system is available for validation and verification from June 2000 and a critical mass of users has been identified in France and the UK. The project will end in late 2000, when the system will be available for commercial purposes.

Currently SupplyPoint provides access to above the line procurement, however there are many opportunities for contracts below this figure of 5.000.000 Euro (Construction Works). There are a number of regional and sector specific systems that provide this type of information - interfaces to these sources would be extremely beneficial, as would the ability to be able to place sub-contracts onto them.

Further work will be required on many issues, including for example the close integration with new and existing 3<sup>rd</sup> party services, in order to provide a seamless environment for the SupplyPoint user.

The virtual rooms concept is being utilised in the education arena to form a virtual campus with students and tutors being able to upload notes, tutorials etc online.

Although this paper does not address the legal implications of virtual company formation the SupplyPoint consortium have done extensive research into the subject. The final report will be publicly available shortly.

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## SUPPLYPOINT: ELECTRONIC PROCUREMENT USING VIRTUAL SUPPLY CHAINS – AN OVERVIEW

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### BACKGROUND

In the area of Electronic Contracting and Virtual Company Formation within Supply-Chains there has been little research or development work. During this paper we will outline the European Union sponsored project SUPPLYPOINT (ESPRIT 27007) which addresses the issues of pan-European electronic trade links for business-to-business and business-to-public body electronic commerce. This will be achieved by using virtual supply chains and covering a life cycle from contract identification to completion, including virtual supply chain management and electronic payments. It will provide a one-stop shopping service for companies to purchase goods and services from small / medium sized enterprises (SMEs) co-operating in virtual and dynamic supply chains. The project started on July 1st 1998 and is co-funded by the European Commission to support the multi-national consortium conducting the research and development over a two year period.

### OBJECTIVES

SUPPLYPOINT, a European electronic procurement system utilising virtual supply chains will:

- ◆ undertake comprehensive surveys to identify the requirements of SMEs and procuring entities and the legal framework in which these requirements must operate.
- ◆ develop a conceptual European framework for electronic procurement using virtual supply chains incorporating existing state-of-the-art public and private sector electronic procurement and supply chain systems, in particular, Tradepoint, ELPRO and SIMAP which takes explicit account of the needs of SMEs at all stages.
- ◆ build and pilot on a number of sites a demonstrator electronic procurement system using virtual supply chains in-

corporating multi-media and distributed work-flow management, document handling, supply chain and tendering procedures.

- ◆ conduct user trials, and give guidance and make recommendations on the development of virtual supply chains within electronic procurement systems meeting the needs of SMEs, and the development of effective regional support networks for SMEs with a view to the long term exploitation of the SUPPLYPOINT concept.
- ◆ SUPPLYPOINT will be an open project, collaborating with and offering demonstration facilities to other projects in this field (e.g. ELPRO, Tradepoint and SIMAP)

### TECHNICAL AND BUSINESS APPROACH

The SUPPLYPOINT service is a new business opportunity which will be taken up by a number of the project partners. It will benefit the wider business audience by addressing a current gap in the Electronic Commerce market place and will:

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- ◆ support the whole transaction cycle
- ◆ give fast and accurate access to information on possible contracts
- ◆ show the current state of the supply chain(s) involved in current contracts
- ◆ allow SMEs to form dynamic supply chains
- ◆ enable brokers to form virtual supply chains

### EXPECTED RESULTS

#### WEB SERVER SYSTEM

This will allow users to search the supply chain database depending on different criteria and form a virtual supply chain. The supply chain database administration for suppliers will also be supported by WWW access.

#### ORDER PROCESSING

SUPPLYPOINT will contain a dedicated subsystem for order processing, which, most likely will be separate from the Web server system for reasons of security and auditable transaction processing.

#### EDI GATEWAY

SUPPLYPOINT will contain an integrated EDI gateway, through which orders can be transferred to the suppliers in EDI formats (EDIFACT, ANSI X.12, XML, in-house, or others) via electronic mail, file transfer, and, in a later stages, via existing VANS. The provision of EDI through a programmable gateway also allows the future integration of complete EDI Clearing Centres from different vendors.

#### E-MAIL

This gateway will basically be an SMTP gateway for inbound and outbound mail

#### BANKING GATEWAY

A banking gateway for secure electronic payment.

#### EXTERNAL INTERFACE API

SUPPLYPOINT will also provide an API to external sources of information (e.g. external databases, external software systems). This will allow users to integrate customs information, VAT and other tax

information, as well as the integrating tracking systems and pricing information from shipping agents and freight handlers.

All these will be combined in a single coherent system (together with existing systems, e.g. product databases, electronic catalogues) which will help to accelerate user uptake.

INDUSTRIAL DEMAND

There are literally millions of contracts awarded in the European Union (EU) each year, most of these existing in supply chains. However the vast majority of these supply chains are relatively fixed and are comprised from a high proportion of large companies. In order to enable more SMEs to bid for contracts a way of co-ordinating dynamic and virtual supply chains in required. SUPPLYPOINT meets this need and will reduce the number of disadvantages that SMEs have. Additionally, SUPPLYPOINT will give the end purchaser more control over the supply chain and hence a higher quality of service / product.

The EU Initiative Electronic Commerce estimates that 3% of the public procurement budget in the EU (12% of GDP) could be saved through the use of electronic commerce, SUPPLYPOINT will go a long way towards achieving this goal.

PROJECT OBJECTIVES AND SCOPE

Electronic procurement is one of the main issues in the Bangemann report, enabling a European wide co-operation between administrations and industry with a strong involvement of SMEs. The objective of the SUPPLYPOINT project is the development and implementation of a software and service infrastructure for the integrated deployment of electronic procurement using virtual supply chains. Special attention is paid to the integration of traditional EDI systems and new interactive World Wide Web technology together with multimedia.

SUPPLYPOINT will fill a gap in current electronic commerce support systems by providing fast and accurate access to con-

tract information for both procurers and suppliers in a supply chain context. It will provide affordable and easily packaged support for business relationships, in particular for SMEs wishing to become part of or to initiate supply chains.

In addition it will be a best practice pilot for the marketing and trading of goods and services in supply chains, thus enhancing quality, flexibility, responsiveness and productivity at a global level.

The aim of the project is to demonstrate the effectiveness of the SUPPLYPOINT approach to electronic procurement using virtual supply chains by taking a number of existing systems and providing access to them in an integrated manner.

To this end a number of tasks have been identified, namely:

- ◆ a review of the environment, which the SUPPLYPOINT system will meet, with a special focus on the legal situation and the existing work done in other projects
- ◆ a definition of the specific requirements to be included in the pilot system and the subsequent commercial products
- ◆ the interfacing of a number of existing systems
- ◆ the provision to the user of a coherent integrated system
- ◆ the utilisation of the SUPPLYPOINT demonstrator to show best practice

SUPPLYPOINT will initially be demonstrated in a construction industry context, but most aspects of electronic procurement using virtual supply chains are common for all supply chains, where SUPPLYPOINT will be exploited as well. Therefore, the whole workplan, although adapted to the construction industry application of the demonstrator, takes into account the wider perspective of electronic commerce for all strands of applications in different sectors. The construction industry has been identified by SMEs as being an area where they would see most benefits from such a system. At the moment when a large contract is adver-

tised it will almost certainly be awarded to a large company. This company then merely re-advertises the contract as sub-contracts which are accessible to SMEs, only after they have taken their 'managerial expenses' in the region of 10% from the total. SUPPLYPOINT will allow the SMEs to form virtual consortia of supply chains and to bid directly for the original contract.

BUSINESS OBJECTIVES

EC document COM (97) 157 states that public procurement accounts for 12% of EU GDP and the Swedish association of local authorities estimate that 3% of the procurement budget could be saved through electronic procurement. SUPPLYPOINT will allow SMEs to be involved as first parties not subcontractors in this procurement, benefiting them and the end purchasers.

There is also the opportunity for a new market in information services as a partner broker who would identify contracts and possible virtual supply chains to fulfil the contract.

The savings for procurers would also be seen for the SME suppliers in terms of reduced administration for the whole procurement cycle from call for tender to electronic payment.

MEASUREMENT OF OBJECTIVES

During the initial stages of the project, the user partners will organise a project user group (PUG) of interested companies. As well as being involved in the user requirements, critically, the PUG will use the demonstrator system to ascertain its usability and effectiveness. The criteria for success will be defined by the PUG at the same time as the user requirements.

STATE OF THE ART

There are a growing number of electronic commerce systems and research projects focusing on supply chains. Listed below are some of the current projects in the area, many of which involve SUPPLYPOINT partners.



FOCUS THEME

GEIS and Netscape have formed ACTRA – OrderXpert (software for e-commerce) and ECXpert (secure Internet-based messaging for e-commerce) [<http://www.actracorp.com/>]

GE TradeWeb offers forms-based, entry-level EDI service via the WWW. [<http://www.getradeweb.com/>]

GEIS Trading Process Network provides a suite of Internet purchasing tools including TPN Post, for electronic RFP distribution and bid receipt. GEIS recently joined forces with the Thomas Publishing Co., to create TPN Register, which will allow end-to-end procurement of industrial materials [<http://tpn.geis.com/>]

TRADE'ex have a suite of Java-based software for various aspects of e-commerce, including RFQs. [<http://www.tradeex.com/>]

IBM World Purchasing provides end-users access to customised supplier catalogues via a Web browser. [<http://www.internet.ibm.com/commercepoint/html3/purchasing/>]

Microsoft are now turning their attention to e-commerce, with the Merchant Server now subsumed into their new Commerce Server. [<http://www.microsoft.com/>]

ELPRO – Electronic Procurement System for Europe (Telematics Project AD-1003) [<http://cec.sunderland.ac.uk/>]

Many forms of electronic on-line payment techniques have been proposed in recent years, but only a few have emerged into reality. Of these, the SET scheme devised by Visa and Mastercard for secure bankcard transactions via the Internet is probably the most important. SET uses a sophisticated combination of cryptographic means to protect the interests of all parties in a payment transaction. Nevertheless, it should not be forgotten that electronic funds transfer is well-established outside of the Internet, and tends to be a preferred means of payment in the more traditional supply chains. How-

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ever, the emergence of more dynamic virtual chains gives rise to a need to handle payments more flexibly. Systems such as SET could provide part of the solution, when integrated with say EDI links into the banking network.

SUPPLYPOINT will incorporate and integrate the best of these systems into a single, coherent, affordable and easily managed support system.

INDUSTRIAL CONTEXT AND IMPACT ON SOCIETY

INDUSTRIAL CONTEXT

The European Commission has always viewed public procurement regime not only as means of complying with GATT but also as a lever and demonstrator to encourage the liberalisation of the private sector procurement field and complete the creation of a single European

market. The Commission has a clear need to realise this objective by encouraging increasing private sector participation in open procurement throughout Europe. Again the advantages to both SMEs and the construction industry in the ability to form effective virtual companies would facilitate this.

The SUPPLYPOINT electronic procurement system will allow SME to form virtual supply chains in order to produce more competitive and realistic bids for contracts. In effect it will provide a seamless gateway to the ELPRO, TRADEPOINT, SIMAP, TAPPE and similar systems allowing SMEs to form virtual companies in the most practical and cost effective ways which would put them at an advantage when bidding for procurement contracts.

MARKET OPPORTUNITIES

The estimated savings from using an integrated electronic commerce system for supply chains is 0.36% of EU GDP [ref. COM(97) 157] from public procurement alone.

SUPPLYPOINT will allow SMEs to be involved as first parties not subcontractors in this market to the mutual benefit of both the suppliers and procurers.

Apart from the SUPPLYPOINT system itself, there is also the opportunity for a new market in information services: SUPPLYPOINT brokers who would identify contracts and possible virtual supply chains to fulfil the contract, as a value added service.

Administrations are required to secure the economic health and welfare of their administrative area, and to provide support for the creation of employment opportunities in their regions. This political imperative is clearly stated in both the EC White Paper on "Growth, Competitiveness and Employment" and in the Bangemann Report as well as in the policies and activities of government at all levels. SUPPLYPOINT would facilitate this.

## FOCUS THEME

## INDUSTRIAL IMPACT

Commission experts expect an increase of invitations to bid to more than 1000 per day within the next year (in the Official Journal alone). The current 150.000 awarding organisations can expect to approach the 3% saving estimated by using a comprehensive, integrated electronic supply chain management system like SUPPLYPOINT.

Conversely, the millions of SMEs in Europe who cannot directly compete for these and similar calls for tender will, with SUPPLYPOINT, be able to do so easily and affordably. The potential impact on the SME community is almost unlimited. Even assuming a 10% market penetration of the system to the 1% of SMEs that are truly viable, means that potential supply chains can be formed from over 300.000 dynamic SMEs within the European Union.

## MARKET SITUATION

There are several current solutions for electronic commerce on the market, which need to be taken into account, when analysing the competitive market situation.

The classical EDI Clearing Centre approach, as for example available from Sterling, Frontec, GE Information Services is strongly application oriented with batch processing of electronic transactions, but it doesn't feature a WWW access. In the classical approach there is also no provision for interactive EDI.

In existing online ordering systems, frequently there is only one single supplier/manufacturer involved. In most cases they do not support integrated EDI, electronic payment, customs information, and cross-border tax calculation.

In the last year, several low-cost solutions (such as the integration of Oracle and Netscape) via CGI scripts evolved in the market. They allow easy integration of product information databases, but they support retrieval only and not order placement.

For more advanced electronic commerce, a number of dedicated solutions (multi-media CD-ROM, product catalogue for home shopping, etc.) have been developed. They feature advanced multimedia as well as order placement (in connection with a modem or off-line by fax). The problem with those solutions is that they are not always up-to-date. Moreover, buying of the CD and a local installation is required.

Most recently, a series of products have been announced, which can be viewed as major competitors to the SUPPLYPOINT set of integrated services. One of them is the announcement of Oracle's end-to-end solution for electronic commerce, developed under the project Apollo, which is mainly targeting the business-to-consumer end of the electronic commerce market. The other one is Microsoft's Merchant Server, which is announced as a complete "electronic shopping mall" solution.

However, those new products mainly address the business-to-consumer market, providing highly proprietary solutions (although one needs to take into account that Microsoft has always set the path to de-facto standards in the past), and do not integrate EDI systems and services already in use and well-established.

In summary, none of the above systems address the issues of supply chains and how to form, manage and monitor them in a 'just in time' manner. SUPPLYPOINT meets this need and will allow SMEs to take full advantage of the single European market.

Notably, the construction industry uses supply chains, and contracts can be very large. Currently SMEs cannot bid for these contracts as they have neither the financial backing nor track record which are perceived needs of the purchasers. SUPPLYPOINT by allowing them to form consortia and supply chains would distribute these implications to a manageable size, thus giving the SMEs access to a 'level playing field'.

## CONCLUSION

The project has only recently started, and so no concrete results are yet available. The intended outcomes of the project are, however, quite clear. The SUPPLYPOINT system will allow the formation of virtual enterprises whose members can then collectively bid for large value contracts. This will build on the existing work of the Centre for Electronic Commerce. Above the threshold procurement is currently being developed in electronic format in the Elpro project. Sunderland University's Centre for Electronic Commerce is the lead partner in the Elpro project, which involves a number of organisations throughout Europe in a web-based procurement solution. Because of the close connection between SUPPLYPOINT and the Elpro project, cluster companies formed in SUPPLYPOINT will be able to use the Elpro system to locate and bid for above the threshold contracts.

The Centre for Electronic Commerce is also lead partner in another European project dealing with below the threshold purchasing for local authorities and large companies. This project, called Tradepoint, allows organisations to pool together information from various supplier catalogues into buyer side catalogues, for centralised use within the local authority or company. The Tradepoint system is also being developed and hosted on a web server at Sunderland University, and this system will also be available for interfacing with SUPPLYPOINT.

Although the project is initially being developed in the construction sector, the broad technological base of the system will allow for development into other commercial areas as demand requires it.

In summary, SUPPLYPOINT will build on and extend the successful work of the Elpro and Tradepoint projects that are now reaching maturity. Various deliverables will be publicly available (via <http://cec.sunderland.ac.uk/>) and should prove to be useful not only in the construction sector but also more widely in the whole domain of electronic contracting within virtual dynamic supply chains.

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Project Deliverables	DELIVERABLES README
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Project Deliverables (directory) contains	
A copy of each deliverable from the Project (identified by filename Dx.y[P] Description)	
Where x is the workpackage number, and y is the task within the work package. Note that items P (after the Deliverable identifier) are public versions of the deliverables, somewhat sanitised to remove commercial information.	
deliverables_readme.txt	
Background Information:	
D1.1 Legal Regulations for EU Virtual Organisations - Final.doc"	
D1.2 User Requirements - Final.doc	
State of the Art:	
D2.1 Relevant Technologies - Final.doc	
D2.2 Technologies to be Utilised - Final.doc	
Project Management Tools:	
D3.1 ProjectNet - Final.doc	
D3.2 Access Guide for External Users - Final.doc	
D3.3 Validation Report on External Feedback - Final.doc	
Project Specification	
D4.1 Functional Specification - Final.doc	
D4.2 Acceptance Test Specifications - Final.doc	
System Design:	
D5.1P Design Document - Final.doc	
D5.2P SupplyPoint System - Final.doc	
D5.3 User Manual - Final.doc	
D5.4 Joint Review Report - Final.doc	
System Validation:	
D6.1 Joint Demonstration and Validation Review - Annex - French Info Pack.doc	
D6.1 Joint Demonstration and Validation Review - Final.doc	
Dissemination:	
D7.1 Website - Final.doc	
D7.2P Business Plan (Public).doc	
D7.3 CEC Newsletter.doc	
D7.3 CEC Newsletter2.doc	
D7.3 Contract Law.ppt	
D7.3 Dissemination Material - Final.doc	
D7.3 EBEW.doc	
D7.3 EC-web 20000905 Presentation.ppt	
D7.3 EC-web.doc	
D7.3 EWMA Paper - The Virtual Consortium.doc	
D7.3 EU Law Workshop 1999I006 Presentation.ppt	
D7.3 IBM San Francisco Presentation.ppt	
D7.3 JEW.doc	
D7.3 JFET - Internet Applications - Japan.rtf	
D7.3 Original Presentation.ppt	
D7.3 Press-Release (PR 0317).doc	
D7.3 Standards for the Construction Industry.doc	
D7.3 SupplyPoint Flier.doc	
D7.3 SupplyPoint Information Sheet.doc	
D7.3 Virtual Organisations - Brussels.doc	
Project Management:	
D8.1P Collaboration Agreement - Final.doc	
D8.2P Management Reports - Final.doc	

Unit 4G, Technology Park Chester Road Sunderland SR2 7PS UK Tel: +44 191 515 2285 Fax: +44 191 515 2257 Email: <a href="mailto:Simon.Kerridge@sunderland.ac.uk">Simon.Kerridge@sunderland.ac.uk</a> Web: <a href="http://cec.sunderland.ac.uk/">http://cec.sunderland.ac.uk/</a>	DELIVERABLES README
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7 PROFESSION PORTFOLIO ITEMS

Portfolio items are grouped into these seven areas:

- ARMA (ARMA)
- Electronic Research Administration (ERA)
- ERA Questionnaire (ERAQ)
- Esteem (Est)
- Focus Group (FG)
- Historical Items (Hist)
- **Profession (Prof)**

This section contains the items pertaining to the **Prof** area.

7.1 Profession (Prof)

These items relate to my claims for having influenced, advocated and helped to develop the profession of research management and administration in the UK.

After this introduction there is an index table of items in this section (an example is shown below), and the portfolio items themselves follow the index table.

Table 12: Sample Portfolio Index Table (Prof)

Ref	Type	Description	Outcome(s)
Profxx	<type>	<title>	Kx, Sx
A short description of item Profxx with its relevance and importance in order to demonstrate the learning outcomes Kx & Sx that they address (K1-2; S1-5, see below for explanations of the learning outcomes). <type> is the type of the item, for example: report, email or presentation. <title> is the title of the item, for example: Invitation to join Steering Group. Profxx is the unique identifier for the portfolio item (xx is a two digit number) which is used to reference it in the doctoral report, or indeed from another portfolio item.			

Each item is described in the table, with two rows of information. The first row of the pair has the portfolio reference, type of document, short description and learning outcome(s) claimed. The second row describes the context and importance of the

item, in order to substantiate the claim towards the learning outcomes listed in the first row. The actual portfolio items follow after the index table.

Note that the numbering is not contiguous as the items presented as evidence have been selected from a larger possible portfolio of items. So for example item Prof09, an email from Research Fortnight about the heaven and hell article (Prof08), is not required as the editorial (Prof07 provides the same information.

Also note that items with confidential sections that have been redacted are indicated with red and those that are abridged have the reference number coloured with orange.

## 7.2 Learning Outcomes

The learning outcomes (knowledge and skills) required for the professional doctorate are:

- K1** Deep understanding of the recent developments in their profession nationally and internationally
- K2** Deep understanding of current theoretical frameworks and approaches which have direct relevance to their own professional context
- S1** Make a significant contribution to practice within their chosen field
- S2** Apply theory and research methodology within the workplace, and feel comfortable in integrating different approaches to address “messy” multidisciplinary problems in a rigorous yet practical manner
- S3** Recognise budgetary, political, strategic, ethical and social issues when addressing issues within the workplace
- S4** Reflect on their own work, and on themselves, and thus operate as a truly reflective independent practitioner
- S5** Present and defend an original and coherent body of work which demonstrates, reflects upon, and evaluates the impact upon practice which they have personally made

Some portfolio items could cover almost all of the seven learning outcomes above, in most cases the listings are restricted to just those outcomes which are the main foci of the item, normally 2 or 3 learning outcomes at the most.

## 7.3 Profession Portfolio Index

Table 13: Portfolio Index Table for Profession (Prof) Items

Ref	Type	Description	Outcome(s)
Prof01	Minutes	JISC RIM minutes of 4 <sup>th</sup> meeting (21 <sup>st</sup> Jan 2010)	K2, S1, S3
Minutes of the 4 <sup>th</sup> Joint Information Systems Committee (JISC) Research Information Management (RIM) group meeting. I provided (p2) an update to the group on the progress of the RMAS (see Est12) project. I also contributed to the (p4) EXRI project recommendations for the UK to adopt CERIF as a standard for exchange of research information data. This was a pivotal meeting where the group agreed to endorse the proposal that CERIF be adopted as a UK standard. The RIM group is <i>“made up of Higher Education or research-based stakeholders from the UK and International research information community. The aims of the group are to enable disinterested discussion, knowledge sharing and strategic coordination of efforts to improve the management and exchange of research information within and between research organisations, funders and agencies.”</i>			
Prof02	Slides	Presentation at INORMS2010 on RMA Development	K1
I gave a workshop presentation on Professional Development for Research Managers and Administrators at the International Network Of Research Management Societies (INORMS) 2010 conference in Cape Town, South Africa. The slides provided a backdrop for discussion and later at the conference I organised an informal meeting on professional development with representatives from a number of national associations (see Prof12).			
Prof04	Paper	Professional development submitted to INORMS2010	K1, K2, S5
This academic paper was submitted in conjunction with the workshop (see Prof12) session at International Network Of Research Management Societies (INORMS) 2010 for consideration in the conference proceedings in a special issue of Acta Academica, it was not published.			
Prof06	Article	An updated summary of the INORMS2010 paper	K1, S1, S4
A professional article, an updated précis of the paper (see Prof04) written for the International Network Of Research Management Societies (INORMS) 2010 conference. Global Research Management (GRM) is a publication of the Association of Commonwealth Universities (ACU), see <a href="http://www.globalrmn.org/">http://www.globalrmn.org/</a> , accessed 25 <sup>th</sup> April 2011, with a distribution of around 600.			
Prof07	Editorial	On the Research Fortnight Heaven and Hell article	S1
The publication of my article (see Prof08) on research management and academic staff next to the counterpoint by Professor David Colquhoun led to great discussion at the 2010 ARMA conference. These discussions were the lead item in the editorial of the following edition of Research Fortnight (16th June 2010). See section 3.3 for my reflections on the articles.			
Prof08	Article	In Research Fortnight – research management debate	K1, S1, S4
After presenting to the staff at ResearchResearch Ltd (see Est13), I was invited to write an article (to be part of a pair) on the relationship between researchers and research managers (from the view of the latter). This was published on Jun 2 <sup>nd</sup> 2010 (p18) just in time for the 2010 ARMA conference and with the counterpoint piece by Professor David Colquhoun (p19) promoted a lot of debate (see Prof07). See section 3.3 for my reflections on the articles.			

Prof10	Ppt	Overview of ARMA 2010	K1
I created the first 'formal' corporate presentation about ARMA for informational purposes. It was originally developed in late 2009 and updated with suggestions from other board members and released in Feb 2010. It is available on the ARMA website at <a href="http://www.arma.ac.uk/files/guest/Information/ARMAOverviewFeb2010-1.pdf">http://www.arma.ac.uk/files/guest/Information/ARMAOverviewFeb2010-1.pdf</a> (accessed 12th Jan 2011). I updated it in early 2011, see (Prof14).			
Prof11	Web	Page showing the HEFCE LGM PI project background	S1
I was an invited member of the steering group (Est02) for the HEFCE funded LGM PI project that developed an on-line resource for Principal Investigators (see <a href="http://www.vitae.ac.uk/pi">http://www.vitae.ac.uk/pi</a> , accessed 25 <sup>th</sup> April 2011). As part of my role on the steering group I reviewed and commented on the text on most pages and wrote most of the text for the project management section. This website went live on 12 <sup>th</sup> Jan 2011.			
Prof12	Notes	From a meeting that I arranged at INORMS2010	K1
At the International Network Of Research Management Societies (INORMS) 2010 conference, after the interest in my presentation (Prof02) I arranged an informal meeting with interested parties in order to share best practice on professional development. These are the notes that I made and distributed after that meeting. It was followed up with (Prof13).			
Prof13	Report	On the professional development offerings of ARMA	K1
After the meeting in Cape Town at INORMS (Prof12) I developed this summary of the professional development activities of ARMA and sent it to those at the meeting (and others that expressed an interest afterwards) including associations from the UK, Europe, Denmark, USA, Canada, Australia, India, the Commonwealth and Africa.			
Prof14	Slides	Overview of ARMA 2011	K1
This is an updated version of (Prof10). Directorships and membership statistics have been updated.			
Prof15	Booklet	AUA Handbook: Supporting Research (2004)	K1, S1
Steff Hazlehurst made a substantive update to a previous good practice guide by Marion McClintock to produce this 32 page booklet for the Association of University Administrators (AUA). On p28 she credits me on my helpful comments on an earlier draft. This handbook is available to the AUA membership of around 4,000 UK University administrators.			
Prof17	Email	Thanks for contribution to Postgraduate Review, 2010	S1
Email of thanks from Professor Adrian Smith for the contributions that I sent in (a synthesis of my own thoughts with input from colleagues at Sunderland) to the review of Postgraduate Education in 2010.			
Prof18	Program	NE-ARMA five event programme (2010)	K1, S1, S3
I was instrumental in setting up the regional group of heads of research offices in the five campus based universities in the North-East of England. In 2009 we determined that there were many members of staff that could not access ARMA courses and so we decided to develop and implement our own course focussed on our own HEIs, (Prof19) shows the feedback.			



Prof19	Report	Evaluation of the NE-ARMA course	K1, S1, S4
After each event of the NE-ARMA course (Prof18) I undertook a feedback questionnaire. After allowing for a period (6 months) of reflection I surveyed the participants again to see if there was any lasting benefit from the course. This summary report (a full report is available on-line at <a href="http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/NE-ARMA2010EvaluationReport.pdf">http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/NE-ARMA2010EvaluationReport.pdf</a> , accessed 21 <sup>st</sup> April 2011) clearly shows the lasting benefit of the course.			
Prof20	Program	Brunel (BRAM-NET) research administrators conference	K1, S1
ARMA was invited by the Brunel University research office to present at their inaugural conference for research administrators (dubbed BRAM-NET). I was available and offered to present on behalf of ARMA, for the slides see (Prof21).			
Prof21	Slides	From BRAM-NET research administrators conference	K1, S1
I was asked to cover ARMA, the developing professional development framework and models of research support. I updated and modified some of my own slides (see Prof14) and those from other ARMA presentations on similar subjects (in consultation with the previous presenters). There were around 30 attendees.			
Prof22	Report	Mentoring Agreement with a mentee from another HEI	K1, S1, S4
This outline agreement shows that I have been paired with a colleague from a research intensive university in order to help her plan and prepare for a career in research management and administration. I suspect that the relationship will be much more of a mentor-mentee relationship as compared to the mentor-buddy situation that evolved with my previous pairing (ERA45).			
Prof23	Slides	Presentation: fEC for commercial activities, AURIL (2005)	K1, S1, S3-4
I was invited by John Newton (then of Joint Costing and Pricing Steering Group - JCPSG) to give a talk on full economic costing (fEC) of commercial activities at a workshop he organised for the Association for University Research and Industry Links (AURIL) in June 2005. At that time most of the focus was on fEC for research, but the fECAf system that I devised (see section 7.3) provided fEC calculations for commercial activities too, I spoke about the underlying principles of my methodology.			
Prof24	Report	Update on Professional Development Framework	K1, S1, S3-4
This is the Feb 2011 update from Marie Garnett, the ARMA Professional Development Manager. As an ARMA board member I have actively contributed to the development of the framework and have shared information (eg Prof04, Prof13) with Marie in order to provide context. I helped to organise the North-East Focus Group and have provided direct input into the framework. I have also presented on the framework (Prof21).			
Prof25	Report	Extract from AUA 2002 Conference Programme	K1, S1, S3
The programme and workshop listings from the full 28 page conference programme handbook are reproduced with the workshop session that I gave (121 How research is funded in the UK (SFS)) highlighted. The presentation covered the dual support system with details of how various research funding streams arrive at universities. Around 50 delegates attended the session.			

## 7.4 Profession Portfolio Items

(follow on the next page)

Research Information Management Group

4th meeting, 21<sup>st</sup> January 2010.

HEFCE Offices, Centrepoint, London

Present

Alan Green	Nicky Ferguson
Alan Danskin	Nikki Rogers
Andy Youell	Pam Macpherson Barrett
Anna Mathews	Sally Rumsey
Anna Clements	Scott Rutherford
Daniel Hook	<b>Simon Kerridge</b>
Dominic Tate	Steve Bailey
Ian McCormick	Stuart Bolton
Keith Jeffery	Frederique van Till
Kevin Dolby	
Leslie Carr	<b>Apologies</b>
Mark Cox	Deborah Welland
Michael Day	Helen Reddy
Naomi Drinkwater	Lesly Huxley
Neil Jefferies	Mary Davies
Neil Jacobs	Rachel Shapton

Updates from National bodies:

HEFCE (Scott Rutherford) – focused on REF

The consultation phase closed in December and received large response from the sector. The team is presently working through the responses. In future the REF team will produce a document summarising the high level responses from the sector and this will be discussed by the funding councils.

REF Systems: in November there was a series of workshops held with institutional RAE staff, panel secretaries/ administrators and key agencies such as HESA, RCUK. The workshops focussed on discussing the requirements for a system for the REF. The REF Team are presently working on a paper, to translate workshop findings into high level requirements.

In line with the current REF timetable, the REF system must be up and running by end 2011.

Present planned activities:

- Technical upgrade of the RAE 2008 system
- Outputs system redesign (late 2010), feeding through in phased approach.
- Pilot late summer/ autumn 2011 to test.

Research Councils (Alan Green) – focused on Research Outcomes Project

They are presently working to find best way for the research councils' requirements to be met, bearing in mind the capabilities of research organisations. There is a proposal to adopt a phased approach to minimise risk and ensure deadlines are met. Priority to getting acceptance first and building on that

Will tender for a supplier late spring 2010, the notice will go out in a week or so. Reporting will be done late summer 2010 to executive strategy group.

HEFCE has been involved in discussing these requirements; there is ongoing work to align reporting requirements where appropriate and so minimise burden. HESA is also included. It is not a set objective, but teams are attempting to get efficiency gains for all where there is a commonality in data collection.

Universities UK (Naomi Drinkwater)

UUK released a position statement on open access in 2007, and is looking at wider issues of scholarly communications, research information management etc. Anyone wanting to be involved: contact Naomi

JISC (Neil Jacobs)

There are several activities:

- EXRI project, to be discussed below.
- RIM call for proposals has gone out, projects to be up and running next month
- Sector support via JISC InfoNet, ongoing
- Michael Day at UKOLN is providing technical support
- There will be a new (RIM) call coming up, we will be looking at the outcomes from this meeting to inform future JISC steps.
- New project is just starting, identifying best practice in the online promotion of research expertise, see Neil Jacobs.
- Frederique van Till will now be managing this group, she has a background in eResearch, example from OpenImpact project helping researchers to share stories and improve impact with the use of web2.0 tools (Les Carr).

RMAS project (Simon Kerridge)

A proposal for the 3<sup>rd</sup> phase, converting pathfinder institutions into pilot institutions, has been submitted to HEFCE. The outcomes of the HEFCE Board meeting on 28<sup>th</sup> January will be influential in the future of this project, though a final decision may not be known until March.

St Andrews and Aberdeen (Anna Clements)

Have implemented the PURE information system based on CERIF, after tender procedure they are now fully in the implementation stage. Starting to roll out in March.

They are also working with Thompson Reuters via their Web of Science API, seeking to get that working with PURE... in beta at the moment. Noted: there is a potential benefit of a national deal to procure metadata from WOS.

Data structures and data management policy in the institution get upgraded by implementing this new technology. For example, it identifies duplicates in legacy data and the metadata from Thompson Reuters helps finding impurities. Some work was planned and implemented to improve data quality as a result.

Oxford (Sally Rumsey, Neil Jefferies)

The BRIL project in Oxford has been running from Oct 2008 and has focussed on building information infrastructure. The benefits of this infrastructure are demonstrated via two high profile outputs:

- Blue pages, an online registry of online research activities, pulling external data from EPSRC as well. Demonstrating power of data aggregation. Co-authorship, location, what, who and where are we collaborating, demonstrate by project information.  
There are four items on Blue pages:
    - o People,
    - o academic units,
    - o funders,
    - o Research projects.
  - Themed website Getting different activities together throughout different departments organised in themes. Including:
    - o Demonstrator on graduate opportunities in medical sciences
    - o Dissemination to show what others can do within their own institutions.
- Further:
- stakeholder analysis
  - Home for ontology and vocabularies. Online open access site used across university, central resource, funding from university.

Ian M: there is an issue of getting the right keyword in vocabularies... the variation on discipline taxonomies... Presently there is no top level management

*Readiness4REF project (Mark Cox)*

R4R is a mapping exercise for CERIF elements. They have worked with EUROCRIS and are now finished and are running implementations in Southampton and King's College London.

Upcoming:

1. Mid March they will run a workshop on their results so far, mapping submissions into an Oracle database using EuroCRIS tools.
2. They will inform other institutions about their lessons learnt
3. They will liaise with EuroCRIS to incorporate 'impact' into the CERIF data model, so far as this is possible before the final REF specification is available.
4. They will test the Web of Science API interoperability and build a SWORD tool to harvest that data into repositories.

It will depend on what is to come next at REF.

**Action:** Scott R. and Mark Cox will align their planning and ideas.

Noted also that Southampton are expanding the capabilities of EPrints to cope with the CERIF data model, allowing it to become a lightweight CRIS, or component in a wider CERIF-based infrastructure.

**Presentations Exchanging Research Information (EXRI) project report outcomes**

Nikki Rogers introduced the main sections of the EXRI report.

1. EXRI scenarios
2. Criteria for benefits,
3. The full technical appraisal.
4. CERIF comparison to semantic web approach

**Next steps:** A possible future action to expand the current review of international practice.

**Responses:**  
The report is positively received by all present.

*Anna Clements* – bear in mind the subtle differences in Scottish research reporting compared to the rest of UK, ie the importance and process of research pooling.

*Simon Kerridge* –different starting points of HEIs should be considered, this will create issues in time lines.

*Ian McCormick* – think about building the adoption of CERIF into the renewing cycles of the institution. This will lead to a much more incremental roadmap

**Action EXRI:** Ensure the roadmap and timelines reflect the uncertainty and variety in the sector as noted above

*Alan Green* - Informally he recognises the quality of this report and welcomes the direction of this report. However, the timeframe needs work to reflect existing and planned activities of all stakeholders including RCs.

The main thing missing is a business case, including a real cost and benefits analysis, with recommendations on how to proceed.

**Next Steps:** Commission a Business case.

*Scott Rutherford* – Excellent report in such a short time and a good starting point

The report needs some work on proposed roadmap (section 5), timeframe and assessment of cost/benefit. From a REF perspective examples of what has been done with data mapping, such as in the R4R project are critical. Compare cases and see where a common standard can add efficiencies in the system.

The recommendations should include reference to the wider leadership, infrastructure, management, governance, advocacy and support for take-up and sustainability models that would need to be in place to ensure a common standard is picked up and used with confidence in the UK.

Noted that, while EuroCRIS was the custodian of CERIF, any extension of CERIF for the UK would need an organisational home, which would need to work closely with EuroCRIS.

**Next Steps:** Ownership and leadership need to be made clearer and agreed on. How is UK going to 'project manage' this? This requirement needs to be spelt out in the report, and appropriate actions taken.

**Next steps:** There are no suppliers mentioned in the plan. An analysis of the suppliers market should be beneficial.

Responses to Recommendations in Para 5.1

No	Responses	Actions
1. CERIF as standard format	<p><b>This recommendation was unanimously endorsed by all people in the room</b> (<i>as individuals rather than as representatives</i>).</p> <p>(Caveat: If the recommendation reads “Basis” instead of “Format”)</p> <p>Common-sense suggests that harmonising activities via a common exchange format is cost saving. However, more robust evidence would help support the case for adoption. This evidence may come from UK pilots (see below), current work (R4R, St Andrews), and international examples, and should compare costs/benefits against situations where no common format is used.</p> <p>A <b>Business case</b> should be developed from the evidence noted above. This will demonstrate success and convince sceptics.</p> <p>This <b>CERIF business case</b> should include:</p> <ul style="list-style-type: none"><li>- Main question: It has been around for 15 years why are there not more implementations of it?</li><li>- An analysis of objections, see barriers in EXRI report, which can be used as a base.</li><li>- Analysis of real <b>costs &amp; benefits</b> for the different stakeholders and different levels of institutions</li><li>- Analysis of commercial solutions and suppliers market.</li></ul> <p>Second <b>Data business case</b> could be explored, relating to the costs and benefits of improving data quality, once shortcomings in that are exposed via the used of a common exchange format:</p> <p><b>Additional work to be done:</b> Find what evidence already exists: RMAS, EUROCRIS, present best business case of the moment.</p> <p><b>Inter-institutional pilots</b> and benefits should also be taken into account (instead of only looking at activities within institutions).</p> <p>Additionally international comparison of cases could be useful. There are several good cases to be found in Europe already. These can serve as a context.</p> <p>Presently ownership and leadership need are not addressed and need to be made clearer and agreed on. How is UK going to project-manage this?</p> <p>There are no suppliers mentioned in the plan. An analysis of the suppliers market should be beneficial.</p> <p>NB.: scope it well, this can potentially turn into wider problem.</p>	<p>Re-word recommendation accordingly</p> <p>A <b>Business case</b> should be developed, identifying costs and benefits across the sector as a whole, and for particular stakeholders</p> <p>A second data business case might be commissioned.</p>

2. JISC confirmation	JISC has received this assurance.	EuroCRIS will update their site to inform everyone
3. 4. and 5 Harmonisation	<p>These recommendations are endorsed in essence, but the sequence was queried It was agreed that in order to be successful, and to fit key timeframes (eg REF, RCs), these recommendations would need to be taken forward iteratively and in parallel. A project would be needed to coordinate this.</p> <p>HEFCE would not endorse the enforcement of a standard format upon the sector for submitting data to the REF.</p> <p><b>Harmonisation 3, 4 and 5 will be turned into one project.</b></p> <p>HEFCE HESA and RC are the main stakeholders for project in terms of data COLLECTION. For EXCHANGE of data the institutions need to be represented.</p> <p>Planning: This will be operating independently of the REF/ RCUK, bringing HEFCE/ RCUK in as needed.</p> <p>There is a great need for as complete a harmonisation as possible of vocabularies in a shared lexicon.</p> <p>The timeframes are not yet clear.</p> <p>Approach needs to be refined with a realistic plan and clear ownership/ leadership.-</p>	<p>A new <b>Harmonisation project</b> should be commissioned:</p> <p>Sequence of actions:</p> <ol style="list-style-type: none"><li>1. Set up a common lexicon amongst UK sector</li><li>2. Mapping of solutions</li><li>3. Roll out</li></ol> <p>Specification of project to be discussed amongst:</p> <ul style="list-style-type: none"><li>- Alan Green</li><li>- Mark Cox</li><li>- Keith Jeffery</li><li>- Scott Rutherford</li><li>- Andy Youell</li><li>- Neil Jeffries</li><li>- Pam Macpherson-Barrett</li><li>- an ARMA person</li><li>- a JISC person</li></ul>
6. Information exercise	<p>The wording of any message to the sector about CERIF should be more nuanced. For example, HEFCE may note the recommendations of the EXRI report and declare an aspiration to use a UK version of CERIF2008 (when proven viable within other constraints) However, the main message should relate to the benefits to the sector as a whole, and specifically to HEIs, that are realised by using a common standard. While REF is acknowledged as an important driver, it is one amongst many.</p> <p>A <b>cover paper</b> for a revised EXRI report needs to be agreed by all participants. This would then form the basis for communiqués to be sent out as appropriate by the organisations represented at the meeting. These should be sent out before May.</p> <p>This cover paper should:</p> <ul style="list-style-type: none"><li>- publish the updated EXRI report</li><li>- Explain the context of the report</li><li>- list of participants involved in the paper (personally not from the organisation they represent )</li><li>- list advice on how to take forward the recommendations and this roadmap</li></ul>	<p>JISC will draft and circulate a <b>cover paper</b> for the EXRI report to the participants and ensure the wording is agreed.</p> <p>JISC will release a revised version of the EXRI report with this cover paper.</p> <p>Key bodies represented at the meeting, including UUK, ARMA, UCISA, HEFCE, RCs, JISC, and HESA, will use the cover paper as the basis for an appropriate communication to their constituencies.</p>

7. Universities and HEI	<p>This recommendation should be put to the institutions to encourage them to think about their own progress, instead of being over-directional with unrealistic deadlines.</p> <p>The timescale should be softened and instead supply institutions with advice on what to do next.</p> <p>At what point the funders will commit to a preferred format will be announced later. This timing to be set after other developments</p> <p>Ratification through the ISB would be an additional incentive to get people interested.</p>	<p>FYI , no action.</p> <p>This will be wrapped into the communication noted above but will not be a timed implementation.</p>
8. Fund pilots	<p>JISC will consider this, but it depends on the present funding situation. A meeting will be held to align and scope this work.</p> <p>The scope and next actions need to be clarified.</p> <p>The cases should exhibit what is it like on the ground to implement CERIF and should include some case studies from people who have done it themselves and would like to share their lessons learnt. There should be some publicity done around this.</p> <p>Cases should represent the community, including PURE, other systems and institutions that start from scratch. Ideally they should represent the variety amongst institutions: large &amp; small, research &amp; teaching, England &amp; Scotland. The EXRI team has a good up to date list of interested parties.</p> <p>These cases should demonstrate the different systems and describe the differences in export.</p> <p>This work should be aligned with the activities of InfoNet and UKOLN. At InfoNet presently the primary business cases have been done. The pilots / case studies would be an important source of evidence in support of the business case noted above.</p>	<p>A <b>meeting</b> will be held between: JISC InfoNet UKOLN</p>
9. 10. 11. and 12. Project synthesis	<p>A Synthesis activity should be set up by JISC, to review all the CERIF related projects in the sector and feed back to group.</p> <p>The approach will be discussed amongst InfoNet, Stuart Bolton and JISC.</p> <p>This report should come out in September/October 2010.</p> <p>This synthesis should be aligned with all relevant stakeholders and take a wider view of projects, including ones not mentioned in this report and any pilots funded as above.</p> <p>The synthesis work would also provide evidence in support of the business case as noted above.</p>	<p>JISC to commission a <b>Synthesis report</b> to put together the range of CERIF related projects for this group.</p> <p>Set up a <b>meeting</b> with Steve Bailey and Stuart Bolton to discuss scope, deadlines and right expertise needed.</p>

13. Exchange of activity	<p>Preference for option 3: CERIF, but the main message of the report is that we should adopt CERIF as a basis, and work with EUROCRIS to move the standard forward</p> <p>This recommendation should be rewritten to reflect:</p> <ul style="list-style-type: none"><li>- Subject to recommendations elsewhere in this report (eg the business case), the UK should invest in work to develop an application profile of CERIF2008 for the UK</li><li>- The UK should consider the potential benefit of agreeing a mapping from CERIF2008-UK to a linked data format</li><li>- The UK should continue to keep the above under review in terms of the maturity, flexibility, etc of the UK approach</li><li>- The UK should develop adequate organisational arrangements to support the above.</li></ul>	<p>Make a new recommendation for future take-up of CERIF within UK, to be 'reviewed' in an unspecified time period.</p> <p>Wording should be nuanced, like: expand, extend, evolve... maturity etc.</p>
14. 15. Tracks for future	<p>There was a strong sense that these recommendations as written were out of scope for the report.</p> <p>There may be an additional recommendation ... Given what we said above, we recommend that this dialog is continued by these stakeholders, including keeping each other informed of relevant activities and timescales that might impact the agenda outlined in the EXRI report..</p> <p>Several organisations around the table need to go through process to support the central consensus.</p> <p>We can say that, as a sector, we are moving in the direction indicated in the EXRI report and the national bodies will determine a date in the future when they may be able to make firmer statements.</p>	<p>No action. This dialogue will continue offline, but not in this wording.</p>



Discussion of what we do with the EXRI deliverables

**Action:** Neil Jacobs will talk to the EXRI team for about the work coming out of these responses.

**Action all:** Any further comments or responses on this report by the end of Friday 22<sup>nd</sup> January 2010.

Communication with the sector: Discussion Research Information Briefing paper

The cover paper mentioned under recommendation 6, will describe the outcomes of this meeting and the opinions of representatives and strategic agencies around the table.  
It was agreed to set up a communiqué/ briefing paper for further circulation.

Next meeting:

Will be held quarterly, perhaps at a more central venue.

Date: TBC, preferably in second week of April 2010, possibly after the JISC conference (13<sup>th</sup> April).

Items for agenda:

- updates from stakeholders
- responses to communication
- progress

Other events:

2 <sup>nd</sup> -5 <sup>th</sup> June	EUROCRIS conference	@ Aalborg Denmark
6 <sup>th</sup> -8 <sup>th</sup> June	ARMA conference, including a RIM strand.	@ Manchester, UK
17 <sup>th</sup> June	UCISA event on research management systems	@ Liverpool, UK

# Developing a national training framework for Research Managers and Administrators: a case study from the UK

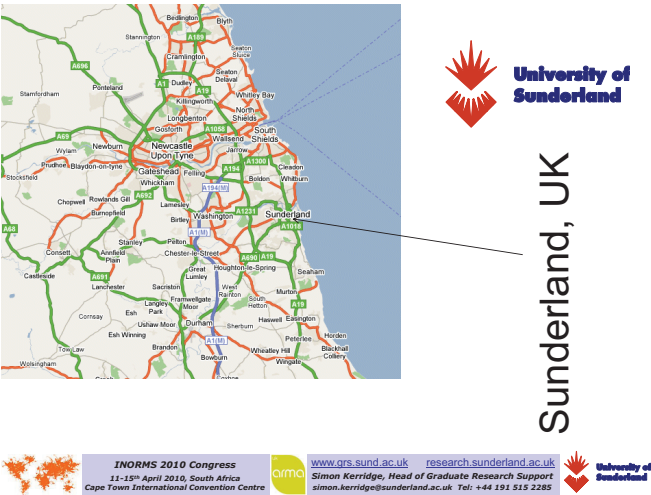
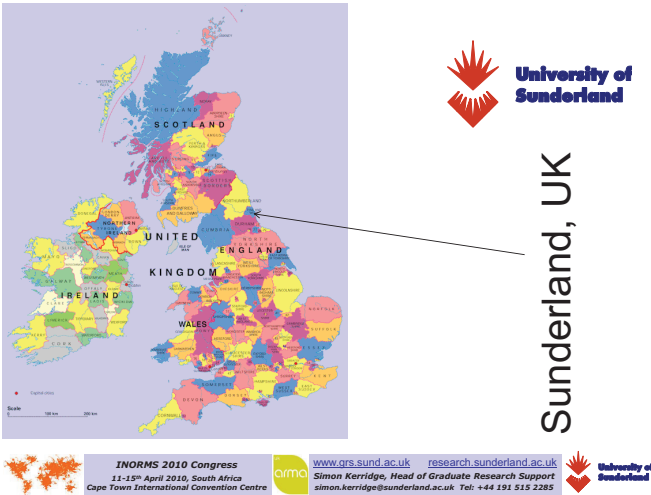
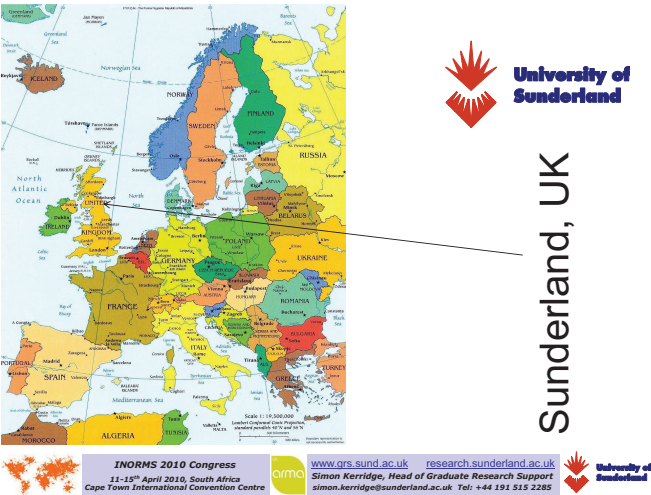
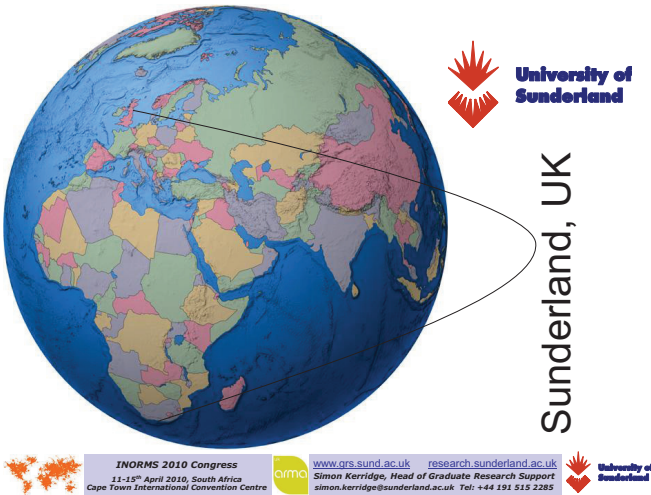
**Simon Kerridge**

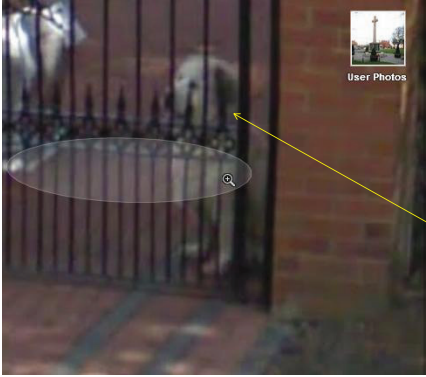

















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## Overview

- Research Management & Administration
- ARMA
- Other UK Providers
- International Perspective
- A Way Forward for the UK
- Questions / Discussion



<div>  <div>  <p>Sunderland, UK Holly!</p> </div> </div> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>	<div> <h2>Research Management and Administration</h2> <ul style="list-style-type: none"> <li>What is it? <ul style="list-style-type: none"> <li>– leadership, management or support of research activities (from Chronister and Killoren 2006)</li> </ul> </li> <li>Who does it?</li> <li>Where do they do it? <ul style="list-style-type: none"> <li>– central, department, elsewhere</li> </ul> </li> <li>Do they want any training?</li> </ul> </div> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>
<div> <h2>ARMA</h2>  </div> <ul style="list-style-type: none"> <li>Leading UK association</li> <li>20 years old</li> <li>1600 members</li> <li>Training Provision <ul style="list-style-type: none"> <li>– 3 ‘levels’, Training Courses well established</li> </ul> </li> <li>Professional Development <ul style="list-style-type: none"> <li>– Mentoring, Study Tours, Workshops, ...</li> </ul> </li> </ul> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>	<div> <h2>Other Providers in the UK</h2> </div> <ul style="list-style-type: none"> <li>AUA</li> <li>AURIL</li> <li>IKT</li> <li>PraxisUnico</li> <li>LFHE</li> <li>Universities themselves</li> <li>... many more</li> </ul> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>
<div> <h2>International Perspective</h2>  </div> <ul style="list-style-type: none"> <li>SRA / NCURA / CAURA</li> <li>RACC</li> <li>Other associations</li> <li>INORMS</li> </ul> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>	<div> <h2>A Way Forward for the UK</h2> </div> <ul style="list-style-type: none"> <li>Professionalising Research Management <div>(Green and Langley 2009)</div> </li> <li>Defining the Scope</li> <li>Agreeing the Core Training</li> <li>Additional Professional Development</li> <li>Ensuring ‘buy-in’ from stakeholders</li> <li>... Accreditation?</li> </ul> <div>   <a href="http://www.grs.sund.ac.uk">www.grs.sund.ac.uk</a> <a href="mailto:research.sunderland.ac.uk">research.sunderland.ac.uk</a>  </div>

Simon Kerridge

Developing a national training framework for research managers and administrators, a case study from the UK.

This paper outlines the development of a training framework for the burgeoning profession of research management and administration (RMA) in the UK. It reflects on the training and development provision for research managers and administrators over the past twenty years, with a focus on the professional Association of Research Managers and Administrators (ARMA) in the UK. The paper charts the progression from running ad-hoc events to developing a series of well established training courses and continuing professional development events. It will conclude by considering potential next steps for the research management and administration profession in the UK including accreditation and outline the drivers for and inhibitors to the development of a sustainable framework for professional training.

This paper is based on a presentation delivered at the INORMS 2010 Congress, 11-15 April 2010, Cape Town International Convention Centre, South Africa.

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This paper outlines the development of a professional development framework for the burgeoning profession of research management and administration (RMA) in the UK.

It starts by looking at and attempting to define the profession of research management and administration in the UK and internationally, what these professionals do, and where they work, reflecting on the needs for the profession as it develops and as a career.

In the UK one of the key actors in this space is the Association of Research Managers and Administrators (ARMA). This paper looks at the development of this association over the last twenty years, which to some extent reflects the development of the profession itself. The history of ARMA and the major changes are highlighted to provide a context for the rest of the paper.

The section on the professional development framework itself draws in the other actors in the field in the UK and contrasts their various contributions before outlining the current training provision and describing how this could be used as a basis for a UK framework for research managers and administrators.

This paper also outlines the work to date and reflects on some of the issues that have impeded its development; including the lack of dedicated resource, issues with collaborating with other training providers, and the recognition of research management and administration as a profession.

It concludes by looking at the potential next steps for the research management and administration profession in the UK, with an eye towards accreditation. However, the main foci of the paper are the drivers for and inhibitors of the development of a sustainable framework for professional training.

1. Research Management and Administration

Before looking at professional development for Research Management and Administrators (RMAs) in the UK it is worth reflecting on who these people are, where they work, and how they have come together to share good practice.

1.1 A Definition of Research Management and Administration

This paper refers to "Research Management and Administration" (RMA) as the title of the profession (and we shall see that it is one), however this is not a universally agreed moniker. As discussed below, much of the early activity was in North America, where the word 'administration' has a less pejorative meaning than that in the UK. Quite often an administrator in the UK is a lowly position, with that of a manager being automatically assumed to be a higher grade. The case is somewhat different in North America, where for example 'the administration' refers to the government as a whole and the word 'administrator' can often refer to someone high ranking. The two main research management and administration associations in the USA are the National Council of University Research Administrators (NCURA) and the Society of Research Administrators (SRA) International; elsewhere in North America the Canadian Association of University Research Administrators (CAURA) also excludes the word manager from its name. However in much of the rest of the world the term 'manager' has more cachet and many other associations use that word in

their titles (see section 4); indeed the worldwide association of associations – the International Network of Research Management Societies (INORMS) favours ‘management’ over ‘administration’.

However, this paper takes the pragmatic approach, including both views, and uses **Research Management and Administration** as the title of the profession.

So what (given the above proviso) is a Research Manager and Administrator? There have been many definitions, for example:

(Beasley 2006): “... [those providing] the support required for success in research programmes.”

(Chronister and Killoren 2006): “... someone who leads, manages or supports the research enterprise.”

(Stackhouse 2008): “... [research management] embraces anything that universities can do to maximise the impact of their research activity.”

The last is interesting as it is from the initial results of an international survey by the Association of Commonwealth Universities (ACU) through their Global Research Management Network (GRMN) initiative into research management as a profession; the definition was put forward and was agreed to by around 85% of 400 or so respondents (mainly from Africa, Australasia and the UK). The first two, North American definitions, are somewhat more succinct, whilst being less exclusive in terms of where research is undertaken.

Whereas the Beasley definition is upbeat the Chronister and Killoren one gives a little more shape and is preferred. So the definition adopted in this paper is:

Research Management and Administration [RMA] is the **leadership, management or support of research activities**.

### 1.2 What do Research Managers and Administrators do?

There are many lists of tasks that research managers and administrators undertake; most of the research management and administration associations have such lists. For examples of UK centric ones see (Carter and Langley 2009), (Green and Langley 2009) or (Langley 2008). However the definition from the Association of Commonwealth Universities is quite concise (as long as the reference to ‘universities’ is read with the wider understanding of ‘research organisations’ (Stackhouse 2008)):

“... [research management and administration] embraces anything that universities can do to maximise the impact of their research activity. It includes assistance in identifying new sources of funds, presenting research applications and advice on costing projects and negotiating contracts with external sponsors. It incorporates project management and financial control systems. It also involves help in exploiting research results – through commercialisation, knowledge exchange and dissemination to wider society”.

### 1.3 Where do Research Managers and Administrators Work?

It might be assumed from the above that research managers and administrators work in places where research is undertaken; whilst certainly some do, this perspective is a little narrow for two reasons.

Firstly, within an organisation where research is undertaken, quite often much of the administration is centralised whereas the research will be undertaken in departments. For example, analysis of a recent survey (about Electronic Research Administration<sup>1</sup>) of the membership of the Association of Research Managers and Administrators (ARMA) in the UK revealed that (Question 15, n=477) only 35.8% of respondents worked in a faculty/department, with 58.5% working in a central service (the remainder responding ‘other’ or ‘not applicable’). These results are similar to those found by (Campbell 2008) in her survey and analysis for the Research Administrators Certification Council (RACC) in the USA where 31% of (n=238) responders reported working in a Dept/College as compared to 64% working in central administration. It can also be argued that of those who work away from the central administration many might not actually work with the researchers themselves on a day to day basis.

Secondly, some research managers and administrators work in institutions that do not undertake research at all, but are nonetheless involved in the research process. Again, analysis by the author of the ARMA membership (from membership records rather than from a survey) shows that in 2009 5.6% (of n=1546) members worked not in research performing institutions, but elsewhere, mainly in funding agencies and some in government departments. Specifically, ARMA members working outside research organisations in the UK can be found in the National Health Service (NHS), charities, higher education funding councils, research councils, government departments and companies.

Given the history of ARMA (from a research centre base) it is likely that this is an underestimate of the proportion of research managers and administrators in the UK that work in places other than research organisations.

Whilst there is undoubtedly some overlap in the figures, it still means that approximately two thirds of research administrators work, for the most part, separated from the researchers themselves. In many ways this accounts for a number of the tensions that research managers and administrators work under and the skills and training requirements in order to be able to work effectively with and for researchers and the institution. Also, research managers and administrators have to deal with the ever growing external requirements of research governance and good practice (Carter and Langley 2009).

In summary, research managers and administrators can be found working in all areas of universities and other research organisations and in research funders and policy making establishments; but although they might sit on different sides of the funding fence, their overall aim is to enable the best possible research by providing leadership, management and support.

### 1.4 Research Management and Administration as a career

<sup>1</sup> These data are extracted from the (yet to published) results of a survey of the perceptions of ARMA members to Electronic Research Administration (ERA) conducted by the author. 1515 email requests to respond to the survey resulted in 624 responses with 472 completing all the sections of the questionnaire. The data referred to in this paper are from the final section of the questionnaire; about the responders, collected to allow for statistical classification of the main responses, but useful here to give insight into the shape of the profession.



In terms of a profession we have seen that research management and administration provides opportunities to work in many different environments, it is however worth looking at the potential for progression. Whilst it is out of the scope of this paper to look in detail at the career paths of research management and administration professionals, it is worth reflecting on whether research management and administration can be considered as a career. A recent article by (Morgan 2010) on career strategies compared professionals (more generally) working in universities in the USA and the UK with each other and their academic counterparts; however we can take a more focussed look at research managers and administrators in particular.

The Electronic Research Administration questionnaire mentioned above included two questions that provide an insight into this issue, remembering that all responders are ARMA members and hence consider themselves to be research management and administration professionals, the initial analysis can provide some insights. Question 13 (n=477, see figure 1) asked how long they had worked in research management and administration; the mode was 2-5 years at 35.8%, the next highest response was for 6-10 years with 27.7% and then 11-15 years with 15.3%, with a few reporting 21+ years (2.9%). On its own this is perhaps not conclusive evidence that a career structure exists, but factoring in the responses to Question 16 (n=477, see figure 2) about current salary, a similar range of responses was observed ranging from 3.4% with a salary of under £20,000 through 25.4% for the range £20,000-£29,999 to a mode of 32.1% for the range £30,000-£39,999 with 3.1% for £70,000+. Taken together these data support the hypothesis that career structures for research managers and administrators exist as some have stayed in the profession for a long time and some are earning good salaries. Again, this is reflected by Campbell's analysis in the USA where she found very similar results, reporting salaries (n=234, see figure 4) ranging from \$25-50K (about 27%) through the mode of £50-75K (about 44%) with about 9% earning over \$100K. Length of time in the profession was also similar to the UK results; with (n=237, see figure 3) up to 5 years at about 20%, the mode of 6-10 years at about 29%, just under 20% for 11-15 and 16-20 years, and trailing off to about 1% for 36-40 years. The higher proportions reported for the longer lengths of experience reflect the longer history of the profession in North America.

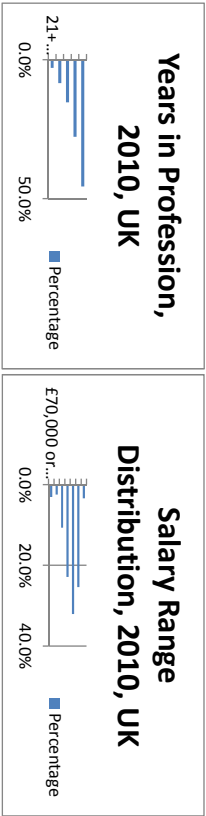


Figure 1: Years in the Profession from UK Survey. Figure 2: Salary Ranges from UK Survey

Note that Figure 1 shows the range 0-5 years as having 45.6% in order to make comparisons with the US data easier. This figure is an aggregation of 3 responses: Never (0.4%); 0-1 years (9.4%); and 2-5 years (35.8%).

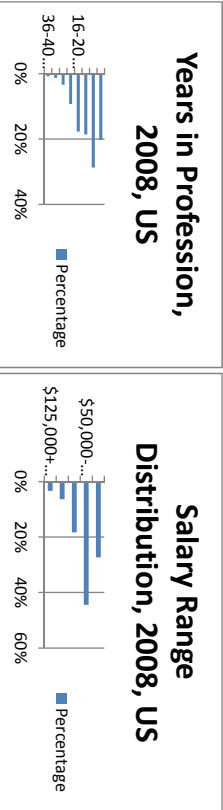


Figure 3: Years in the Profession from US Survey. Figure 4: Salary Ranges from US Survey

The figures above show the similarities between the distributions of salaries (notwithstanding the variances in values and cost of living) between the UK and the US research managers. In terms of the length of time in the profession, whilst the tables have similar shapes it can be seen that, in general US research managers and administrators have been in the profession for longer than their UK counterparts. Given that research management and administration has been seen as being a profession and a career in the US for many years now (Beasley 2006) it is reasonable to assume that it can also be considered to be one in the UK, and this is supported by (Kulakowski and Chronister 2006).

Much of this section has concentrated on ARMA, the leading association for research management and administration professionals in the UK; however there are other professional bodies in the UK that support related activities, a number of these will be discussed in section 3 after the history of ARMA is considered.

## 2. History of ARMA

The rise of research management and administration as a profession in the UK is closely tied to that of the Association of Research Managers and Administrators (ARMA) which will be discussed in this section. This can be viewed against an international backdrop where many other countries have seen and are seeing a similar rise in the acknowledgement of research management and administration as an important part of the research process. In the USA, for example, this can be traced back to the post-war 1940s (Beasley 2006). (Wile 1984) gives an account of the first twenty-five years of (INCURA), which has been added to on-line to provide a fifty year history (Roberts, Sanders et al. 2008).

While research management and administration has a long history in North America, it is relatively new in terms of having a professional body in the UK.

### 2.1 ARMA 1987-2001

The formation of RAGnet (the precursor to ARMA) is documented by (Taylor 2001) who describes how a group of, initially seven, research centre administrators in the social sciences were brought together by one of their number (Joan Hughes) to discuss their professional situation. They felt that other administrators in their institutions did not really understand the breadth of the tasks that these research administrators were called on to perform. After various exchanges of information a



group was finally set up as a subgroup of the Association of Directors of Research Centres in the Social Sciences (DORCIS) in early 1991. Later that year the results of a survey revealed that, of the 35 putative members of RAGnet, only half had ever received any formal training relating to the needs of their jobs. Over the following years the organisation grew to include all subject areas and by 2001 had seen membership grow almost ten-fold to 316.

1998 was perhaps a pivotal year with the introduction of a website and the first of the (to be annual) 2-day introduction to research administration induction courses for new research administrators, with the former providing an on-line resource for the then 154 members and the latter being the first step towards certification of professional skills for research managers and administrators in the UK.

2.2 ARMA 2001-2010

There is no formal historical account of RAGnet covering the period from 2001 onwards, however the author has been a member of the executive committee (and now board of directors) for this period and as such presents a brief summary here as a context to the discussion on the progress of creating a professional development framework.

In 2000 a small Advisory Group consisting of senior people from funders and other agencies, was invited to act as a sounding board for the committee and the group met with the committee periodically from 2000 onwards. This ensured that the committee considered research management and administration in the wider context of the sector in the UK.

In 2001 RAGnet became a founding member of the International Networks of Research Management Societies (INORMS).

Also that year the 4<sup>th</sup> iteration of the two day residential induction course was run with 46 delegates from 30 institutions. There was however a concern in the committee that there was an overall lack of members from science areas.

2002 saw a joint event with the UK Association of University Administrators (AUA) – an induction for research administrators, and also some RAGnet presentations at the main AUA conference. The extremely popular study tours to visit research funders were mainstreamed and the fifth RAGnet Induction Course saw the first attendees from a research sponsor.

2003 saw RAGnet provide the first of 3 events for the Association of Commonwealth Universities (ACU) to provide their visiting scholars with an insight into research management and administration.

Also in 2003, the results of a commissioned review of RAGnet revealed that the membership was predominantly female (75%), young (70% less than 45), junior (50% earning < £25K), inexperienced (50% in post <5 years) and working in university administration (90%, and half of these in central offices). The key features of the association were the strong community, brand loyalty and the quality of the training, but also a confusion from outside the association of what it did. It recommended that if RAGnet was to expand and fulfil the aims in its strategy then it needed to have a permanent staffing base rather than just relying on the spare time of the volunteer committee members. However, the income stream could not adequately support such a move, but perhaps

making that move would increase the membership sufficiently to be self-supporting. This was reported at the 2003 Annual General Meeting (AGM).

At the 2004 AGM the motion to change the name of the organisation to ARMA(UK), the Association of Research Managers and Administrators (United Kingdom) was approved. This year also saw the introduction of the group membership scheme, where a number of individuals at one institution can pay on a single invoice for a discount, five years later this accounted for over half of all members.

The first of ARMAs occasional substantive papers (Issues in Research Management and Administration – IRMA) into a particular theme (full economic costing) was published in 2004.

In 2005 the board considered a more detailed paper on the sustainability of RAGnet/ARMA, highlighting the need for dedicated resource to support the organisation going forward. It agreed to proceed on this basis and appointed a permanent ARMA executive administrator by the end of the year. Also in 2005 ARMA launched its mentoring scheme, modelled on the one introduced by its sister organisation in Australasia (ARMS) the year before.

ARMA ran its first course for senior research managers in 2006, which over the years has developed into a forum for directors of research offices. It also ran the first residential course for lower level managers and administrators. Seen in conjunction with the normal suite of training events and expert seminars the beginnings of an emerging professional development framework can be seen. It was also in this year that ARMA became a legal entity, a company limited by guarantee (CLG), rather than just an association, mainly in a move to gain a credit rating in order to enhance cash flow.

In 2007 a substantial re-engineering of the back office and web systems was undertaken, reducing the reliance on a small number of board members to keep things updated.

The annual conference in 2008 in Liverpool embraced the 2<sup>nd</sup> Biennial International Network of Research Management Societies (INORMS) Congress.

In 2009 the board agreed that a framework for professional development of research managers and administrators in the UK is a core objective of ARMA; 2010 should see some visible developments on this agenda, which are discussed in the later sections.

3. Professional Development Training Framework

Over the past 20 years ARMA (formerly RAGnet) has undertaken numerous training courses for its members over a variety of subjects in the field of Research Management and Administration. ARMA, however is far from the only provider of this type of training in the UK, others include:

- The Association of University Research and Industry Links (AURL), which focuses on the interface between research and commercial organisations and mainly on the knowledge transfer agenda, and it has run courses of interest to research managers and administrators. The membership is around 110 and consists of institutions rather than individuals. It is also noteworthy as being the driving force behind the creation of the Institute of Knowledge Transfer.

- The Institute of Knowledge Transfer (IKT) supports that even newer profession and sets standards for development of its profession and addresses issues surrounding accreditation, certification and training. IKT is also becoming more active in Europe, for example being part of the recent European Knowledge Transfer Society (EuKTS) project, which is aiming to co-ordinate the activities of the existing major Knowledge Transfer networks and associations in the European Union).
- PraxisUnico (PraxisUnico) has an institutional membership of nearly 120 and was formed in 2009 by the merger of the not for profit Praxis training company with Unico, the association for research commercialisation. It is also oriented towards the knowledge exchange end of the research management and administration arena. In the 1990s Unico was formed by a group of heads of university technology transfer offices in order to share best practice. Interestingly, Praxis formation in 2002 was lead by a mixture of individuals from Unico and others who had no direct involvement with the organisation. It was created in order to meet the demand for high quality in depth training in that area; although such training did exist it was not focussed towards the specific needs of public and private sector research. Over the years many of the same people have been involved in both organisations. This led to a mutual trust, similar visions and indeed for the past few years a sharing of support office infrastructure. These factors made the merger timely in 2009. Many of the old Praxis committee are now involved with the training committee of PraxisUnico.
- The Association of University Administrators (AUA), is much wider in terms of specialities than research management and administration, covering all types of administration in universities but, on the whole, restricts itself to those who work in higher education institutions.
- The Leadership Foundation for Higher Education (LFHE) is focused on high level issues such as leadership, management and governance, which has some overlap with the research management and administration, but, again for the academic sector only.
- The Association of Research Centres in the Social Sciences (ARCISS) is an example of a subject specific association; it is listed here as the forerunner of ARMA (RAGnet) was formed from DORCISS (the Association of Directors of Research Centres in the Social Sciences), which merged with the Association of Social Research Organisations (ASRO) in 1996/7 to become ARCISS)

As the above clearly illustrates, there are a number of associations in and around the area of research management and administration in the UK (and the above list is not exhaustive) with overlapping and intertwined interests and indeed histories. They all provide training / professional development for research managers and administrators (and there are many examples of joint provision), as indeed do many research organisations themselves. With a fairly new professional area this is perhaps to be expected, but it presents a number of challenges to the achievement of a widely accepted framework for professional development. It can be seen that the current situation does go some way to meeting the professional ideal of (Perkin 1989) with certification being perhaps the next logical step, but that step is probably a number of years in to the future yet.

### 3.1 Existing Provision

As indicated, there are a number of training and Continuing Professional Development (CPD) providers that already exist; the marketplace is, however, complex, particularly at the innovation and knowledge transfer end of the arena.

Traditionally ARMA has provided a number of professional development activities, mainly towards the research end of the sector, which can be broadly categorised as:

Induction Course – a two day residential (or one day intensive) course covering the basics and context of research management and administration, aimed at new staff.

Training Courses – one day in depth training (normally at an introductory level) on specific issues.

Expert Seminars – on issues that are developmental; in future years the topics may become more mainstream (and then delivered as Training Courses).

Training Courses and Expert Seminars have covered a wide variety of subjects including: Clinical Trials; Costing, Pricing and Sustainability of Research; Disseminating Research Findings; Electronic Research Administration; Full Economic Costing; Grading criteria for Research Administrators; Impacts of Research; Indirect costs; Open Access Publishing; Partnerships with the NHS; Performance indicators; Personnel issues; Post-Award Financial Administration; Practice-based research degrees; QAA Code of Practice; Research Assessment; Research Assessment Exercises; Research Contracts; Research Degrees; Research Ethics; Research Governance; Research Management and the REF; Supporting Academic Research; Supporting Research Proposals; The Research Office in the 21st Century; Time Sheets; US Research Funding; VAT; and Working with Research Students.

Administrator Courses – covering common areas of research management and administration in greater depth than the induction course

Management Courses – covering higher level issues, but in a research management and administration context; for example: developing a research strategy

Mentoring – a pairing method where an individual seeks support from a mentor for a specific project

Whilst the ARMA portfolio is extensive it does not cover the whole of the research management arena in its widest context, particularly in the innovation and knowledge transfer areas.

PraxisUnico for example regularly run a number of well respected in depth 3-day residential courses: Advanced Licensing Skills; The Successful HE Business Development Professional; Creating Spinouts; Fundamentals of Technology Transfer; and Research Contracts.

They also run a series of One Day training Events including topics such as: Advanced Patents; Bid Writing; Business Plans; Consultancy; Design in Technology Transfer; Directors' Forum; Finance for Technology Transfer; Healthcare Technologies; International Collaborations; Leveraging Funding; Marketing; Market Research; Negotiation; Networking; Non Patent IP; Sales Skills; Technology Licensing; and Valuing IP.

Similarly, AURIL has run events and workshops on subjects such as: Cultural & Creative Industries; University Knowledge Transfer in the Age of ‘Open Innovation’; Knowledge Transfer: Delivering a Route to Growth; Ethics & Knowledge Exchange.

They have also identified and (in 2006 refined) a CPD framework covering 8 key themes: Information & Communications; Relationships; Projects; The Commercial Interface; Legal Operations; Problem Solving & Decision Making; Leadership; and The KT Office. Which, whilst useful, is too narrowly focussed to address the needs of the wider research management and administration sector.

The IKT have accredited a number of providers that have given many courses including: Building a Consultancy Portfolio; Developing your Negotiating Skills; Developing your Entrepreneurial practice; Developing training courses for commercial clients; Writing bids and commercial proposals; Business Development in Higher Education; and Developing your Networking & Business Development Skills.

Clearly there is much existing material that could be utilised within an overall framework for research management and administration, the challenge will be to do so in an inclusive way so that all the stakeholders and actors in the sector will identify with it.

Unsurprisingly these subjects and activities are not unique to the UK, and work on a professional development framework for research managers and administrators in the UK should draw on experience from the international community.

#### 4. International Context of Professional Development for Research Managers and Administrators

As we have seen Research Management and Administration is not unique to the UK, and indeed has been considered as a profession for much longer in some other countries, most notably in North America, where there has been an established training framework for a number of years; and indeed certification has been available through the Research Administrators Certification Council (RACC) since 1993.

The recent survey carried out by (Stackhouse 2008) with around 400 respondents from across the world showed that around 70% saw a need for their institution to increase its expertise in the areas of legal, financial, marketing, intellectual property, ethics, innovation and technology transfer. Of these about two-thirds saw this as an urgent need – the need for a professional development framework appears pressing.

In the UK this is supported by the ARMA Membership Survey 2007 (Weir 2007) with (n=339) respondents, of which 86% felt that a greater range of training would be valuable. Note that the survey was distributed on an open email list and of the responders 279 were ARMA members and a further 60 worked in the profession, but were not members; there was however no statistical difference between the responses of the cohorts.

The Research Administrators Certification Council (RACC) in North America has the following elements as part of the Certified Research Administrator (CRA) examination:

- I. Project Development and Administration
  - A. Collection and Dissemination of Information
  - B. Proposal Development
  - C. Administration of Awards
  - D. Ethics and Professionalism
  - E. Intellectual Property
- II. Legal Requirements and Sponsor Interface
  - A. Regulations and Statutes
  - B. Compliance – Federal Sponsors and General
  - C. Federal/Sponsor Appeal Procedures
- III. Financial Management
  - A. Budgeting/Accounting
  - B. Costs
  - C. Sponsor Financial Reporting
  - D. Audit
- IV. General Management
  - A. Facility Management
  - B. Contracts and Purchasing
  - C. Records Management
  - D. Human Resource Management

With some slight word changes (for example ‘Federal’ is not applicable in the UK) this could make a good basis for a certification framework for research managers and administrators in the UK. However, certification is not the same as professional development and this is acknowledged by the requirement to 60 hours (rising to 80 hours by 2012) of educational contact as a requirement for 5 yearly re-accreditation.

##### 4.1 INORMS

In 2001 the International Network of Research Management Societies (INORMS) was formed as a vehicle for research management and administration associations around the world to come together for mutual benefit. Currently (2009) INORMS has 10 member organisations from around the world (Australasia (ARMS), Canada (CAURA), Denmark (DARMA), Europe (EARMA), USA (NCURA) and SRA (SRA), South Africa (SARIMA), the UK (ARMA) and Western Africa (WARIMA)), with biennial international conferences. It should be noted that the Global Research Management Network GRMN (GRMN) managed by the Association of Commonwealth Universities (ACU) is also a member.

##### 4.2 International accreditation

One of the specific aims of INORMS is “to internationalise the body of knowledge on research management” and so it should be well placed to deal with the issues relating to equivalence of training and indeed certification between countries. Indeed it could perhaps in the future be the catalyst for international federated certification for research managers and administrators. This is however, as yet, a long way off.

### 5. The future in the UK

In 2009 the results of the Professionalising Research Management project were published (Green and Langley 2009) and they were presented and discussed in a workshop setting. One of the main recommendations was that the various training providers and associations in the UK should work together to develop a professional development framework for research managers and administrators. 2010 will see the start of some visible progress towards this goal.

ARMA has indicated its intent to push forward with developing a professional development framework for research managers and administrators in the UK. It is likely that it will include significant elements ARMA's existing training programme and the structures used by other INORMS associations, it will then aim to deliver courses, development and networking opportunities that cover the scope of the framework, recognising that other organisations will be better placed to deliver certain areas/ elements of the framework.

It is envisaged that the framework will have three strands: Introductory; Continuing Professional Development; and Executive. This will enable variations in content to reflect the differing requirements of individuals and their roles. An analogy can be drawn between the initial accreditation of the Research Administrators Certification Council (RACC) in North America and the proposed Introductory level in the UK, with the Continuing Professional Development perhaps aligning with the ethos for RACC's re-accreditation. Whereas the proposed Executive level is more about strategy and leadership and, indeed, could perhaps be seen as fitting into the framework of the Leadership Foundation for Higher Education (LFHE).

The span of the framework should include all aspects of research management and administration, with one of the key questions being the exact scope of the framework. As a consequence, in developing the framework it is expected that ARMA will work with the other specialist professional associations / organisations, as well as sharing experiences through the INORMS mechanisms.

At this stage there are no plans for formal certification of the courses, although it has not been ruled out.

### 6. Conclusions

It is clear that Research Management and Administration is indeed a profession, albeit a fledgling one in the UK. Currently, although there is a leading association (ARMA), there are many other parties with overlapping interests. The challenge will be to see if the recommendations from the Green and Langley report and the recent initiative from ARMA will result in a framework that is inclusive in terms of the various stakeholders and whether the proposed new framework for professional development will be widely accepted.

Given the long history of ARMA and the phenomenal rise in membership, ten-fold in the first ten years and further five-fold in the subsequent nine years, it is reasonable to conclude that training offered is seen as being of high quality and could form the core of the new framework. It is acknowledged that there are areas of key strength in other stakeholders (for example PraxisUnico and providers of IKT accredited training) and that these need to be included in the framework. Such

an approach is likely to receive support across the board and enable the framework to have wide acceptance.

However, it must be clear at the outset as to what the scope of the framework should be. It could be adjunct to the scope of the Institute of Knowledge Transfer, overlapping, or indeed encompass it. Given the nature and history of support for Research and Knowledge Transfer in the UK it seems likely that an adjunct or slightly overlapping scope would bear most fruit in the first instance.

A study in the south-eastern part of USA by (Roberts 2005) of (n=297) research administrators (roughly half of whom were certified research administrators) concluded that:

*"a comprehensive certification program in the professional field of research administration has strong potential to serve individuals, organizations, and sponsors of research in an effective and positive way. In order to accomplish this, a comprehensive certification program should be closely aligned with the two major professional organizations dedicated exclusively to the professional field of research administration."*

This view supports the approach that a UK based framework (whether certified or not) should be based on the existing training courses of the main players. Once a framework has been agreed, it is probable that the issue of accreditation will at some point follow.

It is perhaps interesting to note that whereas the formation of the Institute of Knowledge Transfer in the UK benefitted from the injection of external funding to set it up, the proposed research management and administration development framework is being progressed by utilising internal resources from the profession. This has only been possible in recent years due to the critical mass of members and hence the available income. It also means that there is a ready market for the courses and professional development in the proposed framework.

The first stage will be to define the training framework, with a complementary set of continuing professional development options. Formal accreditation could follow on.

This could be another turning point in the development of research management and administration as a profession in the UK.

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# RESEARCH GLOBAL

Magazine of the Global Research Management Network

June 2010, Issue 25

## New approaches to research and innovation management

Commercialisation versus cash in hand

Stable funding platforms in New Zealand

Capacity building in RM





## Research Global

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# Global

**T**his edition of *Research Global* follows the Third Biennial INORMS Conference held in Cape Town, South Africa in April 2010 – with the theme *Managing Research for Impact: New Approaches to Research and Innovation Management*.

The conference stimulated comparison of issues and identification of solutions facilitated by the experiences of different continents; using this knowledge to develop a better understanding of the factors influencing research management across cultures and geographic borders, in different contexts. This comparative approach supports the objectives of INORMS, as the umbrella organisation for research management associations across the world – a snapshot of the content from the various 2010 conference sessions follows on pages 12 and 13.

The article by Victoria Bradley and Shane Cronin emphasises the fact that higher education (HE) remains one of the largest knowledge producers and employers of knowledge workers (researchers). Changes affecting the financing of HE research include declining public subsidies ('first-stream' funding) and pressure to limit increases to, and income from, tuition fees ('second-stream' funding). The result has been the need to increase income from other sources, i.e. 'third-stream' funding. They describe the attempts by the New Zealand government to bridge the gap between competing research providers and research users through building coherence in the research sector as a 'stable funding platform' structure.

A platform is a funding model that provides the framework for integrating research and funding across agencies and disciplines, together with research users. They conclude by emphasising that sustainability of this platform approach will signal a massive paradigm shift for the future of collaborative funding initiatives in New Zealand.

**Simon Kerridge** provides a background of professional development in the UK. The governance and regulation of research has become increasingly complex which in turn has made increasing demands on professional research managers. Planning, coordination and admin-



# Connectedness

istration of institutional research requires an increasingly professional approach whereby managers and administrators must provide high quality, client-centred services to diverse internal and external stakeholders. Most significantly, research management staff must have the ability and willingness to work in a capacity which supports and enables researchers.

In the contribution on building research capacity in Africa, Regina Smith James provides an overview of the National Institutes of Health's International Extramural Associates Research Development Award (IEARDA) with the overall goal to develop a cadre of research administrators poised to manage administrative activities which will facilitate participation of academic institutions in biomedical and behavioural research in Sub-Saharan Africa and India. The quality and sustainability of the research endeavour depends on an adequate supply of highly-skilled, intellectually-curious and dedicated researchers via a research capacity development 'pipeline'. Addressing these challenges of the research capacity development is increasingly becoming the responsibility of professional research managers. This requires specific strategies for developing and retaining researchers, including the advancement of institutional research leadership, mentorship and excellence.

David Richardson (commercialisation vs cash in-hand) explores issues of intellectual property preservation. He highlights the changing research landscape, with specific focus on the increased involvement of end-users early in the innovation process, and openness to increased collaboration within and across networks

delivering end-use driven innovation. There is a tension between universities, which are driven by delivery of public benefit; and private organisations, which are driven by the need to deliver shareholder value. Universities and private organisations should form better partnerships, providing access to knowledge exchange, rather than access to technology transfer alone.

In the final contribution, Liam Roberts provides a summary of the first workshop of the Pan African Institute for University Governance. The new institute is formally based in Cameroon with support of the Ministry of Higher Education in Cameroon and the Central African Regional Bureau of the AUF. Following the inaugural workshop in March 2010, it is encouraging that there is wide-spread interest in university governance in Africa, confirmed by active participation of both Anglophone and francophone universities.

This edition concludes with a career spotlight interview with Eva Maria Christiansen, Director of Research Support for the Capital Region of Denmark, emphasising the need and importance for degree programmes in research and innovation management.

This issue is unique, as it is supplemented with a comprehensive report of the Third INORMS Conference – the first time that such a report has been compiled. Together with the report, it emphasises diverse approaches, and draws on international best practice, to support a common goal of increased effectiveness and professionalism in research and innovation management.

RG

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# Towards a national development framework for research managers and administrators: a case study from the UK

**Simon Kerridge** provides a background to professional development in the UK.

**R**esearch management and administration (RMA) is starting to be seen as a profession around the world. In many countries, however, it is still in its fledgling stage. If a profession can be measured by the length of the existence of an association to serve it, then certainly North America is the birthplace of research management and administration. The National Council of University Research Administrators (NCURA) was formed in 1959, and the Society of Research Administrators (SRA) International in 1967; elsewhere in North America, the Canadian Association of University Research Administrators (CAURA) was formed not long after in 1971. It was not until 20 years later, in 1991, that the precursor to the Association of Research Managers and Administrators (ARMA) was formed in the UK, with the European Association of Research Managers and Administrators (EARMA) just after in 1994. Further afield, the Australasian Research Management Society (ARMS) was formed in 1999 and, over last decade, a number of other associations have formed in Europe and Africa. In 2001, the International Network of Research Management Societies (INORMS) was created, and now has ten membership organisations under its umbrella.

However, although there is much activity in support of RMAs around the world, this in itself is not sufficient to cement the moniker of 'profession' to its practitioners. There are

many definitions of 'profession' and all of them include the ideas of education, training, qualification, accreditation, or a licence to practice as requirements to being admitted to the profession. There is also the implicit requirement for the scope of the profession to be defined. Again, there are many definitions

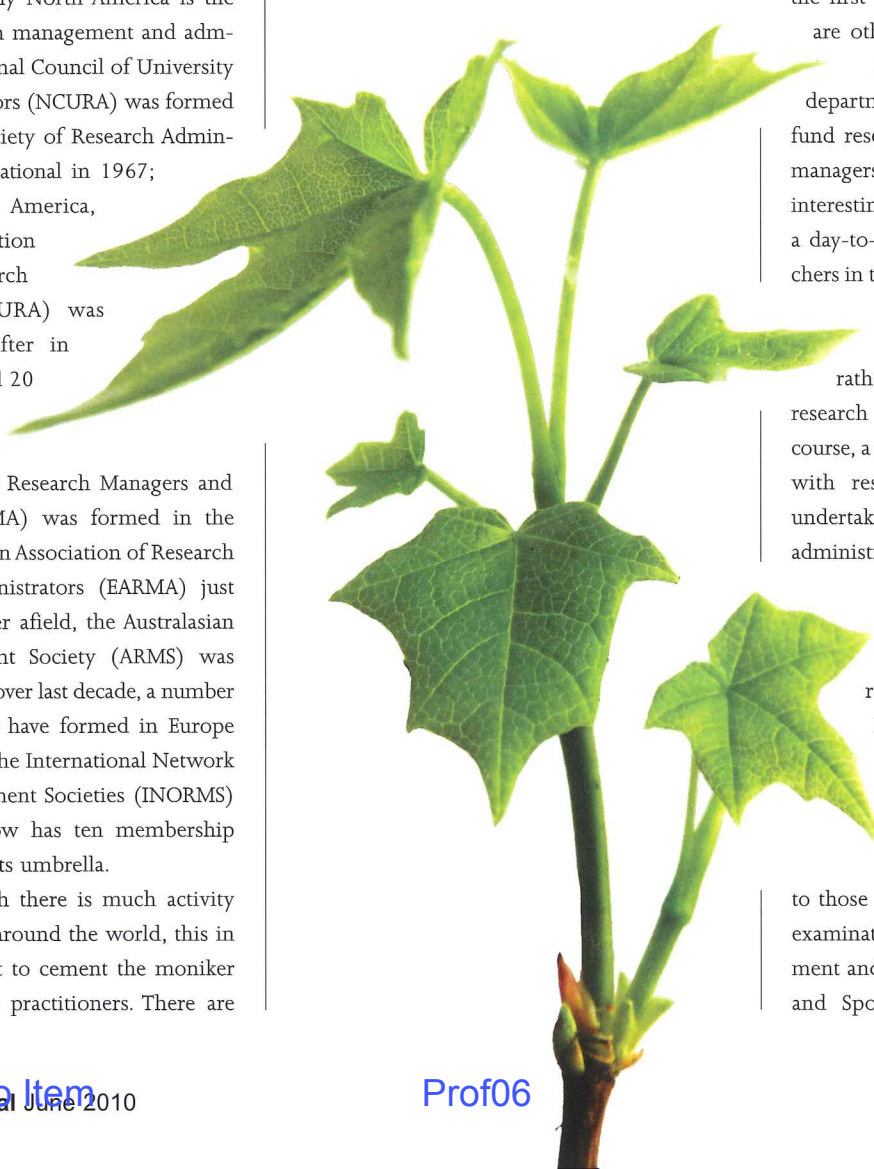
of what a research manager and administrator does; with the almost tautological (Chronister and Killoren 2006) definition, 'someone who leads, manages or supports the research enterprise' perhaps being the clearest.

It is important also to consider where RMA professionals work. The most obvious place is in organisations where research is undertaken, with universities and research institutes being the first that spring to mind. However, there are other research performers to consider; companies and even government departments, for example. Further, those that fund research activities also employ research managers and administrators. It is perhaps interesting to note that most RMAs do not, on a day-to-day basis, work directly with researchers in their research environment. Even those

who work in research organisations often work in central offices, rather than in the departments where the research is actually undertaken. There are, of course, a number of RMAs that do work directly with researchers, and indeed many who undertake the role of researcher and manager/administrator.

Moving to the issue of professional development and (as some definitions of profession require) accreditation, it is not unexpected that North America has taken the lead. Since 1993, the Research Administrators Certification Council (RACC) has awarded the title of Certified Research Administrator (CRA)

to those candidates that score well enough in examinations in the areas of: Project Development and Administration, Legal Requirements and Sponsor Interface, and Financial and



although there is much activity in support of RMAs around the world, this in itself is not sufficient to cement the moniker of 'profession' to its practitioners

General Management. However, this does not fully meet the professional development needs of RMAs, particularly outside North America (CRA requires knowledge of research systems in the US, but not of other countries), and the national associations therefore provide professional development activities of their own.

In the UK, there are many professional development providers, ranging from commercial training providers, universities themselves, and various professional associations. These include the Association of University Administrators (AUA); the Association for University Research and Industry Links (AURIL); the Institute of Knowledge Transfer (IKT); Praxis-Unico; the Leadership Foundation for Higher Education (LFHE); and the Association of Research Managers and Administrators (ARMA). ARMA organises opportunities for members at introductory, continuing professional development, and executive stages. In recent years, ARMA has been working more closely with these related organisations and has, for example, provided several joint courses to members with PraxisUnico.

Last year, the results of the Professionalising Research Management project were published, presented, and discussed in a workshop setting, with one of the main recommendations being that the various training providers and associations in the UK should work together to develop a professional development framework for research managers and administrators. The leading UK association (ARMA) concurred in a recent press release (12 May 2010): 'Frameworks for the professional development of research managers and administrators have been discussed nationally and internationally, but none have yet emerged. This is partly because of the wide and diverse span of research management and administration, and the range of organisations employing research managers and administrators and hence the environments in which they work'. ARMA have moved

forward by advertising for a Professional Development Manager to work for the association to develop just such a professional development framework for the UK.

This should be a pivotal time for the development of the profession of research management and administration in UK. The framework must be developed in an inclusive way so that the various providers of training, professional development, and leadership and management skills for research managers and administrators, will contribute to and, crucially, accept it. Successful implementation of the framework could naturally lead to accreditation in the UK and hopefully provide useful feedback to the other RMA associations around the world that are considering this next step towards being a fully-fledged profession.

#### References

- Chronister, L. U. and R. Killoren, 'The Organization of the Research Enterprise' in *Research Administration and Management*, ed. by E. C. Kulakowski and L. U. Chronister. (Sudbury: Jones and Bartlett, 2006), pp. 41-61.
- Green, J. and D. Langley, (2009) 'Professionalising Research Management'

**This article (updated with recent developments) is based on the paper given by the author at the INORMS 2010 conference.**

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## Brunswick Material Transfer Agreement

The Brunswick Group has developed a Material Transfer Agreement (MTA) for use between two universities to facilitate the routine transfer of materials between academic institutions. The aim is to remove the need to spend time on drafting and negotiation in the majority of cases, and to avoid a situation where a provider of material requests terms that they would not accept as a recipient.

The approach is deliberately minimal, and is not intended to cater for all situations. In particular, it is not suitable for use with clinical materials. Situations in which there is known to be an intellectual property (IP) position that needs careful treatment are also not suitable. Although this agreement may be used unilaterally, we believe that it will be more effective as the basis of an agreement between two institutions, for use in all routine transfers between them in either direction. The template is available for universities and other public sector research institutions to use. However, it is not designed for use between universities and commercial organisations.

The Brunswick Group is an informal collection of individuals responsible for research support from a number of research-intensive universities. It acts as a means of sharing information and good practice, and also as a sounding board and lobby group. Membership is by invitation only.

The Brunswick Group decided to create the MTA because of the amount of traffic between group members. However, the MTA is now a freely-available document for anyone to use, and the Association of Research Managers and Administrators (ARMA) and Praxis-Unico have offered to host and to promote it.

For further information, visit the ARMA website at

[www.arma.ac.uk/resources/resdirectory/brunswick.xhtml](http://www.arma.ac.uk/resources/resdirectory/brunswick.xhtml)





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a Research publication

# Team coach

*A marriage made between heaven and hell? Or an imminent divorce?* Our debate on research management published last issue [RF 2/6/10, p18,19] between the biologist from University College London David Colquhoun and Simon Kerridge of the Association of Research Managers and Administrators caused a few ripples at ARMA's annual conference in Manchester last week.

The relationship between academics and research management, often fraught, will be put under further strain in the coming weeks as the government takes an axe to public spending. If cuts have to be made, what do you lose? An excellent, but expensive academic department (such as philosophy); or an average energy and environment research office?

To coin a phrase much maligned because of its association with New Labour, there is a 'third way'. If they want their institutions to thrive, academics need to learn to let go a little. Likewise, research directors, managers and their staff need to do more than oversee grant applications and master evaluation processes. They need to be at the heart of an institution's research strategy. What this means is that they need to become as expert in research content as they already are in research processes.

One area where research management is vital is collaborative research. If we are to find answers to the so-called 'grand challenges'—vaccines for infectious diseases; better cancer therapies and solutions to climate change—these need academics from across disciplines using their creative talents towards a shared goal.

Someone has to take responsibility for these projects. It could be an academic, of course. But to do an effective job they would need experience of running creative teams, knowledge of how to raise large amounts of funding and how to spend it wisely. Not many have such experience. Moreover, thanks to two decades of the RAE, UK academics have also become highly competitive. They are good at doing the best for their own departments and teams. But research that crosses the boundaries of faculties and institutions needs a different, more collegial, mindset.

The best research directors and managers, on the other hand, do have more experience of managing and team building. What they often lack, however, is detailed subject knowledge. And this is what they must change. Research managers need to immerse themselves in the topic of research.

Any academic struggling to understand the usefulness of research management need look no further than this country's national sport. As it's the start of the football world cup, think of your research director as a soccer coach. Like coaches, research managers are responsible for a group of highly creative people; they each need to make sure that the 'talent' has the freedom to excel, but at the same time ensure that the team's interests remain paramount.

Research managers are not Nobel candidates, but do they need to be? Again, think of the best soccer coaches: how many have themselves played at the international level? Is it more important to have been a star player? Or is it more important to know the game inside out, and to be able to bring out the best in your players?

Coaches are an indispensable part of the modern game, respected and often feared. As they contemplate the future of their profession, research directors and managers need to see themselves in a similar place.

## elsewhere

**"The CIA appears to have broken all accepted legal and ethical standards put in place since the Second World War to protect prisoners from being the subjects of experimentation."**

Frank Donaghue, chief executive of Physicians for Human Rights, says medical personnel on the payroll of the Central Intelligence Agency participated in research on detainees during interrogations following the US terror attacks of 11 September 2001. *Nature*, 7/6/10.

**"Not everyone will want to miss the footie to discuss the split [between departmental and non-discretionary spending]."**

A government official admits that the Treasury's plan to hold a public consultation on spending cuts may struggle to attract much attention. *Financial Times*, 8/6/10.

**"Those involved were highly qualified individuals who should have provided the public with different answers."**

Alfredo Rossini, chief prosecutor of the town of L'Aquila, Italy, is considering charges, including manslaughter, against researchers and officials of the National Geophysics and Vulcanology Institute for dismissing predictions made before last year's quake that a major tremor would soon occur. *Science Insider*, 7/6/10.

**"In my own constituency the Science Party candidate who campaigned against my support for integrated healthcare, complementary medicine and, yes, homeopathy, lost his deposit."**

David Tredinnick, Conservative MP for Bosworth, gloats about his defeat of Science Party candidate Michael Brooks. *ePolitix.com*, 2/6/10.

**"I want this government to have effective policies that tackle Britain's problems and that means they have to be evidence-based."**

Science minister David Willetts says ministers have been told to respect independent scientific advice and to base more decisions on sound evidence. *The Times*, 9/6/10.

## decade

**"The one thing that really worries me is that we have made everything too short-term."**

Former Conservative science minister William Waldegrave tells the Commons Science and Technology Committee that researchers have to deal with too much bureaucracy.

*Research Fortnight*, 21 June 2000



research management debate **simon kerridge**

# A marriage made between heaven and hell...

In theory the main function of a research manager and administrator is to support researchers; but this may not mean the same thing to both parties.

Researchers and research managers may work in research institutes, funders and government, but most are found within universities. Just as there are many types of researchers, from fairly junior research assistants to very senior (some recalcitrant) professors, research managers and administrators range from clerical and administrative grades to senior positions.

All university staff should be there to support the mission, goals and strategic aims of their institution. 'Internationally excellent' and 'world leading' research is a part of most universities' strategic aims. These high aims often translate into fairly coarse targets for the academic researcher on the ground.

We need only consider one dimension, research income, to illustrate how problems can develop.

Researchers often say they have too much administrative work, and then complain about the large number of administrators in the university. The problem of course is that they do have too much administrative work to do because there are not enough administrators in the university—or at least not enough doing the right things.

When a researcher develops a funding proposal they invariably have to go through some university process or processes before the proposal may be submitted. The research office will have developed these to: comply with external requirements and obligations; meet internal governance and reporting issues; and support research staff in making the best possible bid. It should be noted that national regulations are often there only as a direct consequence of previous research misconduct; research

managers play a key role in protecting researchers, and the institution, from sanctions.

A good working relationship between researchers and research managers, and sufficient time to ensure that the support provided adds value, can enhance a proposal's chances of success while reducing the load on the researcher in developing it. The other end of the spectrum is a poorly structured or incomplete proposal arriving at the research office just before the funder's deadline (or even afterwards with instructions to try and

sort it out!). This is often the result of similar bad practice earlier in the process: inadequate planning and poor communication by the researcher may not leave sufficient time for academic quality checks and departmental authorisation.

Things can get complicated, so communication, sensitivity and flexibility in research support are vital. For example, some universities are developing plans for focusing research support into strategic areas. This does not mean that research in other areas will not be supported. But it could mean that a proposal from outside those areas might receive little central support or have support gazumped by a proposal from a priority area.

I have concentrated on researchers and the central research office, but similar tensions exist between researchers and the research managers or administrators working within academic departments.

Unfortunately there is insufficient room to pay full justice to all the points raised in the thoughtful, provocative (and I suspect sometimes purposefully misconstruing) article, opposite, from the eminent researcher, David Colquhoun. But I would strongly argue that research managers (or administrators) have, for more than 20 years, shown that they do understand 'scientific' research. It is perhaps insightful to hear that direct research administration for an individual researcher is a good thing, whereas centralised research management, which might benefit others more, is dismissed as positively inappropriate! I agree that inappropriate management is unproductive, but good research managers use appropriate means to enable researchers to get on with what they do best—research rather than administration. We both have the same objective: for researchers in our institutions to undertake high quality research.

So, researchers and research managers or administrators need time to achieve better communication, mutual respect and understanding.

To quote author Douglas Adams, "It is difficult to be sat on all day, every day, by some other creature, without forming an opinion on them. On the other hand, it is perfectly possible to sit all day, every day, on top of another creature and not have the slightest thought about them whatsoever." The reader may have an opinion about which of these is the researcher.

More to say? Email [comment@ResearchResearch.com](mailto:comment@ResearchResearch.com)

**Simon Kerridge** is a director of ARMA and head of research support at the University of Sunderland.

'Researchers say they have too much admin, and then in the same breath complain about the large number of administrators in the university.'



david colquhoun research management debate

## ...or an imminent divorce

The website of the Association of Research Managers and Administrators says it has 1,600 individual members, but every scientist I have ever met is baffled about why they have suddenly sprung into existence.

Apparently their mission, according to the website, is "to facilitate excellence in research by identifying and establishing best practice in research management and administration". I had to read this several times in an attempt to extract meaning from the bureaucratic prose. "Our mission is to promote excellence in research". How can non-scientists with no experience of research possibly "promote excellence in research"? They can't, and that's pretty obvious when you read the second half of the sentence. They propose to improve science by promoting research management: that is themselves.

Kerridge's article, opposite, doesn't help me to understand. He seems to think research managers are there to make sure that scientists fulfil the "strategic aims" of the university. In other words they are there to make sure that scientists obey the orders of non-scientists (or elderly ex-scientists) who claim to know what the future holds. I can think of no better way to ruin the scientific reputation of a university and to stifle creativity.

We all appreciate good support. I worked in a department with a very helpful person (not a 'manager') who could advise on some of the financial intricacies. But now the function has been centralised, depersonalised and is far less efficient.

The fact of the matter seems to me to be that research managers are just one more layer of hangers-on that have been inflicted on the academic enterprise during the time New Labour was in power. They are certainly not alone. We have now have research facilitators and offshoots of human resources departments running nonsense courses in things like Brain Gym. All of these people claim they are there to support research. They do no such thing. They merely generate more paperwork and more distraction from the job in hand.

Take a simple example. At a time when there was a redundancy committee in my own faculty, in existence to decide which academics should be fired, the HR department advertised two jobs (on near-professorial salaries) for people trained in neurolinguistic programming—a well-known sort of pseudo-scientific psychobabble.

A quick look at what research managers actually do (in two research-intensive universities) shows that mostly

they send emails that list funding agencies, and forward emails you have already had from someone else. Almost all the information can be found more conveniently by spending a couple of minutes with Google. Although they claim to reduce administrative work for scientists, it is usually quicker to do things yourself rather than to try to explain things to people who don't understand the science. They don't save work; they make it.

One might well ask how it is that so much money has come to be spent on pseudo-jobs such as "research managers". I can only guess that it is part of the ever-expanding tide of administrative junk that encumbers the work of people who are trying to do good creative science. It also arises from the misapprehension, widespread among vice-chancellors, that you can ensure you get creative science by top-down management of research by people who know little about it.

I'm reminded of the words of the "unrepentant capitalist", Luke Johnson (he was talking about HR but the words apply equally here): "HR is like many parts of modern businesses: a simple expense, and a burden on the backs of the productive workers. They don't sell or produce: they consume. They are the amorphous support services. I have radically downsized HR in several companies I have run, and business has gone all the better for it."

The dangers are illustrated by the report (*Times Higher Education*, 20 May) of a paper by the professor of higher education management at Royal Holloway (we already have a chair in this non-subject). It seems that, "Research 'can no longer be left to the whims and fortunes of individual academics'; it must be left to people who don't do research or understand it. It's hard to imagine any greater corruption of the academic enterprise.

Oddly enough, the dire financial situation brought about by incompetent and greedy bankers provides an opportunity for universities to shed the myriad hangers-on that have accreted round the business of research. Savings will have to be made, and they shouldn't start with the people who do the teaching and research on which the reputation of the university depends. With luck, it may not be too late to choke off this new phenomenon before it chokes us. If you want research, spend money on people who do it, not those who talk about it.

More to say? Email comment@ResearchResearch.com

"Research managers" are just one more layer of hangers-on that have been inflicted on the academic enterprise.'

David Colquhoun is an honorary fellow of University College London.



Association of Research Managers and Administrators (UK)

# ARMA – An Overview

20 Years  
of Research Management  
and Administration in the UK

The Professional Association of Research Managers and Administrators



Association of Research Managers and Administrators (UK)

# ARMA – An Overview

Simon Kerridge,  
Executive Director, ARMA

The Professional Association of Research Managers and Administrators





Association of Research  
Managers and Administrators

# Overview

- Research Management and Administration
- Who are we?
- Where are we?
- What are we?
- ARMA – What is it?
- ARMA – What does it do?
- Summary






Association of Research  
Managers and Administrators

# Research Management & Admin

- Information
- Pre-award
- Post-award
- Development / Planning
- Strategy / Policy
- Assessment / Governance
- Metrics
- Research Students (PGRs)






Association of Research  
Managers and Administrators

## RMA: who

- Secretarial (e.g. clerical support)
- Admin (e.g. admin support)
- Professional (e.g. Research Development Officer)
- Managerial (e.g. Head of Section)
- Senior Management (e.g. Director)
- Leadership (e.g. Pro Vice-Chancellor)





Association of Research  
Managers and Administrators

## RMA: where

- Universities
  - central office, faculty office, research centre
- Research Institutes
- Other Research Performers
  - E.g. NHS, Companies
- Research Funders
  - E.g. Research Councils, Charities, Companies, Government, European Commission
- Worldwide





Association of Research  
Managers and Administrators

## RMA: what

- **Not** a ‘Jack of all Trades’... But multi-skilled:
- Information, Opportunities, Advice, Costing, Pricing, Submission, Negotiation, IP, Contracts, Finance, Legal, Reporting, ICT, Influencing, Enabling, Monitoring, Development, Training, CPD, Strategy, Analysis, Returns, Advocacy, Marketing, HR, Procurement, Research Students, Ethics, Project Management, Networking, Dissemination, KT, Partnering, Governance, Planning, Policy...
- An interface

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Association of Research  
Managers and Administrators

## ARMA – What is it?

- Association of Research Managers and Administrators
- UK based
- CLG
- Formed in 1991 (as RAGnet)
- Over 1500 members
- The Leading UK RMA professional association

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Association of Research  
Managers and Administrators

## ARMA – What does it do?

- Annual Conference (2+1 days)
- Professional Development
  - Training Seminars
  - Expert Seminars
  - Special Interest Groups
  - Study Tours
  - Mentoring
  - Publications: IRMA, Newsletter and Fact Sheets
- Representation
- Peer Support Network



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Association of Research  
Managers and Administrators

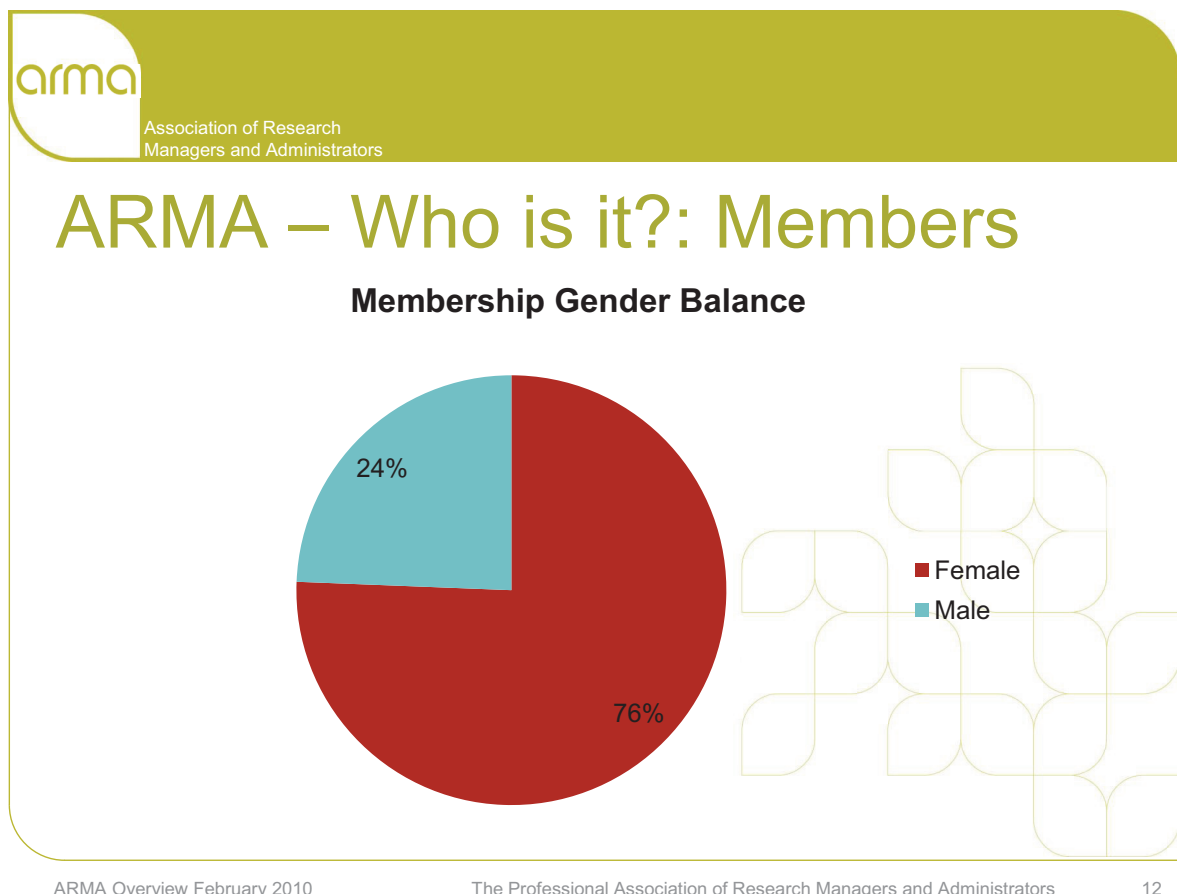
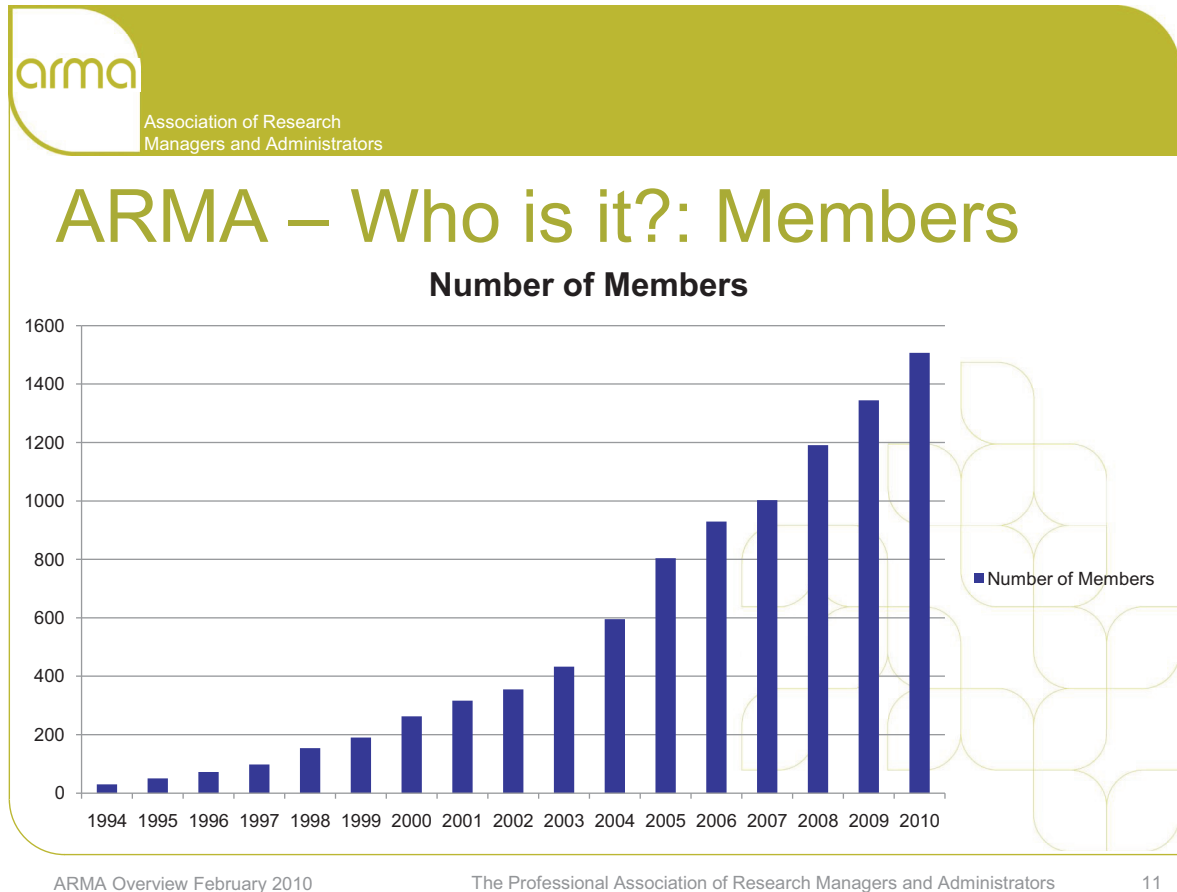
## ARMA – Who is it?: Board

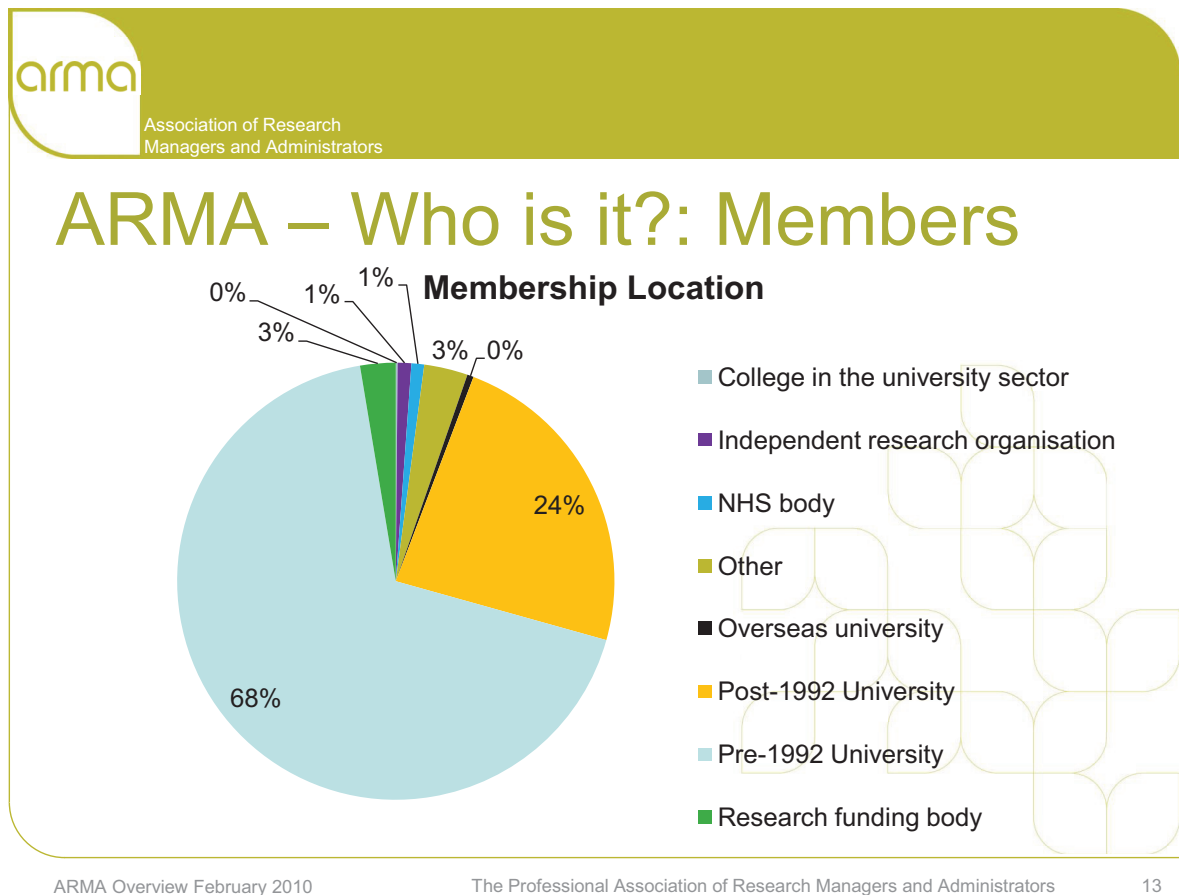
- Chair: Ian Carter (Sussex)
- Deputy Chair: Pauline Muya (Birkbeck)
- Deputy Chair: Tony Weir (Heriot-Watt)
- Conference: Lita Denny (Manchester)
- Treasurer: John Green (Imperial)
- Secretary: **Simon Kerridge** (Sunderland)
  - **Sheena Bateman** (Keele), **Ray Kent** (Loughborough),  
**Ian McCormick** (UEA), **Karen Sergiou** (Imperial),  
**Maggy Taylor** (MMU), **Mark Wight** (Open)



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Association of Research  
Managers and Administrators

## INORMS

■ International Network of Research Management Societies

- Formed 2001
- ARMA (UK), ARMS (AU), CAURA (Can), DARMA (Den), EARMA, (EU) NCURA (US), SARIMA (SAfrica), SRA (US), WARIMA (WAfrica), GRMN (ACU)
- Biennial conference
- 2010 Conference, Cape Town



ARMA Overview February 2010

The Professional Association of Research Managers and Administrators

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Association of Research  
Managers and Administrators


## Summary

- Research Management and Administration is:
  - A diverse and growing profession
  - Spread across the University and the Research Sector
- ARMA is:
  - The professional association for research managers and administrators in the UK
  - See [www.arma.ac.uk](http://www.arma.ac.uk) for more information

ARMA Overview February 2010

The Professional Association of Research Managers and Administrators

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uk  
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Association of Research  
Managers and Administrators

Association of Research Managers and Administrators (UK)

## ARMA – An Overview

20 Years  
of Research Management  
and Administration in the UK



University of  
Sunderland

The Professional Association of Research Managers and Administrators



## supervisors and managers

for those who supervise and manage researchers

### Breadcrumbs

[Home](#) [Supervisors & managers](#) [Leadership development for principal investigators](#) [Project background](#)

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## Project background

A HEFCE Leadership, Governance and Management funded project, the Leadership development for principal investigators website aims to provide online resources for new and aspiring PIs. This collaborative project has received input from colleagues at the universities of Nottingham, Loughborough, Cambridge, Newcastle, Sunderland, UCL and Leicester, as well as Vitae, Research Councils UK, Leadership Foundation for Higher Education, Association of Research Managers and Administrators and Universities UK.

In addition we are grateful to the principal investigators who contributed to the project.



Notes from the impromptu meeting on Wed 14<sup>th</sup> April 2010, INORMS2010, CTICC, Cape Town.

Present:

Tania Bezzobs, Melbourne, Au / ARMS

Ian Carter, Sussex, UK / ARMA

and later Phil Clare, Oxford, UK / PraxisUnico

Frank Heemskerk, RIMS, Be / (& ex EARMA)

Mark Hochman, South Australia, Au / ARMS

Simon Kerr, Melbourne, Au / ARMS

Simon Kerridge, Sunderland, UK / ARMA

Martin Kirk, British Columbia, Ca / CAURA

David Richardson, Pennsylvania State, USA / NCURA

John Westensee, Aarhus, DK / DARMA

The gathering was called to see if best / good practice in developing professional development frameworks for research managers and administrators could be exchanged.

After a wide ranging discussion including the scope of research management and administration, the landscape outside universities, tacit vs heuristic knowledge, depth of knowledge required for different roles and models, the following position was adopted:

- It might be possible to agree a common framework internationally
- But lower levels of training / education and development were probably best developed at national / regional levels rather than internationally, but that good practice could and should be shared.
- For Higher levels (eg for Directors of Service) it might be able, and indeed desirable to have an international element and so a common content might be possible too.
- Accreditation might be important in the future, but was not a driving force at the moment
- It is important to determine what the bosses (who would pay for any training / development) want their staff to learn
- The profile of research management as a profession and career needs to be raised
- It might be possible to show the value of the profession through metrics (although there are many issues with this), eg value added to research proposals

#### ACTIONS

The following actions were agreed:

1. Simon Kerridge would (initially) act as the hub for:
2. **Each person** to send the current status / availability of professional development in their own countries
3. Frank Heemskerk to send the EARMA presentation from a few years ago

Whilst not strictly related to professional development, it was also agreed that it would be interesting to share benchmarking information

4. **Each person** to send and benchmarking data / rules of thumb that they had (for example 1FTE post award staff is required per \$10M income) for research management

SRK 18/4/2010 [amended 28/4/2010]



**ARMA (UK)**  
***Professional Development Support***

ARMA is the professional association for research managers and administrators (RMAs) in the UK. It provides a focus for professional development for its 1500 members.

ARMA has recently (Sept 2010) appointed a Professional Development Manager to develop and formalise the development opportunities for members, focussing initially on training.

Currently ARMA provides the following:

**Training Events**

These are categorised into 3 levels of activity: introductory, continuing professional development (CPD) and Executive. There are residential workshops for each level and a series of training seminars (mainly at introductory level) including the following topics:

- Research funding
- Costing and pricing
- Research and consultancy contracts
- Introduction to research ethics
- Project management
- Disseminating research findings
- Post-award financial administration
- Introduction to research strategy
- HE issues for research administrators
- Research governance
- Writing research consultation responses and policy documents
- Intellectual Property Rights
- VAT
- Research students
- European project funding and management

We are moving towards developing a regular calendar of training events.

**Expert Seminars**

Expert seminars are usually one-day events on topical subjects, and are generally one-off and not repeated. For example there will always be a series of seminars related to the Research Assessment Exercise (now Research Excellence Framework), each addressing a different aspect.

**Annual Conference**

Each year an annual conference is run over 2 days (with a day beforehand scheduled with additional activities) with a mixture of plenary sessions and (generally) interactive parallel workshop sessions. Recent years have seen approximately 400 attendees. There are opportunities for members to put forward workshop ideas and speak at conference and also to present posters.

**Study Tours**

We work closely with a number of national research funders to arrange for (mainly one day) events where a group of research managers and administrators visit the offices of a particular funder to find out, amongst other things, more about the mystique of what happens after proposals are submitted.

**International**

ARMA has links with many similar organisations in other countries and is a founding member of INORMS the International Network of Research Management Societies (<http://www.inorms.org/>) which facilitates opportunities for ARMA members to network internationally.

**Special Interest Groups**

ARMA runs a number (approx 10) of email SIGs (some of which meet occasionally) where peer support is used to help people to answer questions about specific issues that they might have.

**Joan Hughes Bursary Scheme**

ARMA runs a scheme where members can apply for help towards the costs of attending specific events in return for a report and a piece for the newsletter.

**Mentoring Scheme**

ARMA runs a scheme where mentors are paired up with mentees in order to address a specific project.

**IRMA (Issues in Research Management and Administration)**

Approximately two publications of around 30 pages are produced each year. Each contains a number of papers all addressing a specific issue.

**Newsletter**

A quarterly newsletter is sent to all members to keep them up to date with the latest news and events in the world of research management and administration.

**Resource Directory**

A collection of reports and summaries of SIG discussions are available on-line.

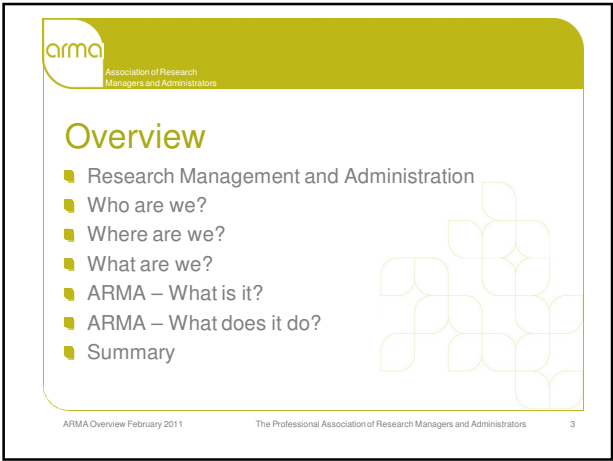
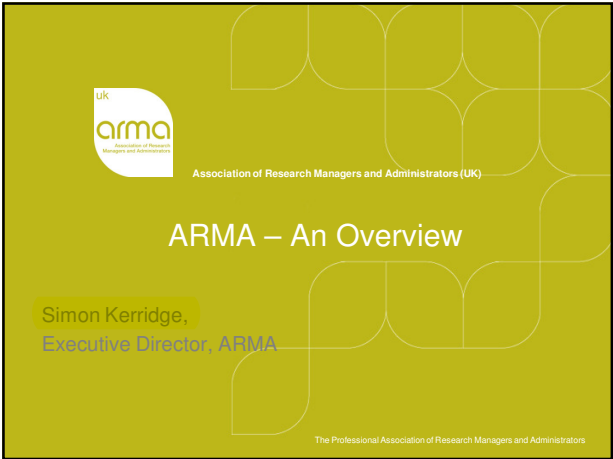
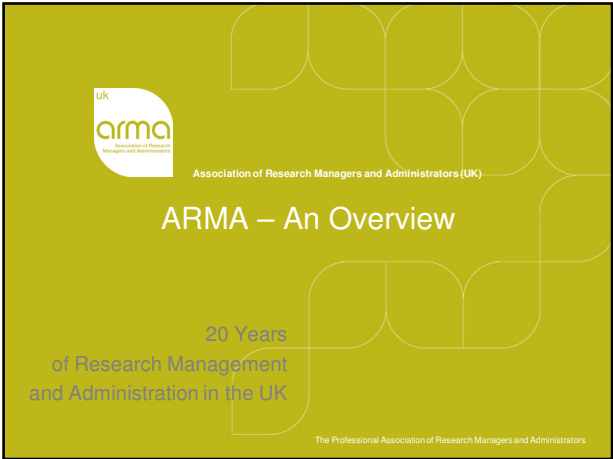
**Factsheets**

A number of brief overviews / factsheets of different aspects of RMA are available on-line.

**Website**

The website is the focus for much interaction with and between members and it provides access to Event Bookings, SIGs, the Bursary and Mentoring schemes, Resources, IRMAs, Newsletters, Factsheets, useful links and so on. Much of the website is restricted to members only.

<http://www.arma.ac.uk/>



arma

Association of Research  
Managers and Administrators

### RMA: what

- **Not** a ‘Jack of all Trades’... But multi-skilled:
- Information, Opportunities, Advice, Costing, Pricing, Submission, Negotiation, IP, Contracts, Finance, Legal, Reporting, ICT, Influencing, Enabling, Monitoring, Development, Training, CPD, Strategy, Analysis, Returns, Advocacy, Marketing, HR, Procurement, Research Students, Ethics, Project Management, Networking, Dissemination, KT, Partnering, Governance, Planning, Policy...
- An interface

ARMA Overview February 2011

The Professional Association of Research Managers and Administrators

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arma

Association of Research  
Managers and Administrators

### ARMA – What is it?

- Association of Research Managers and Administrators
- UK based
- CLG
- Formed in 1991 (as RAGnet)
- Over 1600 members
- The Leading UK RMA professional association

ARMA Overview February 2011

The Professional Association of Research Managers and Administrators

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Association of Research  
Managers and Administrators

### ARMA – What does it do?

- Annual Conference (2+1 days) 6<sup>th</sup>, 7-8<sup>th</sup> June 2011
- Professional Development
  - Training Seminars
  - Expert Seminars
  - Special Interest Groups
  - Study Tours
  - Mentoring
  - Publications: IRMA, Newsletter and Fact Sheets
- Representation
- Peer Support Network

ARMA Overview February 2011

The Professional Association of Research Managers and Administrators

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Association of Research  
Managers and Administrators

### ARMA – Who is it?: Board

- Chair: Dr Ian Carter (Sussex)
- Deputy Chair: Pauline Muya (Birkbeck)
- Deputy Chair: Dr Tony Weir (Heriot-Watt)
- Conference: Lita Denny (Manchester)
- Treasurer: Steff Hazlehurst (IoE)
- Secretary: **Simon Kerridge** (Sunderland)
  - Sheena Bateman (Keele), Ray Kent (Loughborough), Dr Louise Shelley (Bangor)

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The Professional Association of Research Managers and Administrators

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Association of Research  
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### ARMA – Who is it?: Members

#### ARMA Membership Growth

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The Professional Association of Research Managers and Administrators

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Association of Research  
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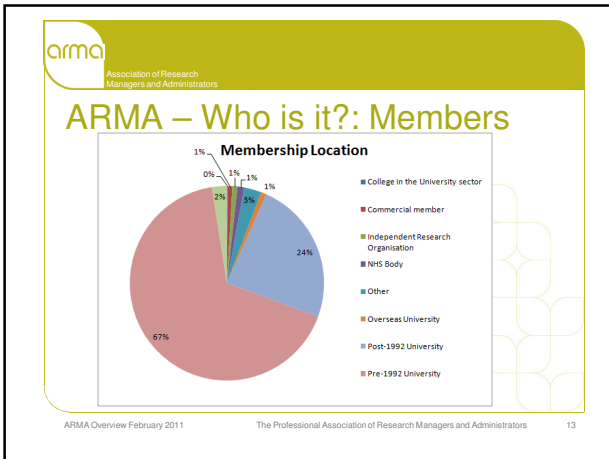
### ARMA – Who is it?: Members

#### Membership Gender Balance

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The Professional Association of Research Managers and Administrators

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Association of Research Managers and Administrators

# INORMS

- International Network of Research Management Societies
  - Formed 2001
  - ARMA (UK), ARMS (AU), CAURA (Can), DARMA (Den), EARMA, (EU) NCURA (US), SARIMA (SAfrica), SRA (US), WARIMA (WAfrica), GRMN (ACU)
  - Biennial conference
  - 2012 Conference, Copenhagen 13<sup>th</sup>-16<sup>th</sup> May

ARMA Overview February 2011

The Professional Association of Research Managers and Administrators

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Association of Research Managers and Administrators

# Summary

- Research Management and Administration is:
  - A diverse and growing profession
  - Spread across the University and the Research Sector
- ARMA is:
  - The professional association for research managers and administrators in the UK
  - See [www.arma.ac.uk](http://www.arma.ac.uk) for more information

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The Professional Association of Research Managers and Administrators

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uk

arma

Association of Research Managers and Administrators (UK)

# ARMA – An Overview

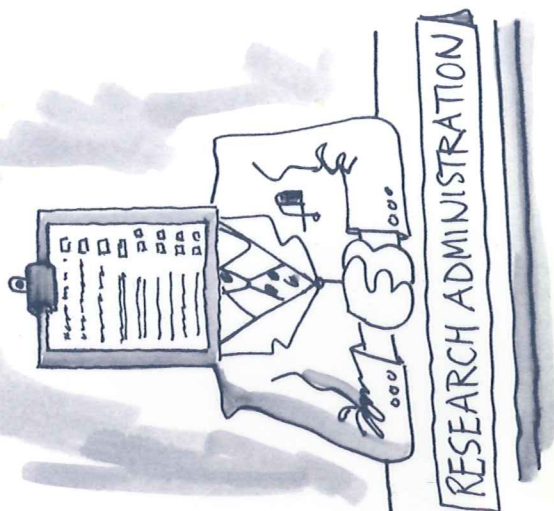
## 20 Years of Research Management and Administration in the UK

ARMA Overview February 2011

The Professional Association of Research Managers and Administrators

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**AUA**  
The Association of  
University Administrators

## Supporting research From proposal to publication

Steff Hazlehurst

*promoting excellence  
in HE management*

## Supporting research From proposal to publication

Steff Hazlehurst

Research and scholarly activity have always had a place in universities, although research (as distinct from scholarship) grew greatly in importance during the twentieth century. It is important to universities because of the prestige and financial benefits of a high research profile, including the ability to attract students, especially graduate students. Individual academics find research enjoyable, and see it as being important because of the part it plays in career advancement. Many feel that their research will 'make a difference', improving others' quality of life in some way. Most believe that their research activity enhances their teaching.

This Guide is about supporting or managing research. It is aimed both at those who are specialists in the field of research management, particularly those new to the field, and at those in more generalist roles, or in other specialisms, whose involvement in research management is more occasional.

Some research managers will be involved in most aspects of research support, from proposal to publication; others will be responsible for only a small part of the process. However, everyone involved in research management will benefit from an overview of the whole process, being able to see where their own contribution fits in.

In this Guide, the administrator/manager referred to is a composite of several possible systems of support, including finance manager and research support, contracts, or copyright officer, and the description of their activity is also designed to help the non-specialist, or those newly appointed to such a role, to understand the challenges and responsibilities they face.

**AUA**  
The Association of  
University Administrators

This is one of a series of  
Good Practice Guides  
published by AUA

Series Editor: Sue Boswell

The Guides are available from:

AUA National Office  
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Tel: +44 (0)1204 523773  
Email: [harnie@shanleysdp.com](mailto:harnie@shanleysdp.com)



### Portion of information

For up-to-date information on policy contexts and other issues of relevance to the research manager, the following websites are recommended

Research Administrators' Group network  
(**RAGnet**)  
[www.ragnet.ac.uk](http://www.ragnet.ac.uk)

Research Councils UK  
www.research-councils.ac.uk

AURIL (Association  
Industry Links)  
[www.auril.org.uk/](http://www.auril.org.uk/)

Universities UK  
[www.universitiesuk.ac.uk/](http://www.universitiesuk.ac.uk/)

[www.auril.org.uk/](http://www.auril.org.uk/)

Research Assessment Exercise  
www.rae.ac.uk

Higher Education Funding Council for England  
[www.hefce.ac.uk](http://www.hefce.ac.uk)

Research Careers Initiative  
www.universities.ac.uk/

Scottish Higher Education Funding Council  
[www.shetc.ac.uk](http://www.shetc.ac.uk)

Or find more links in the Resources section of the **RAGnet** website.

Higher Education Funding Council for Wales  
[www.wfc.ac.uk/hefcw/](http://www.wfc.ac.uk/hefcw/)

Department of Education for Northern Ireland  
[www.nics.gov.uk/deni/index.htm](http://www.nics.gov.uk/deni/index.htm)

The Joint Costing and Pricing Steering Group  
[www.icpsa.ac.uk](http://www.icpsa.ac.uk)

The UK Research Office in Brussels  
[www.ukro.ac.uk](http://www.ukro.ac.uk)

*Dataday issues: A guide to Data Protection*  
Trevor Field  
Good Practice Guide 27, 2002  
ISBN 0 947931 49X

## Acknowledgements

This Guide is designed to update and replace Good Practice Guide 14, Supporting Research, by Marion McClintock, and draws on elements of Marion's work. For additional material, my thanks to Phil Clare for the information on intellectual property taken from his article in *RAG Times* 16. Thanks also to Jacqui Forsyth, [Simon Kerridge](#) and Rosemary Hatch for their helpful comments on an earlier draft of this Guide.



The Association of University Administrators was established in April 1993 as a successor to the Conference of University Administrators (CUA) and the Association of Polytechnic Administrators (APA), creating an association for all administrators and other staff with managerial responsibilities throughout the higher education sector in the United Kingdom and the Republic of Ireland.

The AUA is the professional body for higher education administrators and managers in the UK and the Republic of Ireland. It is an open and accessible body. AUA is committed to:

- the promotion of excellence in higher education management through a professional development scheme, an annual conference, specific training events and publications;
- the advancement of a code of professional standards through a framework of values and principles which members are expected to follow;
- the provision of information networks through newsletters, electronic media and personal networking;
- the development of international links with appropriate organisations and with individuals
- the enhancement of the profile of the profession nationally and internationally.

AUA organises seminars and conferences to facilitate the exchange of good practice and is committed to the promotion of professionalism in the sector. It has developed and operates a postgraduate certificate in professional practice (higher education administration and management) which is validated by the Open University. This is underpinned by a code of professional standards which is endorsed by over forty HEIs in the UK.

AUA gratefully acknowledges the general financial support that is being made available by Pinsonet Curtis, Solicitors, and others.

AUA is Registered Charity No 1030024

**Subject:** BIS Postgraduate Review - University of Sunderland  
**From:** Postgraduate Review <postgraduaterewiew@bis.gsi.gov.uk>  
**Date:** Thu, 15 Apr 2010 11:42:50 +0100

**To:** **Simon Kerridge** <simon.kerridge@sunderland.ac.uk>

**CC:** David Fleming <david.fleming@sunderland.ac.uk>, Louise Bell <louise.bell-1@sunderland.ac.uk>, Postgraduate Review <postgraduaterewiew@bis.gsi.gov.uk>

Dear **Simon**

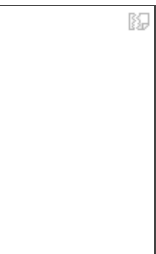
I am writing to thank you for your contribution to the Postgraduate Review. The review report, ***One Step Beyond: Making the most of postgraduate education***, was published on 31 March.

The report responds to the main areas of investigation that Lord Mandelson asked the review to consider and makes a series of recommendations to the UK Government, Higher Education Institutions, funding bodies and other stakeholders. It finds that postgraduate education in the UK is a great asset and world leading in many areas; but there is more that can be done to ensure it remains internationally competitive, responds to the needs of employers and prepares postgraduates to succeed in a range of careers.

It also draws attention to the need for improved data about the benefits of postgraduate study, the social background of postgraduates and the impact of cost and student finance on participation. We will be presenting the evidence we have received on postgraduate funding and finance to the Independent Review of Higher Education Funding and Student Finance.

We were fortunate to receive submissions to the review from a wide range of stakeholders and I am very grateful for your contribution.

Yours sincerely



**Professor Adrian Smith**

**Director General Science and Research**

Professor Adrian Smith | Director General Science and Research | Department for Business, Innovation & Skills, Bay 277 (Orchard Zone 2), 1 Victoria Street, London SW 1H OET | Email: [Adrian.Smith@bis.gsi.gov.uk](mailto:Adrian.Smith@bis.gsi.gov.uk) | T: **+44 207 215 1219** | [www.bis.gov.uk](http://www.bis.gov.uk)

The Department for Business, Innovation & Skills (BIS) is building a dynamic and competitive UK economy by creating the conditions for business success; promoting innovation, enterprise and science; and giving everyone the skills and opportunities to succeed. To achieve this we will foster world-class universities and promote an open global economy. **BIS - Investing in our future**

The original of this email was scanned for viruses by the Government Secure Intranet virus scanning service supplied by Cable&Wireless Worldwide in partnership with Messagelabs. (CCTM Certificate Number 2009/09/0052.) On leaving the GSI this email was certified virus free. Communications via the GSI may be automatically logged, monitored and/or recorded for legal purposes.



## **Introduction to Research Administration (2010) – a regional programme**

### **About the programme**

Welcome to the first regional induction programme for research administrators in the five regional universities. The programme has been developed for staff involved in supporting research across the institutions and will offer you an opportunity to understand the fundamentals of research and how they can help to enhance support to researchers. We hope that you enjoy the learning activities you undertake and the colleagues and facilitators who are part of it. This programme has been devised with the following aims in mind and we hope that it will equip you with a greater awareness of research issues and our role as administrators

### **Objective**

To develop an introduction to research, raising the awareness of issues in research for administrators to enable networking, learning and development, exchange knowledge, and provide enhanced support to academic colleagues

### **The aims of the programme**

- To raise awareness of the important role of the Research Administrator and to give participants a good overview of the core elements of research administration.
- To provide context for staff supporting research and give them an opportunity to increase their understanding and to provide enhanced support to academic colleagues
- To network with colleagues undertaking similar roles across the region and exchange good practice and knowledge.

### **Attendees**

Research administrators or staff who provide support for research from each organisation. Attendees must normally be in the first year of their post supporting research, or have it as a secondary element of their main role.

### **Programme content and timescale**

The programme is structured to cover the basic elements of the policy environment (including Research Assessment Exercise/Research Excellence Framework and ethics), pre-award areas (funding sources and information and costing and pricing), and support for PGR students).

The full list of workshops is outlined below:



Programme content and timescale.

Session	Date and time	Venue
<b>Introduction to Research Administration</b> <ul style="list-style-type: none"> <li>• Introduction to the programme</li> <li>• The role of the research administrator</li> <li>• Dual support</li> <li>• Introduction to funders: Charities, Research Council, Industrial Funders, Government, EU</li> <li>• Introduction to Full Economic Costing (fEC)</li> </ul>	<b>5<sup>th</sup> February 2010, 9:30-16:30</b>  <b>Coffee and registration from 9.00</b>	Research Beehive, Newcastle University
<b>Research Governance and Ethics</b> <ul style="list-style-type: none"> <li>• Rationale of research governance: why ethics?</li> <li>• Ethics, the law, and research activity</li> <li>• Effective and efficient governance procedures</li> </ul>	<b>25 March 2010</b>  <b>9:00-12:00</b>	To be confirmed
<b>REF</b> <ul style="list-style-type: none"> <li>• What is REF and why is it important?</li> <li>• From RAE to RE: Outputs, Impact, &amp; Environment Supporting</li> <li>• REF and administrative processes</li> </ul>	<b>20 April 2010,</b>  <b>9:00-12:00</b>	Durham University
<b>PGR issues,</b> <ul style="list-style-type: none"> <li>• PGRs and the University</li> <li>• PGR funding issues</li> <li>• PGR processes and management</li> </ul>	<b>19 May 2010</b>  <b>9:00-12:00</b>	Sunderland University

University Contacts

Durham University: Sally Hewlett  
 Newcastle University: Jill Golightly  
 Northumbria University: Stephanie Bales  
 Sunderland University: **Simon Kerridge**  
 Teesside University: Andrew Rawnsley

## NE-ARMA 2010 – Evaluation Report – Executive Summary

This is a short summary of the full report<sup>1</sup> (which is available on-line).

### Background

In the latter part of 2009 the five North East Universities (Durham, Newcastle, Northumbria, Sunderland and Teesside) agreed to develop and deliver a short ‘introduction to research administration’ for administrators from those Universities. The programme was somewhat inspired by the National ARMA<sup>2</sup> Introduction to Research Administration programme and a similar programme that Newcastle had previously held.

The programme started with a one day Introduction to Research Administration [Intro] (Feb 5th 2010) and was followed up with 3 half day events: Introduction to Research Governance and Ethics [Ethics] (Mar 25th 2010); The Research Excellence Framework [REF] (Apr 20th 2010) and Postgraduate Research Students [PGRs] (May 19th 2010).

Overall the cohort consisted of 56 individual participants (with up to 50 individuals expected for each event). The breakdown in terms of institution was as follows:

	Cohort	Intro	Ethics	REF	PGRs	av.	av.%
Durham	14	9	11	11	12	11	23%
Newcastle	12	10	11	10	10	10	22%
Northumbria	21	17	16	19	16	17	36%
Sunderland	6	5	2	6	6	5	10%
Teesside	3	2	3	3	2	3	5%
Total	56	43	43	49	46	47	100%

### Feedback Analysis Summary

The analysis is based on the (n=39) responses<sup>3</sup> to the final questionnaire.

The events were relatively equally attended (Q1) by those who responded to the feedback questionnaire, so we can be confident that the responses reflect the programme as a whole and are not skewed by specific events.

When specifically asked about length of time as a research administrator (Q16) it can be see that the vast majority had been in post for less than five years, with more than 50% for less than 2 years. Whilst this is perhaps not the ideal cohort, it did allow for good interactions with some participants being more experienced than others.

<sup>1</sup> NE-ARMA 2010 – Evaluation Report:  
<http://www.grs.sunderland.ac.uk/AcademicServicesWebFiles/GRS/NE-ARMA2010EvaluationReport.pdf>  
<sup>2</sup> The Association of Research Managers and Administrators (UK), [www.arma.ac.uk](http://www.arma.ac.uk)  
<sup>3</sup> [https://www.surveymonkey.com/sr.aspx?sm=n4KcRdluUW\\_2bD3ZbZyAVn\\_2fy4aJ7CQMSdpwIQIcNukao\\_3d](https://www.surveymonkey.com/sr.aspx?sm=n4KcRdluUW_2bD3ZbZyAVn_2fy4aJ7CQMSdpwIQIcNukao_3d)



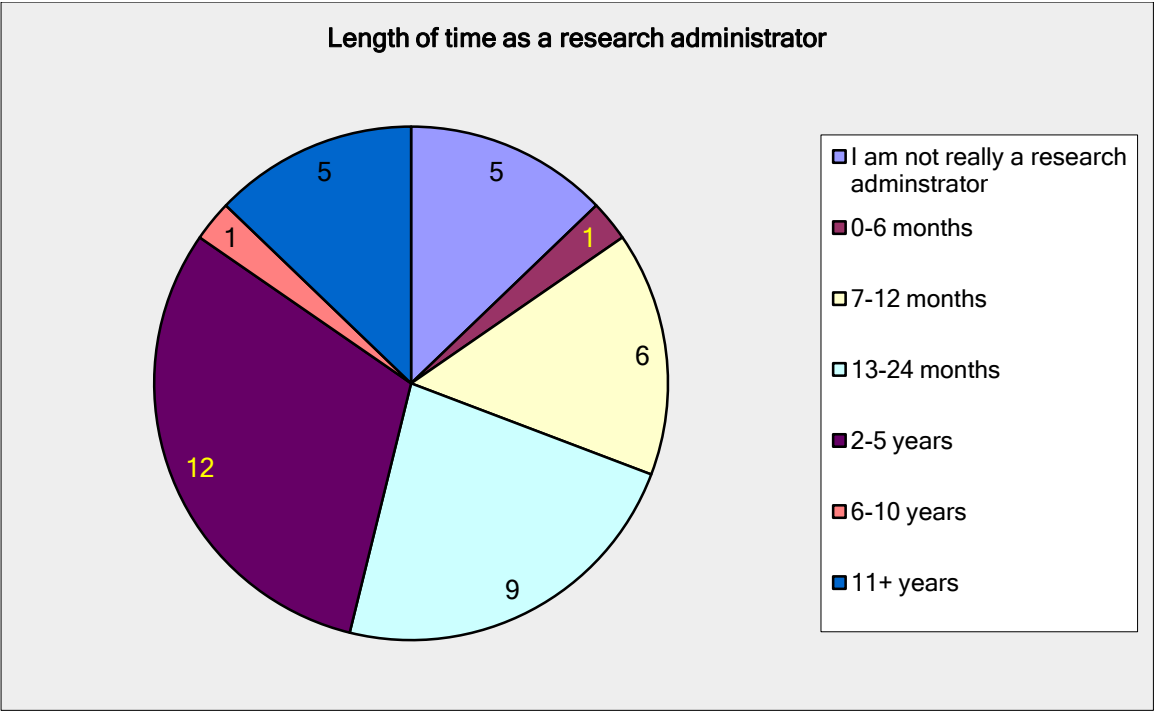


Figure 1: Frequency of Experience Range of Participants (from Q16)

In terms of the participants’ perceptions of their own roles (Q17), over half considered themselves to be research managers or administrators. However, well over a third defined themselves more generically as administrators; indicating that for them research administration is just part of a wider role.

The main aim of the programme was to make a positive impact on the way in which the participants were subsequently able to perform their duties. This was addressed bluntly (Q4) and the responses were overwhelmingly positive.

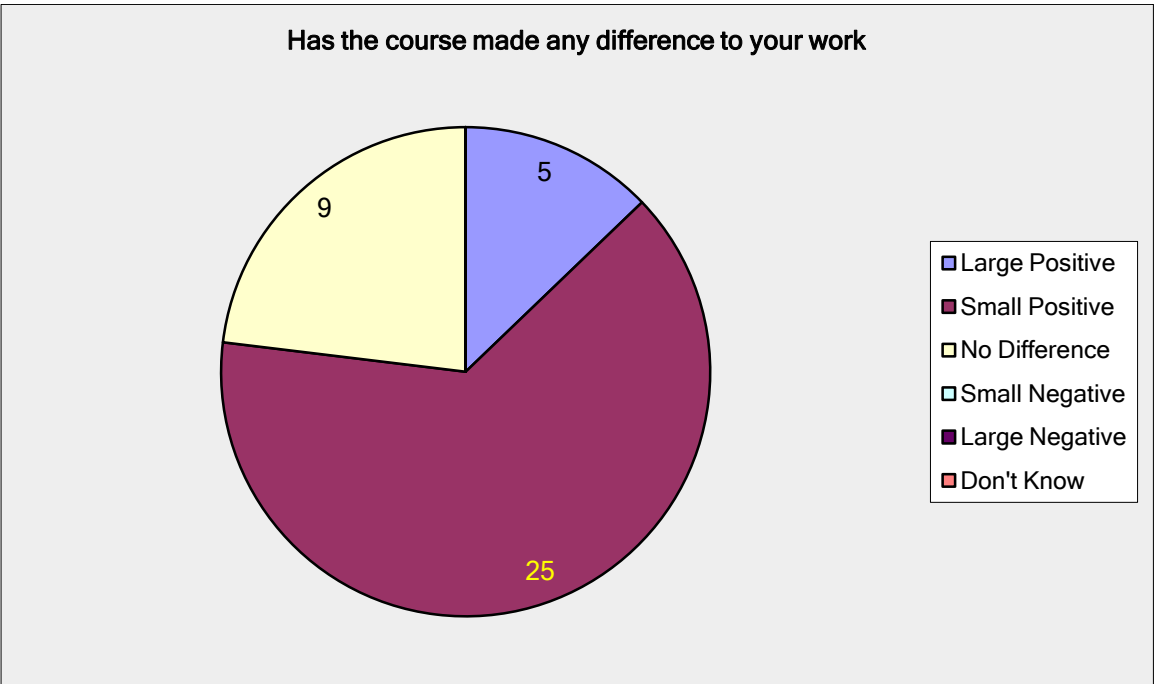


Figure 2: Frequency of responses to impact on participants’ work (from Q4)

When asked to describe how the programme had made a difference (Q5) there were (n=25) responses and 32% (n=8) of these indicated that it was useful to gain insight from the way other universities in the region dealt with issues. A further 24% (n=6) also talked about a better understanding of the bigger picture. There were also some specific comments about ethics and governance, costing and pricing tools, the REF, and PGRs.

A similar question about the impact on the participants personally (as opposed to in direct relation to their occupation) (Q6) shows a broadly similar picture:

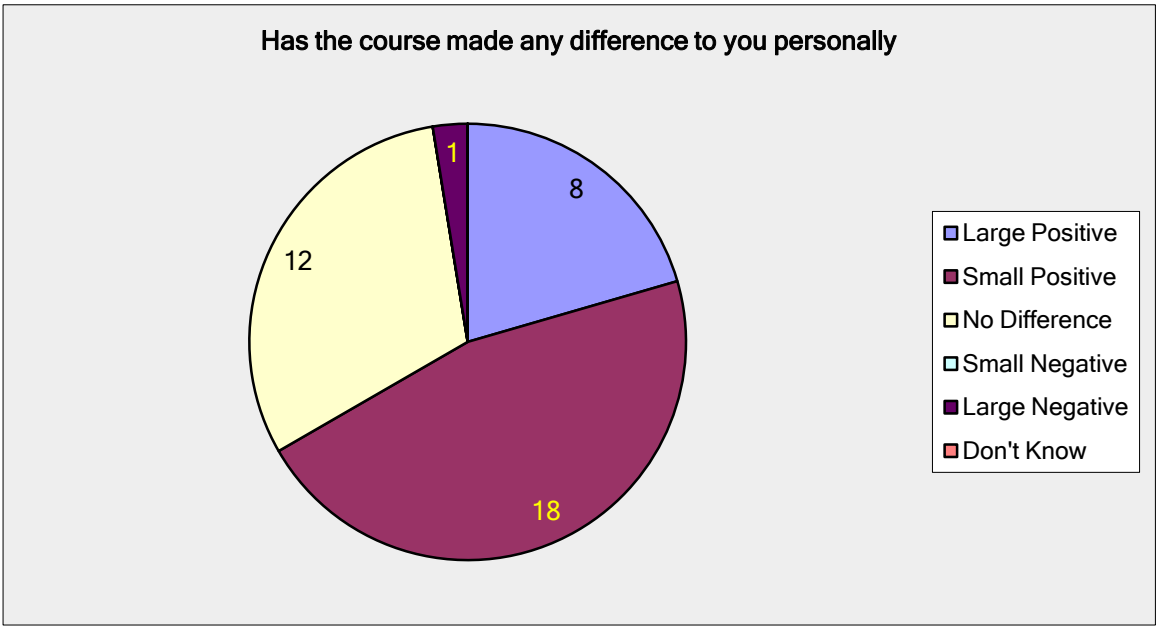


Figure 3: Frequency of responses to impact on participants themselves (from Q6)

Question 7 asked the respondents (n=22) to describe the impact on them personally. Most responses (81%, n=17) talked about having greater awareness / confidence / knowledge or feeling part of a network.

When asked about the best aspect of the programme (Q8, n=29), the responses were quite varied, ranging from the networking, the food, the chance to visit other universities. However the one standout aspect was the ethics session with 14% (n=4) specifically mentioning it.

Perhaps the most telling way of determining if the programme has been a success is to look at the responses to the question about whether or not participants would recommend the programme to others (Q11). Over 70% of respondents would recommend the programme unequivocally, with a further 25% seeing the potential benefit of the programme.

### Summary

Over three quarters of respondents reported a positive impact on their work, and two-thirds experienced a positive impact on them personally. A quarter have made new contacts and kept in touch with them, and over two-thirds would like a follow on event with the same cohort. Finally, nearly three quarters would recommend the programme to others, with only one respondent not being willing to do so. Overall the programme was rated (Q13) at an average of 4.23 out of 5.

The programme was undoubtedly a success.

The Brunel Research Administrators & Managers Network  
BRAM-NET

17<sup>TH</sup> FEBRUARY 2011  
CAVENDISH ROOM (HAMILTON CENTRE)

THE ANNUAL EVENT:

BRAM-NET is a forum to share best practice and information on new initiatives between colleagues supporting research in the centre and academic areas. While these activities are essential for maintaining and improving our position as a research intensive institution, we also need to keep an eye on new developments across the sector. The BRAM-NET Annual Event is an opportunity to focus on the wider sector perspective and to learn and share ideas with key players and organisations.

DAY'S AGENDA:

11:30	Arrival and coffee	
12pm	Welcome	Prof. Geoff Rodgers Pro-Vice-Chancellor (Research)
12:10	Research Management and Support: Perspective from a Large Research Intensive Institution	Dr Mary Phillips Director of Research Planning, University College London
1pm	Lunch and networking	
1:40	Research Support: Models and Professionalisation	Mr. Simon Kerridge Secretary, Association of Research Managers & Administrators (ARMA)
2:30	Vitae and the Research Environment	Dr Vivien Hodges Vitae
3:20	Conclusion	Dr Rosa Scoble Deputy Director Planning (Research & Resources)

SESSION FORMAT:

Each session will be 50 minutes long and will consist of a 20-30 minutes presentation and followed by questions and discussion.

For our first BRAM-NET Annual Event, we are delighted to welcome **three speakers**.

**Dr Mary Phillips:** Director of Research Planning (University College London)

Mary Phillips read physiology at UCL and undertook her doctoral studies in physiology at Oxford University, where she continued as an academic until joining the Wellcome Trust in 1989. At the Trust she ran the International Biomedical Programme and was responsible for a number of major programmes around the world funding research in India, China, Latin America, Australasia, Central and Eastern Europe and the former FSU and Africa. A significant initiative involved a funding partnership between the Wellcome Trust, the NHMRC in Australia and the HRC in New Zealand which focused on the health needs of developing countries in the South East and South Asia and Pacific. She joined UCL in 2004 as Director of Research Planning for Biomedicine and in 2007 took on the role of Director of Research Planning across the entire spectrum of the University's academic activity. She has recently been seconded (on a part-time basis) to the MRC to lead their Global Chronic Disease Programme. Until joining UCL she was also fellow of Merton College Oxford, where she continues to tutor medical students on a very occasional basis.

**Mr. Simon Kerridge:** Secretary (Association of Research Managers and Administrators) and Head of Graduate Research Support (University of Sunderland)

Simon Kerridge had been a member of ARMA since 1997 (then RAGnet) and was elected to the executive committee in 2000 and is now a director and company secretary of ARMA, the professional association for research managers and administrators. Over the years he has delivered workshops on many aspects of research administration for ACU, ARMA, AUA, BUFDG, INORMS and JISC and runs the ARMA Electronic Research Administration special interest group.

Simon sits on various national groups including the RCUK Je-S Management Board, JISC Research Information Management stakeholder group, RMAS Project Steering Group and the HEFCE funded PI Project Steering Group and is leading the JISC funded IRIOS project to combine RC funded project information with institutional repositories.

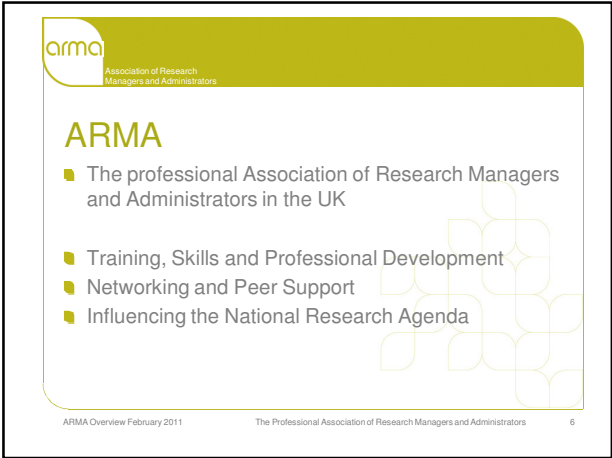
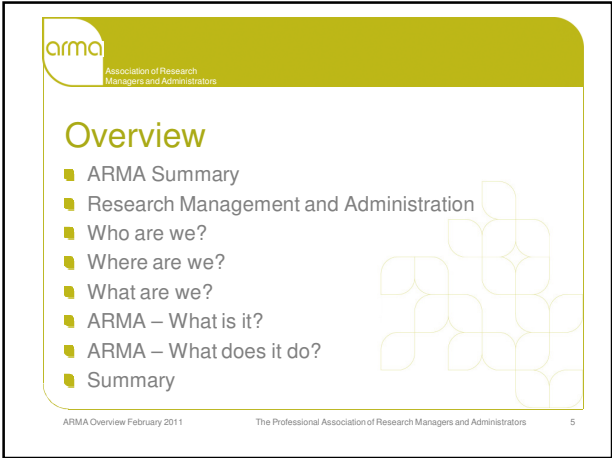
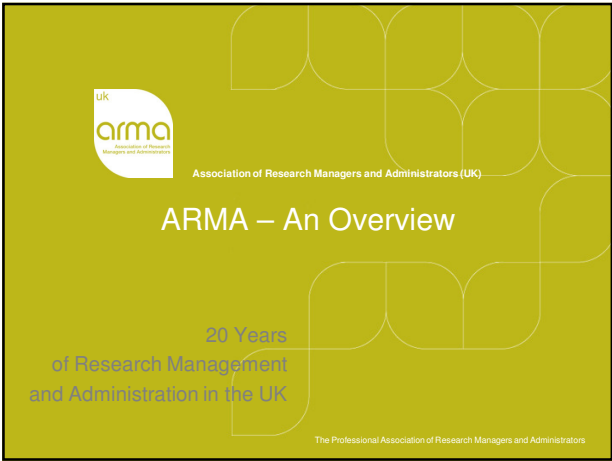
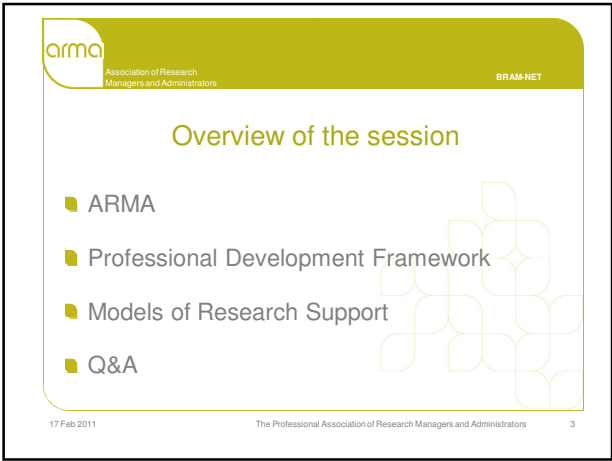
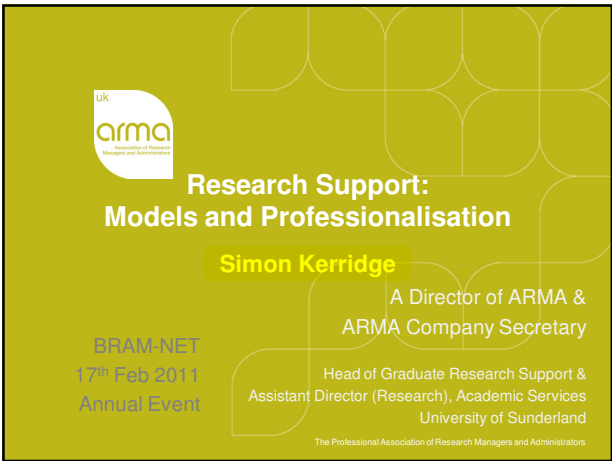
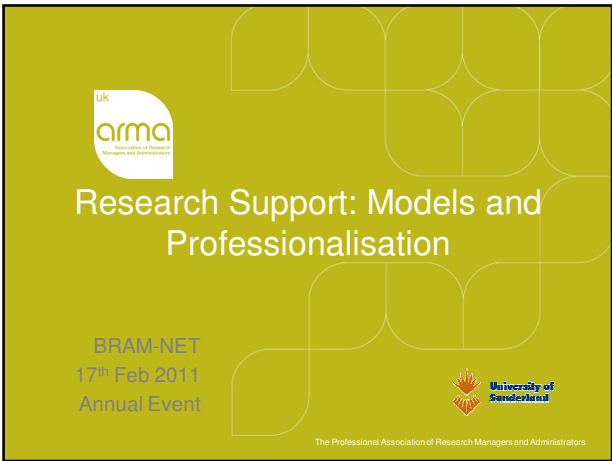
At Sunderland Simon heads up the central research support office that he has worked in since 1995. He is responsible for research strategy, pre-award research management and administration and post graduate research student administration. He also has a number of cross University roles including development of new research related information systems, currently focussing on research ethics approvals and research outputs (with an eye on the REF).

In previous lives Simon has been a Researcher (in Computer Science) at both Sunderland (including co-ordinating an EU ESPRIT project) and Durham Universities and a director of a (very) small software consultancy.

**Dr Vivien Hodges:** Research Manager (Vitae)

Vivien joined Vitae/CRAC as Research Manager in July 2010 and is responsible for both internal and external research projects commissioned by Vitae. She has worked on a number of projects including CROS 2009: differences between broad disciplinary groups and the Researcher Development Framework. Vivien is currently working on a wide range of projects to strengthen the Vitae careers resources for researchers which includes the What do researchers do? publications.

Previously, Vivien was a senior postdoctoral researcher working both in industry and academia, most recently in the Centre for Cancer Research and Cell Biology (CCRCB) at Queen's University Belfast (QUB). While in academia, Vivien developed a strong interest in researcher training and career development, completing a CIPD Certificate in Training Practice in 2010 and actively supporting a wide range of researcher development initiatives at QUB.







Association of Research Managers and Administrators

## Research Management & Admin

- Information / Funding Opportunities
- Pre-award
- Post-award
- Development / Planning
- Strategy / Policy
- Assessment / Governance
- Metrics
- Research Students (PGRs)
- Research Assistants (PDRAs, PGRAs)

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Association of Research Managers and Administrators

## RMA: who

- Secretarial (e.g. clerical support)
- Admin (e.g. admin support)
- Professional (e.g. Research Development Officer)
- Managerial (e.g. Head of Section)
- Senior Management (e.g. Director)
- Leadership (e.g. Pro Vice-Chancellor)

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Association of Research Managers and Administrators

## RMA: where

- Universities
  - central office, faculty office, research centre
- Research Institutes
- Other Research Performers
  - E.g. NHS, Companies
- Research Funders
  - E.g. Research Councils, Charities, Companies, Government, European Commission
- Worldwide

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Association of Research Managers and Administrators

## RMA: what

- **Not** a 'Jack of all Trades'... But multi-skilled:
  - Information, Opportunities, Advice, Costing, Pricing, Submission, Negotiation, IP, Contracts, Finance, Legal, Reporting, ICT, Influencing, Enabling, Monitoring, Development, Training, CPD, Strategy, Analysis, Returns, Advocacy, Marketing, HR, Procurement, Research Students, Ethics, Project Management, Networking, Dissemination, KT, Partnering, Governance, Planning, Policy...
- An interface

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Association of Research Managers and Administrators

## ARMA – What is it?

- Association of Research Managers and Administrators
- UK based
- Company Limited by Guarantee
- Formed in 1991 (as RAGnet)
- Over 1600 members
- The Leading UK RMA professional association

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Association of Research Managers and Administrators

## ARMA – What does it do?

- Annual Conference (2+1 days) 6<sup>th</sup>, 7-8<sup>th</sup> June 2011
- Professional Development *[more on this later]*
  - Training Seminars
  - Expert Seminars
  - Special Interest Groups
  - Study Tours
  - Mentoring
  - Publications: IRMA, Newsletter and Fact Sheets
- Representation
- Peer Support Network

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## ARMA – Who is it?: Board

- Chair: Dr Ian Carter (Sussex)
- Deputy Chair: Pauline Muya (Birkbeck)
- Deputy Chair: Dr Tony Weir (Heriot-Watt)
- Conference: Lita Denny (Manchester)
- Treasurer: Steff Hazlehurst (IoE)
- Secretary: **Simon Kerridge** (Sunderland)
- Sheena Bateman (Keele)
- Dr Ray Kent (Loughborough)
- Dr Louise Shelley (Bangor)

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## ARMA – Who is it?: Members

### ARMA Membership Growth

Year	Members
1994	50
1995	60
1996	70
1997	80
1998	100
1999	120
2000	150
2001	180
2002	220
2003	280
2004	350
2005	450
2006	550
2007	650
2008	800
2009	950
2010	1100
2011	1300

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## ARMA – Who is it?: Members

### Membership Gender Balance

Gender	Percentage
Female	75%
Male	25%

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## ARMA – Who is it?: Members

### Membership Location

Location	Percentage
Pre-1992 University	67%
Post-1992 University	24%
College in the University sector	1%
Commercial member	1%
Independent Research Organisation	1%
NHS Body	1%
Other	1%
Overseas University	1%

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## INORMS

- International Network of Research Management Societies
  - Formed 2001
  - ARMA (UK), ARMS (AU), CAURA (Can), DARMA (Den), EARMA, (EU) NCURA (US), SARIMA (SAfrica), SRA (US), WARIMA (WAfrica), GRMN (ACU), PraxisUnico (UK)
  - Biennial conference
  - 2012 Conference, Copenhagen 13<sup>th</sup>-16<sup>th</sup> May

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## Summary

- Research Management and Administration is:
  - A diverse and growing profession
  - Spread across the University and the Research Sector
- ARMA is:
  - The professional association for research managers and administrators in the UK
  - See [www.arma.ac.uk](http://www.arma.ac.uk) for more information

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# Developing a Professional Development Framework for Research Managers and Administrators

BRAM-NET

17<sup>th</sup> Feb 2011

Annual Event

With thanks to

Marie Garnett

ARMA Professional Development Manager

The Professional Association of Research Managers and Administrators

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## PDF: Project Aims

The aims of this project are to produce a well-researched and evidence-based Professional Development Framework (PDF) that:

- can underpin initial and continuing professional development for research managers and administrators across the full range of roles in HE now and for the foreseeable future.
- has relevance for research managers and administrators in the NHS, funders, private Research Centres etc.
- is capable of 'unifying' the training and development offers of all providers in this area.

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## PDF: Progress to Date

- Establishing ARMA's Board and members' expectations for the Framework
- Communicating with key stakeholders and partners for the PDF
- Identifying the **functions** undertaken by RMs and RAs and the **knowledge, skills and attributes** required to undertake them – 9 Focus Groups held with 114 participants from 35 HEIs
- Beginning to prepare the first draft of the Framework based on data from the Focus Groups

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## Expectations of the PDF

- It should be easy to use and understand
- It should unify the training and development provision of all relevant providers
- It should help to raise the profile of research management and administration as a profession
- It should engage senior members as well as junior colleagues

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## PDF: Structure of the Framework

Progression through the Framework:

- A change in focus from 'self' to 'team'
- An increase in the breadth of knowledge of research administration and management functions
- The ability to deal with more complex, non-routine tasks
- Increasing proactivity and leadership in relation to the management and administration of research
- The ability to contribute to the professional development of others

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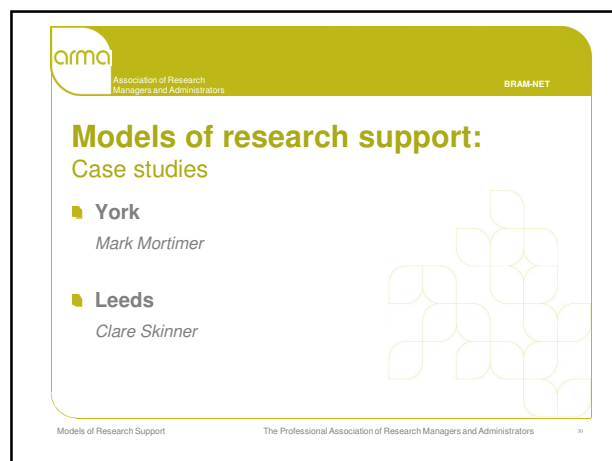
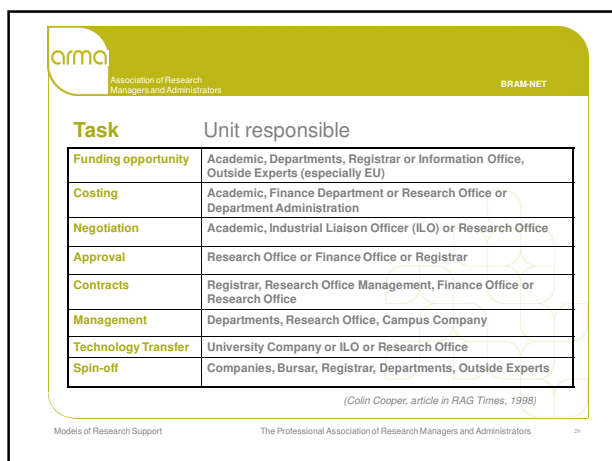
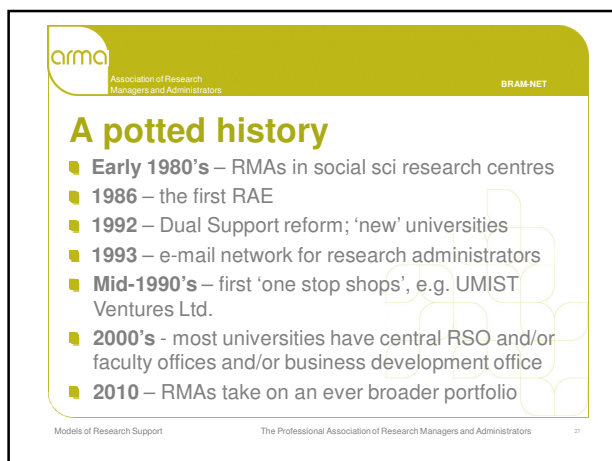
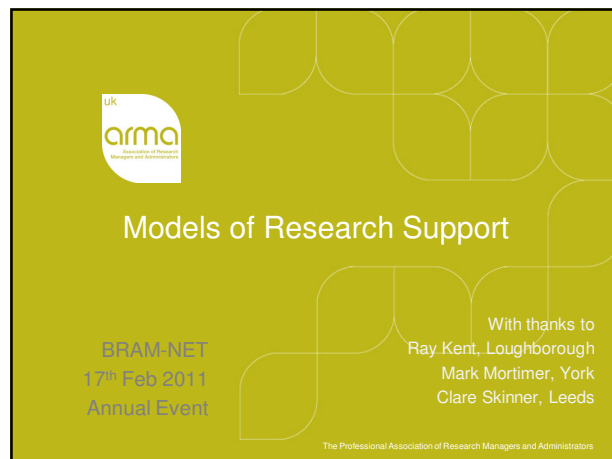
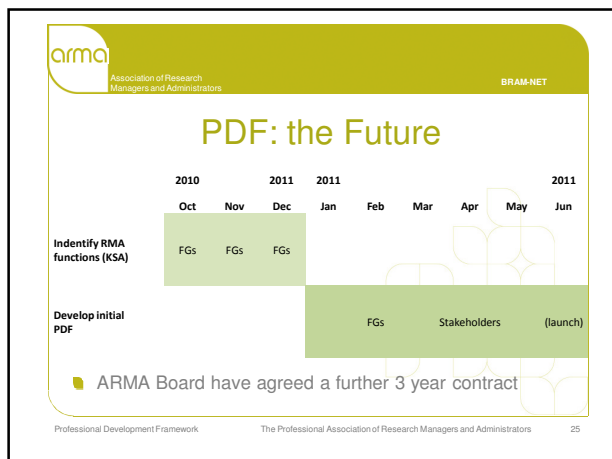
## PDF: Next Steps

- Validate the Focus Group data through further discussions with ARMA members, the ARMA Board and other key partners and stakeholders
- Iterative development of the Framework supported by feedback from ARMA members, the ARMA Board and other key partners and stakeholders
- Work with the AUA on a 'pilot' project to determine how 'attributes' or 'Professional Behaviours' are represented in the Framework
- Make recommendations about accreditation

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### University of York - Structure

- 27 departments, evenly spread over Science, Social Science and Arts & Humanities, plus a number of interdisciplinary centres
- Departments consciously dispersed across campus to promote meetings between cognate disciplines
- All departments independent - no faculty structure whatsoever
- Financial responsibility devolved to Heads of Department, contribution targets set centrally

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### Support Directorates at York

University of York Support Services

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### York R&E: Scope of Support

- Broad spectrum, centralized support
  - Pre- and post-award, primarily financial
  - IP and contract negotiation and management
  - Research strategy, governance, ethics, marketing
  - Research Excellence Framework
  - KT, business collaboration, commercialisation
  - Regional engagement
  - Continuing Professional Development support
- But not...
  - Graduate student admin
  - Costings (done by local admin staff or PIs)
  - Student enterprise

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### Stages of Research

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### Issues to Consider for York

- What is the correct balance of central to departmental support?
- Has York outgrown a non-faculty model?
- Are there genuine synergies arising from putting research and enterprise into the same structure?
- Does CPD belong here?

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### Leeds – View from a Faculty

- Medicine and Health is one of nine Faculties within the University of Leeds
- It's the largest with over £56M of research expenditure in 2009-2010
- Has a Federal Faculty model with four schools including a School of Medicine and School of Dentistry

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## Leeds – Finances

- The University operates a pass through model for income to the Faculties and then uses a Resource Allocation Model (RAM) to charge for central services
- The Faculty of Medicine and Health operates the same model for its Schools

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## Leeds – Review of Structure

- In 2007 central research support commissioned an options report to consider
- 'the structures, resources, processes and systems for research support at the University of Leeds and to propose recommendations for change.'
- 6 options were considered

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## Leeds – Options Considered

- Increased centralisation
- No change to current situation
- Transfer of database and claims function to central finance
- Hybrid model of devolution of database and claims to some Faculties but not others
- Hybrid model of devolution of database and claims to all Faculties
- Total devolution of all research support

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## Leeds – Recommendation

- A devolved cradle to grave systems will give academic staff access to a one stop shop for all their research needs, staffed by discipline specialists with local knowledge of researchers and their projects.
- The co location of pre and post award support will streamline processes, there will be a greater coherence of administration through all stages of the award life- cycle.

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## Leeds: Central Research Support

- Four teams
  - Operations
  - Policy and Performance
  - Contract Review
  - EU/International

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graph TD
    DF[Director of Finance]
    DGS[Director of Graduate School / Head of Research Support]
    RFT[Research Finance team<br/>Research Manager<br/>Pre-Award team<br/>Post-Award team]
    GS[Graduate School<br/>Graduate School Manager<br/>Student Co-ordinators]
    RGE[Research Governance and Ethics<br/>QA Manager<br/>QA Monitors<br/>Ethics Co-ordinator]
    DEKT[Director of EKT/Head of Research Support]
    IC[Impact & Communications<br/>E&I programme manager<br/>Project Officer<br/>Press Officer UoL+Uk<br/>Marketing Manager]
    PDLT[Pro-Dean L&T]

    DF --> RFT
    DGS --> GS
    DGS --> RGE
    DGS --> DEKT
    DEKT --> IC
    IC -.-> PDLT
    IC -- "3 Enterprise Fellows<br/>CPD Lead<br/>CPD support" --> PDLT
    
```

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**Leeds: Issues**

- Nine Faculties – nine voices despite M&H having nearly 40% of the University turnover
- Strategic oversight of interdisciplinary bids – silo working
- Staff mobility – almost all of M&H staffing was recruited from other Faculties, who will invest in junior/training posts?
- Economic Climate – should Faculties aim for a 'strategic mass' by working across a number of partners Faculties
- Less is more – who decides?

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**Models of Research Support**

- Sorry... there is no one size that fits all
- Tailor research support provision and structures to the needs (and structures?) of the institution

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**Questions and Answer Session**

BRAM-NET  
17th Feb 2011  
Annual Event

Simon Kerridge, ARMA  
Head of Graduate Research Support &  
Assistant Director (Research); Academic Services  
University of Sunderland

The Professional Association of Research Managers and Administrators

### Mentoring Agreement

Mentee Name:  
 Organisation: redacted  
 ARMA Member No:  
 Address:  
 Email:  
 Phone:

Mentor Name: **Simon KERRIDGE**  
 Organisation: UNIVERSITY OF SUNDERLAND  
 ARMA Member No: 024597  
 Address: 212 edinburgh buildings, dexter rd. SR1 3SD.  
 Email: simon.kerridge@sunderland.ac.uk  
 Phone: 0191 515 2285

### Issue/Skill Area to be mentored

Describe the key areas of problems/issues/skills that need to be addressed through the mentoring process. Please break these down into achievable tasks, worked on within a mentoring context, and within the agreed timeframe):

Personal development : planning  
 for future career development

State the desired outcome(s) of the mentoring process:

To be in a stronger position to  
 progress to a more senior level in  
 research administration / management.

### Certification and Commitment

I certify that my organisation accepts that any of its employees participating in the mentor programme do so as volunteers, not as representatives of their own employer(s) nor as the agents of ARMA. This volunteer status means that any advice provided by a member of ARMA during the programme is informal, so that where critical matters are involved, my organisation may need to seek formal professional advice. I acknowledge that my involvement in this programme will be considered to be voluntary for insurance purposes.

Name of Mentor: SIMON KERRIDGE Signed: _____ Date: 9TH MARCH 2011	Name of Mentee: redacted Signed: _____ Date: _____
Name of Mentor's Manager: redacted Signed: _____ Date: _____	Name of Mentee's Manager: redacted Signed: _____ Date: _____

Send completed Mentor Agreements to the ARMA office at PO Box 499, Exeter EX2 9DE  
 [Or complete this on-line, print off, sign, and send to rosemary@arma.ac.uk]



# fEC for Commercial Activities

Simon Kerridge


Assistant Director, RDIS

University of Sunderland

[www.grs.sund.ac.uk](http://www.grs.sund.ac.uk)  
[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

**Research, Development and Innovation Services**  
 How Research is Funded

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# Outline

- Sunderland Context
- Research Costing
- Commercial Costing
- fEC Costings
- Discussion

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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# Sunderland – Projects

- 140 research projects: value £12,883,020
  - Annualised value: £4,386,716
- 507 reach-out projects: value £31,200,000
  - Annualised value: £8,270,000

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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# Sunderland - Consultancy

- University
  - School / PRA / additional payment
- Personal (Code of Practice)
  - 1<sup>st</sup> 10 days 90%
  - 2<sup>nd</sup> 10 days 75%
  - 3<sup>rd</sup> 10 days 50%

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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# Sunderland – Approval Process

- GrAppl form
- USE form
- COP form
  - PI
  - School
  - University

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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# The Sunderland Context

Graduate Research School

Research

Business Development

Commercial

External Finance

Teaching

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## The Sunderland Context

**Research Development and Innovation Services**

- Research, Commercial - fEC


**Planning & Finance**

- Teaching ... fEC

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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## Research Costing

**Was:**

**Directly Incurred**

**Directly Allocated**


**135% overhead**

**Now: ... fEC**

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## Commercial Costing

**Was:**

**Directly Incurred**

**Directly Allocated**

**100% overhead (or day rate)**

**10% Management Charge**


**20% ‘mark up’**

**Now: ... fEC – as per Research**

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## fEC Costing

**DI**

**DA**

**Estates (FTE)**


**Indirect (FTE)**

**+/- Surplus → Price**

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## Research Price Distribution

**Was:**

**Directly Incurred → Project**

**Directly Allocated → School (or PRA)**

**agreed% overhead → 50:25:25**

**surplus to 135% → 50:25:25**


**surplus over 135% → PRA**

**deficit → PRA then School then Uni**

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## fEC Costing

**DI → expenditure**

**DA → cost centre**

**Estates (FTE) → University**

**Indirect (FTE) → Split 50:25:25**


**+/- Surplus → PRA / agreed split**

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### fEC Price Distribution


DI → project  
DA → school / PRA  
Estates (FTE) → University  
Indirect (FTE) → Split 50:25:25  
surplus over cost → PRA  
deficit → PRA then School then Uni\*

\* Not normally do this!

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### fEC Price Distribution - Example

Costs			
DI	Staff	30000	1 FTE
DI	Other	10000	
DA	Staff	5000	0.1 FTE
DA	Estates	6600	
Ind	Indirect	38500	
total		90100	

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### fEC Price Distribution - Example

Costs				Distribution	
DI	Staff	30000	1 FTE	Project	30000
DI	Other	10000		Project	10000
DA	Staff	5000	0.1 FTE	School	5000
DA	Estates	6600		Uni	6600
Ind	Indirect	38500		Uni	19250
total		90100		School	9625
				PRA	9625
				total	90100

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### fEC Price Distribution - Example

Distribution	Price	100000
Project	30000	Project 30000
Project	10000	Project 10000
School	5000	School 5000
Uni	6600	Uni 6600
Uni	19250	Uni 19250
School	9625	School 9625
PRA	9625	PRA 9625
total	90100	Surplus 9900

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[www.solutions.sund.ac.uk](http://www.solutions.sund.ac.uk)

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### fEC Price Distribution - Example

Price	100000	Price	80000
Project	30000	Project	30000
Project	10000	Project	10000
School	5000	School	5000
Uni	6600	Uni	6600
Uni	19250	Uni	19250
School	9625	School	9150
PRA	9625	PRA	0
Surplus	9900	Surplus	0

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### fEC for Commercial Activity

Discussion

Questions

Heckling

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Research, Development and Innovation Services  
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Developing a Professional Development Framework

Progress Update

- 1. Marie Garnett, Pauline Myva and Ian Carter have held meetings with key stakeholders (PraxisUnico, AURL, LFHE, Vitae, UKCGE, AUA) to raise awareness of the PDF project and to plan stakeholder review and input.
- 2. Marie Garnett has received 'key individuals' and other interested parties' views on the PDF, including:-
  - All ARMA Board members
  - David Langley (Bristol)
  - Mark Abrams (Coventry)
  - Ailsa Miller (CREST)
  - Jennifer Johnson (Leeds)
  - John Starup Westensee (DARMA)
  - Andrew Fairweather-Tall (Oxford)
  - Peter Hedges (Warwick)
  - Mel Nunn (MRC)
  - Rosie Beales (RCUK)
  - Matt Levi (HEATED)
  - Stephen Conway (Oxford)
  - Barbara Thomas (Southampton)
- 3. Marie Garnett has established an ARMA Special Interest Group for the PDF and members' expectations of the PDF have been sought.
- 4. Marie Garnett has gathered data on the functions undertaken and knowledge, skills and attributes required by research administrators and managers, via 9 Focus Groups with a total of 114 participants from 35 different HEIs. Statistics are provided in the tables below:

Focus Group Attendees (by Central Office and Departmental/Faculty Office)

Focus Group	Date	Attendees	Central	Departmental
Manchester	18.10.11	8	2	6
North East	16.11.10	15	15	0
Keele	17.11.10	7	3	4
Bloomsbury	22.11.10	10	5	5
Coventry	24.11.10	10	7	3
East Midlands	3.12.10	14	13	1
Bangor	6.12.10	8	2	6
UKCGE	9.12.10	28	18	10
Edinburgh-based	14.12.10	14	8	6
TOTAL		114	73	41

Institutions participating in the Focus Groups

HEI	Participants	HEI	Participants
Manchester	8	UCL	1
Newcastle	11	Oxford Brookes	1
Sunderland	3	Bedfordshire	1
Teeside	1	Aston	1
Northumbria	1	Canterbury Christ Church	1
Keele	7	UoW, Newport	1
IoE	6	Sheffield	1
Birkbeck	1	Birmingham	1
Coventry	10	Cumbria	1
Leicester	5	Hull	1
Loughborough	3	London South Bank	1
Nottingham	3	Lincoln	1
Northampton	1	Edinburgh Napier	1
DMU	2	Edinburgh College of Art	1
Bangor	8	Queen Margaret	1
Heriot-Watt	9	SOAS	3
Edinburgh	3	Bournemouth	1
Hull York Medical School	2		

- 5. All data from the Focus Groups (including 12 hours of digital voice recordings) have been processed to produce:
    - A cluster chart showing the range of functions that each participant is involved in
    - A cluster chart showing the functions described by each Focus Group
    - A log of the attributes of research managers and administrators
    - A log of the tasks undertaken and knowledge and skills required for each of the 29 functions (28 original + Managing a Research Office)
- Progress towards Work Package 2 (ref. Project Plan)
- 6. An initial draft of the PDF structure has been produced as a starting point for further discussion.
- Next Steps
- Review other available Frameworks and identify other possible approaches to structure and presentation. Learn from and utilise 'best practice' as appropriate.
  - Cross-check and build on Focus Group data with reference to National Occupational Standards and HERA/Hay descriptors.
  - Gather data from research managers and administrators to fill gaps in the PDF.
  - Enlist key stakeholders (e.g. AURL/PraxisUnico) to help fill in other gaps in the data.
  - Enlist the help of Focus Group participants and SIG members to review and feedback on detailed sections of the PDF

- Sunday 7 April**
- 09.00 – 17.00 Conference office open
  - 12.00 – 20.00 Buses from Southampton Central Station
  - 11.00 – 20.00 Registration in halls of residence
  - 12.00 – 18.30 Visits programme
  - 18.30 – 20.30 Dinner (pre-booked only)
  - 20.30 onwards Social programme (for early arrivals)
- Monday 8 April**
- 07.30 – 08.30 Breakfast (for weekend arrivals)
  - 09.00 – 18.00 Conference office open
  - 10.00 – 18.00 Exhibition
  - 09.00 – 18.00 Buses from Southampton Central Station
  - 09.00 – 20.00 Registration in halls of residence
  - 09.30 – 13.00 Visits programme
  - 12.00 – 13.30 Lunch
  - 14.00 – 15.00 Keynote presentations A
  - 15.00 – 15.45 Refreshments and Networking
  - 15.45 – 17.15 Working session 1
  - 17.30 – 18.30 AUA Annual General Meeting
  - 18.00 – 18.45 Dinner (for 'Whistle Down The Wind' theatre goers only)
  - 18.45 – 19.30 Dinner
  - 20.00 – 01.00 Social Programme
- Tuesday 9 April**
- 07.30 – 08.30 Breakfast
  - 08.15 – 17.30 Conference office open
  - 10.00 – 18.00 Exhibition
  - 09.00 – 10.30 Working session 2
  - 10.30 – 11.15 Refreshments and Networking
  - 11.15 – 12.45 Working session 3
  - 12.45 – 13.45 Lunch at Highfield Campus
  - 14.00 – 15.00 Keynote presentations B
  - 15.00 – 15.45 Refreshments and Networking
  - 16.00 – 17.00 Roundable sessions
  - 19.30 onwards Drinks Reception and Conference Dinner with Live Band and Disco
- Wednesday 10 April**
- 08.00 – 09.00 Breakfast
  - 08.30 – 14.00 Conference Office open
  - 09.30 – 11.00 Working session 4
  - 11.00 – 11.30 Refreshments and Networking
  - 11.30 – 13.00 Working session 5
  - 13.00 – 14.00 Lunch at Highfield Campus
  - 13.00 – 16.00 Buses to Southampton Central Station
  - 13.00 – 19.00 Visits programme.

**The Visits Programme**

Visits to a wide selection of local and regional attractions have been arranged. Please note that these are only available for delegates who have pre-booked. When booking a visit, please

make a careful note of the starting-point and any specific instructions. Remember to bring waterproofs and appropriate footwear for all walks

- Sunday 7 April**
- 12.30 – 18.00
  - Portsmouth Historic Dockyard  
Enjoy the Mary Rose, HMS Victory, HMS Warrior and the Royal Naval Museum.
  - 12.00 – 18.00
  - Isle of Wight – Osborne House  
Visit Queen Victoria's home across the Solent
  - 12.30 – 18.00
  - Marwell Zoological Park, Winchester  
Walking with beasts and birds
  - 14.00 – 17.00
  - New Forest Walk
  - 14.00 – 17.00
  - Guided Walk – Southampton  
Visit the historic Old Town, with its medieval walls, towers and gateways.
- Monday 8 April**
- 09.30 – 13.00
  - Beaulieu Motor Museum  
See some of the last century's most famous motors
  - 09.30 – 13.00
  - Bucklers Hard, Beaulieu  
18<sup>th</sup> century ship-builders' village on the banks of Beaulieu River.
  - 09.30 – 13.00
  - City of Winchester  
Visit the Cathedral and view the College.
  - 10.00 – 12.30
  - Guided Walk – Southampton
  - 10.00 – 12.30
  - Shopping in Southampton  
Bring your cheque book!
- Wednesday 10 April**
- 13.30 – 17.30
  - Museums of Southampton  
Visit one or more of the city's many fine museums.
  - 13.30 - 17.30
  - Shopping in Southampton
  - 14.00 – 17.00
  - Southampton Football Stadium  
Follow in the footsteps of Matthew Le Tissier at the Saints' new St Mary's Stadium.

**SOCIAL PROGRAMME**

- Sunday 7 April**
- 20.30 – 23.00
  - Mambo Jambo/Latin evening  
Sit back and enjoy the Latin sound of Mambo Jambo, or try a salsa or a rumba on the dance-floor.

<b>Monday 8 April</b>	19.00 – 23.30	Riverboat Shuffle Enjoy supper and entertainment as you cruise Southampton Water <i>There will be a charge of £10.00 which includes supper and entertainment</i>
	19.00 – 23.00	“Whistle Down the Wind” Take a theatre trip to see Andrew Lloyd Webber’s spectacular show <i>There will be a charge of £15.00</i> <i>An early supper will be provided for theatre-goers</i>
	20.00 – 22.00	Titanic Experience Visit this exhibition commemorating the 90 <sup>th</sup> anniversary of the liner’s departure from Southampton.
	20.00 – 22.00	The Pub Quiz
	20.00 – 22.00	Live Music with <i>Peter Pad and the Peas</i>
	22.00 – 01.00	Disco
<b>Tuesday 9 April</b>	20.00 – 01.00	Conference Dinner and Live Band <i>Rubber Soul</i> and Disco Dine in style in Southampton’s QEII terminal overlooking Southampton Water.

**Early Arrivals**  
*For meal venues, please refer to your personal programme*

**Saturday 6 April**  
14.00 onwards Registration, halls of residence  
18.30 – 20.30 Dinner, Staff Social Centre/Garden Court, Highfield Campus (pre-booked only)

**Sunday 7 April**  
08.30 – 09.30 Breakfast  
12.00 – 17.00 AUA Conference office open (Staff Social Centre)  
12.00 – 20.00 Buses from Southampton Central Station  
11.00 – 20.00 Registration in halls of residence  
12.00 – 18.30 Visits programme  
18.30 – 20.30 Dinner (pre-booked only)  
20.30 onwards Social programme

**Monday 8 April**  
07.30 – 08.30 Breakfast (for weekend arrivals)  
09.00 – 18.00 AUA Conference office open (Staff Social Centre)  
10.00 – 18.00 Exhibition (Students’ Union Ballroom)  
09.30 – 13.00 Visits programme  
12.00 – 13.30 Lunch  
13.30 onwards Join main Conference programme

**The Newcomers’ Programme**

**Sunday 7 April**

18.30 – 19.00	Reception
19.00 – 20.30	Dinner
20.30 onwards	Social programme

**Monday 8 April**

09.15 – 09.30	Introduction and welcome Alison Johns, Chair AUA
09.30 – 10.00	What you want and what you can get John Ryan, Vice Chair AUA
10.00 – 10.15	Surviving your first AUA Conference Sue Holmes, Sheffield Hallam University
10.15 – 11.00	Refreshments and networking
11.00 – 11.45	Current issues in HE Dr John Hogan, University of Durham
11.45 – 12.30	Planning your career in HE John Ryan, Vice Chair AUA
12.30 onwards	Join main conference programme

**The International Delegates’ Programme**

**Sunday 7 April**

18.30 – 19.00	Reception
19.00 – 20.30	Dinner
20.30 onwards	Social programme

**Monday 8 April**

09.15 – 09.30	Welcome and introduction Jo Doyle, Head of the University of Southampton’s International Office
09.30 – 10.15	History, Structure and Funding of British HE Dr Tony Rich, Registrar, University of Essex
10.15 – 11.00	Refreshments and networking
11.00 – 11.45	Developments in UK HE – Looking Forward Dr Tony Rich, Registrar, University of Essex
11.45 – 12.30	Panel discussion
12.30 onwards	Join main conference programme

**The Branch and International Correspondents’ Programme**

**Sunday 7 April**

14.30 – 15.30	New Branch Correspondents’ Meeting
15.30 – 17.00	Networking sessions – Branch Correspondents International Correspondents
18.30 – 19.00	Reception
19.00 – 20.30	Dinner
20.30 onwards	Social programme

Conference Evaluation Process

As part of the AUA’s commitment to continually seek to improve the quality of the Annual Conference, we will be emailing all delegates a short questionnaire immediately after the event. The questionnaire is easy to use and will only take a few minutes to complete. This is your opportunity to let us know what we are doing well and any areas for improvement. Your support in completing the

questionnaire will be much appreciated. This year the process of handling and analysing feedback on the conference and individual sessions is being handled on the AUA's behalf by vantagepoint management consulting. Vantagepoint will dispatch the email questionnaire on behalf of the AUA and compile a comprehensive report on your feedback.

You will also have the opportunity to comment on individual conference sessions by completing short feedback sheets during the course of the conference. Feedback forms will be distributed by session presenters and once completed should be returned to the vantagepoint stand in the main conference hall.

### Key notes

**Use same copy and photos as in Conference Programme**

### Working sessions

#### Key to session themes

- C&IT
- CI
- (communications and information technology)
- (current issues)
- HRI
- (human resources issues)
- MARC
- (marketing, recruitment and communications)
- MGY
- (managing yourself)
- SFS
- (specialisms for specialists)
- SOP
- (strategic and organisational planning)
- STE
- (students: managing the student experience)
- WWP
- (working with people)

#### Working session 1

Monday 8 April 15.45-17.15

- 101 Effective web sites (C&IT)
- 102 Smart cards and Smart cities (C&IT)
- 103 Working with lists in Microsoft Excel (C&IT)
- 104 Facts, phrases and tools: the reality of technological change in education (CI)
- 105 Plagiarism: going beyond catch-and-punish thinking (CI)
- 106 Politics and HE - uneasy bedfellows across the globe (CI)
- 107 The impact of 'reach - out' on HEI (CI)
- 108 University pricing policies - still too cheap to be cheertu? (CI)
- 109 Ethnicity and cultural diversity: implications of the Race Relations Amendment Act (RRAA) 2000 (HRI)
- 110 Got to get you into my life (HRI)
- 111 On-the-job training - how do you make it work? (HRI)
- 112 Using NVQs in Continuing Professional Development (HRI)
- 113 Design - I can do that (MARC)

- 114 Getting in to print (MARC)
- 115 Career planning for higher education administrators (MGY)
- 116 Joining the AUA CPD Award (MGY)
- 117 Reflective learning for AUA CPD Award participants (MGY)
- 118 THINK - about your presentation skills (MGY)
- 119 Business planning in a non academic department (SFS)
- 120 Charging for space (SFS)

#### 121 How research is funded in the UK (SFS)

- 122 Medical and health administrators forum 1 (SFS)
- 123 So you think estates management is easy!! (SFS)
- 124 Travel policy - can it be green and provide value for money? (SFS)
- 125 Developing and implementing a strategic programme in higher education institutions (SOP)
- 126 Portfolio planning in HE - a case study (SOP)
- 127 The rise and fall of government contributions to HE in Australia and the UK (SOP)
- 128 Under new management.....but still the same old faces? (SOP)
- 129 An independent review of student complaints for HE - progress so far (STE)
- 130 Benchmarking in universities - the experience of the English universities benchmarking club
- 131 Disabled student - developing roles and responsibilities (STE)
- 132 Student Fees in Canada (STE)
- 133 Student induction programmes - a reason for withdrawal (STE)
- 134 Undergraduate student finance in Scotland - an update (STE)
- 135 Appraisal - a workshop for first time appraisers (WWP)
- 136 Communications for managers (WWP)

#### Working session 2

Tuesday 9 April 09.00-10.30

- 201 A case study of the introduction of e-procurement in a university environment (C&IT)
- 202 Benchmarking IT services (C&IT)
- 203 Going digital: managing an online distance education course (C&IT)
- 204 Integrating your Microsoft Office applications (C&IT)
- 205 My LSUE anytime-anywhere Access to academic and support services (C&IT)
- 206 South Yorkshire e-learning programme (C&IT)
- 207 An introduction to the Freedom of Information Act (CI)
- 208 Funding trends: the rise of partially funded and earmarked projects (CI)
- 209 Lifelong learning and widening participation (CI)
- 210 The new post 16 Curriculum 2000 - what is actually happening? (CI)
- 211 Graduate students as 'customers' : how can staff development contribute? (HRI)
- 212 Lessons on equality from Northern Ireland (HRI)
- 213 Revised pay/negotiating structures (HRI)
- 214 Bringing customer focus to administrative services (MARC)
- 215 Customer care and cultural change (MARC)
- 216 Making the most of international scholarships (MARC)
- 217 Understanding your market (MARC)
- 218 Using the marketing mix to communicate your message and reach key audiences (MARC)
- 219 An introduction to problem solving for senior managers (MGY)
- 220 Committee Servicing 1 - Part 1 (MGY)
- 221 Drop in session for AUA CPD Award participants (MGY)



222	Filing systems that really work (MGY)
223	UK - Canada exchange scheme (MGY)
224	Basic budget management (SFS)
225	Medical and health administrators forum 2 (SFS)
226	Research ethics for research administrators (SFS)
227	Sustainability: what is it and why bother me? (SFS)
228	Do's and don'ts of faculty restructuring (SOP)
229	Implementing a risk management programme (SOP)
230	The end of university administration (SOP)
231	Identifying & implementing a new student record system (STE)
232	Nipping it in the bud - effective handling of student complaints (STE)
233	Student records - managing short roll on/roll off courses (STE)
234	Undergraduate non-completion and persistence in higher education - A longitudinal study (STE)
235	Assertiveness - improve your personal effectiveness (WWP)
236	Coaching and mentoring - what is the difference (WWP)
237	Developing people: strategy into action (WWP)
238	Effective use of humour at work (WWP)
239	Hints & tips for minute taking (WWP)
240	Improving staff performance through performance review and objective setting (WWP)
241	Influencing skills part 1 (managing conflict) (WWP)
242	Making the transition from team player to team leader (WWP)
Working session 3	
Tuesday 9 April 11.15-12.45	
301	Freedom of Information: The Open University Business School's records management programme : a case study (C&IT)
302	Understanding Access 2000 Part 1 (C&IT)
303	Change management (CI)
304	Non-pay budget for amateurs (CI)
305	Developing an integrated training programme for central administrative staff (HRI)
306	Disability equality issues for managers and HR specialists (HRI)
307	Lesbian and gay rights in a changing context (HRI)
308	Media training (MARC)
309	One big happy family - strategic internal communications (MARC)
310	Web and e-marketing strategies (MARC)
311	Achieving work/life balance (MGY)
312	Can you, er, hear me at the back (MGY)
313	Committee Servicing 1 - Part 2 (MGY)
314	Drop in session for AUA CPD Award mentors (MGY)
315	Making the most of your appraisal (MGY)
316	RSI Awareness (MGY)
317	Bus provision innovation at Southampton (SFS)
318	Collaborative links with NHS Trusts (SFS)
319	Finance - friend of foe? (SFS)
320	Sustainability : making management introduction easy (SFS)
321	The Framework Programme 2002 - 2006: A guide to getting European research funding (SFS)
322	Assessing quality & impact of awards funded by AH/B & analogous bodies (SOP)

323	Developing successful organisational strategies (SOP)
324	Modernising administration through effective project management (SOP)
325	FAE 2001: the fat lady sings (SOP)
326	Technology - always a tide of change? (SOP)
327	Who needs registrars? (SOP)
328	Implementation of on-line learning for off-site students: administrative and academic concerns (STE)
329	Milestones from application to career: web-based information designed by students for students (STE)
330	Oh no ! It's that woman from special needs again... (STE)
331	Online mentoring - dissemination of learning from the AGCAS MERITS Pilot (STE)
332	Postal registration - lightening the load? (STE)
333	Student support - fees, grants and loans (STE)
334	Student support and widening participation (STE)
335	Coaching Skills to improve Performance (WWP)
336	Influencing skills part 2 (managing difficult people) (WWP)
337	Problem solving in teams (WWP)
338	The skills of successful facilitation (WWP)
339	What to do when all else fails - a strategy for dealing with poor performance (WWP)
Working session 4	
Wednesday 10 April 09.30-11.15	
401	A framework of IT based course delivery and management system for distance Learning (C&IT)
402	Managing e-mail (C&IT)
403	Understanding Access 2000 Part 2 (C&IT)
404	Globalisation, Bologna and competitiveness (CI)
405	New models and new partners for quality assurance in health (CI)
406	The changing face of governance (CI)
407	AUA CPD Award as a staff development strategy (HRI)
408	Innovative development for senior managers: the Wolverhampton / Coventry partnership (HRI)
409	The Human Rights Act and the Disability Discrimination Act in practice - the practical implications for universities. (HRI)
410	New for old? The student perspective on institutional status (MARC)
411	The UCAS tariff and its growing impact on entry to HE (MARC)
412	Breaking out of comfort Zones (MGY)
413	Committee Servicing 2 - Part 1 (MGY)
414	Effective reading (MGY)
415	How to be appointed as a senior manager (MGY)
416	Secondment - an alternative route for staff development (MGY)
417	University administration: an international perspective from down under (CANCELLED)
418	Evaluating the benefits of applying the EFQM excellence model in higher education (SFS)
419	Sustainable travel in higher education (SFS)
420	Using Covey's 7 habits of highly effective people' (SFS)
421	Maximising the commercial potential of your research and your people (SOP)
422	Process modelling & redesign in higher education (SOP)
423	Strategy - an essential navigational tool (SOP)
424	Who runs universities? (SOP)

- 425The UNITEMORI Student Living Report 2002 (STE)
- 426What's in a registry (STE)
- 427Swimming with sharks, dancing with wolves (WWP)
- 428What makes for a more effective meeting/the 6 behaviours of an effective chair (WWP)

Working session 5  
Wednesday 10 April 11.30-13.00

- 501Cutting through the jargon (C&IT)
- 502Making the most of power point presentations (C&IT)
- 503The changing face of HE in the 21st Century - how ICT is affecting teaching, learning and administration (C&IT)
- 504Commercial opportunities in the life sciences sector - how to maximise benefits and minimise risks (CI)
- 505Current issues in American HE (CI)
- 506Distance/E-learning workshops: sharing ideas and experiences (CI)
- 507Equal opportunities in 2002: new law, new challenges (CI)
- 508HE in Argentina : common problems and opportunities ? (CI)
- 509Managing the internal academic audit process at UWE (CI)
- 510The arts culture interface: universities and the wider community / Arts Council of England (CI)
- 511HERA - job evaluation scheme (HRI)
- 512Implementing management development in HE (HRI)
- 513Investors in people: making it work for your HEI (HRI)
- 514Making the case (HRI)
- 515Can time be managed? (MGY)
- 516AUA's Code of professional standards (MGY)
- 517Committee Servicing 2 - Part 2 (MGY)
- 518Preparing for your interview (MGY)
- 519Relaxation (MGY)
- 520Skills for mentors (MGY)
- 521Devolution - or revolution? (SFS)
- 522IPR policies for institutions: managing risks and maximising rewards (SFS)
- 523Using the quality model in HE (SFS)
- 524Handle with care - common problems in student affairs (STE)
- 525Interviews and interviewing - making the most of a bad job (WWP)

Exhibitors

The Association of University Administrator (AUA)

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