

## **TRAC**

### **Identification of staff as Laboratory or Desk - An explanation**

The note dated 24 May 2010 has been superseded (but is shown below).

Schools and TMG raised the issue concerning staff who carry out both Laboratory and Desk based research (May and June 2010). Under the previously issued guidance (24 May 2010), the designation of staff was to be rigorously adhered to in applications. The issue was taken to the TRAC HelpDesk who initially confirmed the Exeter approach, but after consulting the Research Councils revised their position and stated that our approach was overly rigorous and could be relaxed.

In consequence: Staff may be costed as Laboratory or Desk depending on the nature of the application. (This affects the fEC Estates rate only). Staff do **not** have to be costed according to their designation on the staff list.

We will continue to ask for a designation for staff as a basis for the year-end TRAC calculations; this will ask for a percentage of Desk and Lab by person rather than the either/ or approach used previously. As before, most staff will probably remain 100% in a single category. We would expect that the proportion of staff in the Desk/ Lab categories would reflect the proportions of those charged to projects.

The Research Accounting Section (RAS) will apply the Desk/ Lab designation as the default estates rate (where practicable), and will therefore rely on Schools/ Colleges to advise if a different rate is required. RAS may challenge a change to ensure that it is justified.

The note dated 24<sup>th</sup> May 2010 is shown below. Although it is now superseded, the principles of the calculation remain unchanged. The only change is the inflexibility regarding the use of Desk or Lab rates, where the note insists that an individual must be costed according to the category to which he or she was designated: the nature of the project and not the staff designation now dictates which rate should be used on grant applications.

**Neil Chamberlain-Keen**

16 July 2010

## **TRAC**

### **Identification of staff as Laboratory or Desk - An explanation**

**This note was released on 24<sup>th</sup> May 2010 and has now been superseded**

#### **Introduction**

TRAC recognises that the overhead cost of staff working in laboratory environments will differ significantly from those working in a “desk” environment. As a minimum, institutions are required to calculate a lab rate and a desk rate for the fEC Estates Rate for annual reporting; they are allowed to use a greater number of rates in practice.

At Exeter, we used a three-rate system for a few years: Lab, Desk, and Mixed, where the rates were specific to groups of schools. The rate used depended on which school the researcher worked in. The mixed category applied to schools which operated a significant mix of Lab and Desk research. SECAM - Engineering, Maths and Computer Sciences - was an example of mixed use: laboratories required for engineering, and ordinary office space for maths and computing.

This system became difficult to justify with the increasing consolidation of schools. HUSS, a desk school, acquired Archaeology from a mixed school. SECAM became EMPS, taking on Physics, formerly a lab school, leaving Biosciences as the only school in the Lab group.

The TRAC Management Group considered the options, and decided that the best approach was to ignore school and department and draw the distinction at the lowest level, that of the researcher (Summer 2009).

#### **Data from schools**

Schools are provided with a list of staff and asked to designate them as Desk or Lab. For the majority of schools this exercise involves putting all their staff against one or other columns. For the schools previously identified as mixed, their staff have to be allocated across the two.

This is not always easy because some staff will use laboratory facilities for one project but not for another.

The data are combined into a single list so that staff involved in costing research projects (Research Accounting Section) can select the appropriate Estates rate, depending on the staff named on the project.

The list itself is also used as the basis for the annual TRAC fEC rate calculation. The list is used for splitting both estates costs and staff FTEs between Lab and Desk. Cost divided by FTEs is the method for calculating the fEC rates.

As the fEC rates are calculated once a year, staff designations (lab or desk) are fixed for the year ie 1<sup>st</sup> February to the following 31<sup>st</sup> January. Whilst it is not expected that staff will need to change very often, this is the opportunity to do so. The existing staff list designation will run to 31<sup>st</sup> January, but will be superseded by the new list on 1st February. The new list will have been prepared the previous autumn, but the new designation cannot be used until 1<sup>st</sup> February.

## **The fEC Estates Rate calculation**

We are running a 2 rate system for Estates Rates: Laboratory and Desk. To arrive at the rate, we divide the relevant costs by the total FTEs.

Relevant costs are space costs and equipment-related costs.

To get the costs, we split space costs and equipment-related costs into Teaching, Research and Other. This is based on surveys completed by the schools. The fEC rates are based on the Research element only. Details of the FTEs are below.

We have to calculate 2 different rates for Estates: Laboratory and Desk.

To carry out this calculation, we have to categorise each member of staff ie Desk or Lab. This is done by asking schools to allocate staff accordingly. Staff FTEs are split desk or lab per the list and become the denominator in the rate calculations.

## **Staff designations are fixed**

The TRAC Guidance requires that a member of staff once designated Lab or Desk should use that designation in any applications. This prevents any over-recovery at the expense of the Research Councils, and any under-recovery at the expense of the university. Recovery is where you generate income to cover your costs, in this instance your space and equipment costs.

For the sake of convenience, we are equating cost with price. However, almost no research gets funding (price) sufficient to cover all of the projects full economic costs. For Research Councils and other government bodies, there is a proportional relationship between cost and price (price is 80% of cost). For other types of sponsor, the relationship between price and cost can be much looser.

It should be remembered that the functions of fEC are:

- Calculating costs consistently, and allocating these costs to the activity (charging them to a project).
- Providing a “proper” cost ie Full Economic (fEC), which is the starting point in reaching a price.

## **Demonstration of using the wrong staff designation**

I have attached a simple model (excel file) to show what happens to cost recovery when staff move between categories. The figures are made up but they give fEC rates that are similar to the actual rates. The model has several scenarios, applying the rates generated from year 1 figures for costs and staff FTEs to year 2 activity. The staff FTEs in year 2 are in effect those costed to grant applications that are awarded. It is assumed that costs between years do not change, because the rates are in fact indexed to take this into account. It is also assumed that the numbers of staff are steady state.

<b>TRAC - Desk &amp; Lab Estates rate</b>				
<b>Model of effects of "mis-costing" staff</b>				
<b>Year 1</b>				
	<b>Desk</b>	<b>Lab</b>	<b>Total</b>	
Cost £	400,000	1,200,000	1,600,000	Research costs of Space and Equipment
FTEs	100	100	200	Research Acad (direct) + RAs + Wghtd PGRs
Rate £/FTE	4,000	12,000		fEC Rates (= Cost / FTEs)
<b>Year 2</b>				
<b>1 Steady State</b>				
Acad FTEs	100	100	200	Academic time costed to new projects during year
Cost recovered £	400,000	1,200,000	1,600,000	(FTEs x fEC Rate)
Over/(Under) £	-	-	-	Over/(Under) recovery
<b>2 Lab staff costed as Desk</b>				
Acad FTEs	101	99	200	Academic time costed to new projects during year
Cost recovered £	404,000	1,188,000	1,592,000	(FTEs x fEC Rate)
Over/(Under) £	4,000	(12,000)	(8,000)	Over/(Under) recovery
<b>3 Desk staff costed as Lab</b>				
Acad FTEs	99	101	200	Academic time costed to new projects during year
Cost recovered £	396,000	1,212,000	1,608,000	(FTEs x fEC Rate)
Over/(Under) £	(4,000)	12,000	8,000	Over/(Under) recovery
<b>4 Lab staff costed as Desk (Extreme)</b>				
Acad FTEs	200	-	200	Academic time costed to new projects during year
Cost recovered £	800,000	-	800,000	(FTEs x fEC Rate)
Over/(Under) £	400,000	(1,200,000)	(800,000)	Over/(Under) recovery
<b>5 Desk staff costed as Lab (Extreme)</b>				
Acad FTEs	-	200	200	Academic time costed to new projects during year
Cost recovered £	-	2,400,000	2,400,000	(FTEs x fEC Rate)
Over/(Under) £	(400,000)	1,200,000	800,000	Over/(Under) recovery
Note:				
Costs and FTEs are for demonstration only				
fEC rates are approximately the 09-10 fEC estates rates				

In scenario 1, nothing changes. The rates are calculated based on costs and FTEs in year 1. In Year 2, the same number (FTE) of staff are costed to R activities as in year 1, to the same Desk or Lab category. The outcome is that the same costs are recovered as were incurred.

Scenario 2: One Lab FTE is switched and costed to Desk. This leads to a net under-recovery of £8,000, because the Desk rate is £8k lower than the Lab rate. From a TRAC point of view this is undesirable because an under-recovery will jeopardise sustainability. TRAC was originally concerned with an unsustainable "low-cost" culture in the HE sector.

Scenario 3: One Desk FTE is costed to Lab. This leads to a net over-recovery of £8,000, because the Lab rate is £8k higher than the Desk rate. This is undesirable because the

Research Councils are quite concerned about being over-charged, and they conduct periodic audits of both TRAC and the Research Accounting processes.

Scenarios 4 and 5 take 2 and 3 to extremes and assume all staff switch one way or the other. They emphasise the potential for a large under-recovery (4) or large over-charge to sponsors (5).

### FTEs as the rate denominator

The FTEs are the sum of academics' direct research time, plus RAs, plus weighted PGRs.

- Academics' direct research time comes from TAS forms, and is the sum of: Internally Funded R, Externally Funded R, and PGR Supervision.
- RAs are treated as 100% R.
- PGRs are also 100% R, but because they are students they are deemed to consume fewer services, and are weighed relative to a full-time academic or RA.
- The weightings for Estates are 0.5 for Desk and 0.8 for Lab; these are specified in the TRAC Guidance and are mandatory. So for example 100 PGRs in a Desk environment would be weighted at 0.5, and count as 50 FTEs in the fEC rate calculation.

This is laid out in the table below, which shows that the academic FTEs exclude all activity other than Direct Research. The Research Split columns total to the TROS Analysis-Research figures until it reaches the weighted PGRs.

TRAC - Composition of FTEs in Estates rate denominator									
	Research split		TROS analysis of Academics, RAs and PGRs						
	Desk	Lab		Research	Teaching	Other	Support	Total	
Academics:									
Internally Funded R				75					
Externally Funded R				95					
PGR supervision				80					
Academics	190	60	A	250	145	5	200	600	
Research Assistants	135	205	B	340	-	-	-	340	
PGRs	770	310		1,080	-	-	-	1,080	
Weighting	0.5	0.8		1.0					
Weighted PGRs	385	248	C	1,080	-	-	-	1,080	
	710	513	D	1,670	145	5	200	2,020	
				D = A+B+C					
<i>Data for illustrative purposes only</i>									

**Neil Chamberlain-Keen**

24 May 2010