

TRAC EC-FP7 Guidance  
- draft -

J M Consulting Ltd

a report for Universities UK,  
the Higher Education Funding Council for England,  
and the Office of Science and Innovation

16 March 2007

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# TRAC EC-FP7

## Introduction

1. This is a report explaining the United Kingdom (UK) system that will produce personnel costs and real indirect costs for higher education institutions (HEIs) on research projects that can be declared as eligible costs under specific funding schemes in Framework Programme 7 (FP7) of the European Commission (the Commission).
2. The TRAC system for producing Eligible Costs for calculating the Community financial contribution for research and technological development projects under FP7 is called **TRAC EC-FP7**.
3. TRAC EC-FP7 is based on the UK system called the Transparent Approach to Costing (TRAC). TRAC is a suite of systems, consisting of annual TRAC, research charge-out rates, TRAC fEC (full economic cost) and TRAC for Teaching. TRAC is in place in all UK HEIs. TRAC produces various outputs, one of which is the full economic cost of all research projects, including indirect cost rates (overhead rates). The TRAC suite of systems is referred to in this report as **TRAC-fEC**.
4. TRAC EC-FP7 is a development of TRAC-fEC. Some adjustments need to be made to TRAC-fEC processes and calculations in order to calculate the personnel and real indirect costs that can be used as a basis for determining the Community financial contribution under FP7. (These adjustments include, for example, the exclusion of ineligible costs; and the requirement for project-based timesheets for academic staff on FP7 projects).
5. (The eligible costs calculated under TRAC EC-FP7 are a basis for calculating the price (the Community's financial contribution); they are not the full costs of the projects, which are those originally calculated by the TRAC-fEC system. The Community's reimbursement is a contribution to eligible costs, it does not mean that that 100% of eligible costs are reimbursed.)
6. This report describes the Commission's requirements (given in a draft FP7 Model Grant Agreement, and Annex II and Annex VII (Form E) to that agreement, dated 22 December 2006) and describes how TRAC EC-FP7 meets these. As part of this the report describes the adjustments that institutions need to make to TRAC-fEC to produce a TRAC EC-FP7 system.
7. TRAC EC-FP7 should not be burdensome to institutions. It is not mandatory and institutions are free to develop any other costing system they wish. However, no other system can be called TRAC EC-FP7, and they are not covered in this report.

## Confirmation of compliance

8. The UK Government will present TRAC EC-FP7 to the Commission in early 2007, as the UK costing system that meets the FP7 costing guidelines, and will invite the Commission to indicate if it has any reservations or observations to make. The aim is for TRAC EC-FP7 to provide the means for auditors, working with institutions, to provide an 'independent report on factual findings in methodology concerning a Grant Agreement financed under FP7'.<sup>1</sup> It is planned that there will be a standard 'certificate on the methodology' for TRAC EC-FP7. The fact that any particular institution is using the TRAC EC-FP7 system and is eligible for this certificate must of course be separately verified by that institution's auditors.
9. Subject to the outcomes of the discussion with the Commission on the national TRAC EC-FP7 system, it is likely that institutions which are using systems that are in compliance with TRAC EC-FP7, once verified as such by their auditors through the TRAC EC-FP7 quality assurance and validation process, will be in compliance with the Commission's FP7 costing guidelines. They and their auditors should be able to complete the standard TRAC EC-FP7 certificate on the methodology for approval by the Commission.

## Preparation of the Guidance

10. The report was written by J M Consulting Ltd, for Universities UK (the UK rectors' organisation); the four UK Higher Education Funding Councils; and the Office of Science and Innovation (OSI) in the Department of Trade and Industry. J M Consulting worked with the international auditing and accounting firm KPMG LLP; the United Kingdom Research Office, UKRO; and TRAC managers, Finance Directors and European Officers at a small group of HEIs in the UK. TRAC EC-FP7 was compared against models in universities in the Netherlands that have either been applied as a Full Cost model under FP6; or are under development for FP7.
11. This draft report was finalised in February 2007. It refers to the latest set of FP7 requirements available at that time, given in the draft FP7 Model Grant Agreement dated 22 December 2006. These will not quite represent the final version. Clarification on the FP7 requirements has been drawn from the model contract and costing guidelines for FP6 projects. Revisions to this report may be required once the Model Grant Agreement and the detailed Financial Guidelines are finalised.
12. Section A is an endorsement of TRAC EC-FP7 by the Office of Science and Innovation,<sup>2</sup> the Higher Education Funding Council for England, and by Universities UK. It also contains a statement from KPMG LLP.
13. Section B describes TRAC-fEC and how it has been developed for TRAC EC-FP7. This will prove useful reading for senior Commission officials, and European Research Administrators and senior managers in UK HEIs.

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<sup>1</sup> Annex VII, Form E

<sup>2</sup> The Office of Science and Innovation is part of the Department of Trade and Industry. It is responsible for UK Science Policy and for funding basic research allocated via the Research Councils.

14. Section C is a more technical part of the report. Section C-1 gives a more comprehensive description of TRAC-fEC.
15. Section C-2 sets out the FP7 requirements in some detail, and explains how TRAC-fEC, developed for TRAC EC-FP7, meets those requirements. It is suitable for reading by TRAC managers in the UK who would implement the changes to TRAC-fEC. Commission officials who are familiar with the detailed requirements of FP7, and auditors who may be involved in FP7 audits in HEIs, will also find this of interest.

J M Consulting Ltd

reporting to Universities UK, the Higher Education Funding Council for England and the Office of Science and Innovation

16 March 2007

## A. Endorsement

1. TRAC EC-FP7 has been developed as a system that will produce the eligible personnel costs and indirect costs on FP7 research projects. These eligible costs will then form the basis for calculating the Community financial contribution to each project.
2. TRAC EC-FP7 has been developed from TRAC-fEC which is a suite of systems in use by every higher education institution in the UK. TRAC-fEC is embedded in institutions, and is used by the Research Councils and Other Government Departments in the UK as a basis for the cost-based pricing of research projects. It is also used by the UK Government and by the Higher Education Funding Councils in the UK to inform their policies on funding. Institutions rely on TRAC-fEC data to provide information for decision-making and to manage their institutions.
3. Some small adjustments have been made to the costs produced under TRAC-fEC to exclude costs defined as ineligible by the Commission, and to introduce appropriate quality assurance and other processes surrounding the system that ensure that TRAC-fEC will be developed robustly into TRAC EC-FP7 by institutions, using the guidance given in this report. These are summarised in the boxes at the end of Section B.

We believe that TRAC EC-FP7 meets the requirements of the Commission for research projects funded under a 'real indirect cost' method for FP7.

Signed:

Office of Science and Innovation

The Higher Education Funding Council for England

Universities UK

16 March 2007

## Note by KPMG LLP

We have provided support to J M Consulting Ltd in the preparation of this report. During the course of our work, we found nothing that indicated to us that TRAC EC-FP7 would not meet the requirements for producing eligible personnel costs and real indirect costs for FP7 projects as described in the draft FP7 Model Grant Agreement (version dated 22 December 2006) subject to confirmation by the Commission of two areas:

1. that the TRAC indirect cost rates at the time of the project application, which are based on actual historical institutional costs, can be used across the project's lifetime, once the robustness of their calculation has been verified through the TRAC EC-FP7 quality assurance processes;
2. that the salary charge-out rates for academic staff may be based on individual or pay bands, using methods calculated and applied under TRAC, once verified through the TRAC EC-FP7 quality assurance processes.

Signed:

KPMG LLP

16 March 2007

## B. Overview of TRAC EC-FP7

### Introduction

1. TRAC EC-FP7 is a system that has been developed to provide eligible personnel and real indirect costs for research projects undertaken by HEIs in the UK for FP7. These projects are those funded by the Community under the following funding schemes: Networks of Excellence, Collaborative projects, Research projects for the benefits of specific groups (SMEs), and Coordination and Support Actions.<sup>3</sup>
2. TRAC EC-FP7 satisfies the requirements of a 'real indirect cost method', as described in the draft FP7 Model Grant Agreement dated 22 December 2006. TRAC EC-FP7, while a complicated set of standards, principles, requirements and methods, fits the definition of a 'simplified method' under FP7 as it does not require the separate identification of overheads for individual departments.
3. TRAC EC-FP7 has been endorsed by Universities UK, the Higher Education Funding Council for England (HEFCE) and by the OSI. KPMG LLP, an international auditing and accounting firm, have given the view that there is nothing in the Commission's requirements that is not being met by TRAC EC-FP7, subject to confirmation on two points (see Note by KPMG in Section A).
4. The UK Government will present TRAC EC-FP7 to the Commission in early 2007, as the UK costing system that meets the FP7 costing guidelines, and will invite the Commission to indicate if it has any reservations or observations to make. The aim is for TRAC EC-FP7 to provide the means for auditors, working with institutions, to provide an 'independent report on factual findings in methodology concerning a Grant Agreement financed under FP7'.<sup>4</sup> It is planned that there will be a standard 'Certificate on the Methodology' for TRAC EC-FP7. The fact that any particular institution is using the TRAC EC-FP7 system and is eligible for this Certificate must of course be separately verified by that institution's auditors.
5. Subject to the outcomes of the discussion with the Commission on the national TRAC EC-FP7 system, it is likely that institutions which are using systems that are in compliance with TRAC EC-FP7, once verified as such by their auditors through the TRAC EC-FP7 quality assurance and validation process, will be in compliance with the Commission's FP7 costing guidelines. They and their auditors should be able to complete the standard TRAC EC-FP7 Certificate on the Methodology for approval by the Commission.
6. This is not a compulsory system for UK HEIs. Institutions that currently operate robust TRAC systems should be able easily to adapt them to develop TRAC EC-FP7. Institutions can alternatively opt to use a flat rate for indirect costs established in the Rules of Participation and Model Grant Agreement when

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<sup>3</sup> Marie Curie actions are not covered here.

TRAC EC-FP7 also provides eligible costs for research projects undertaken for the European Research Council. However, unlike the funding schemes listed in paragraph 1 above, the contribution from the Commission for 'real costs' is capped (at 120% of direct costs).

<sup>4</sup> Annex VII, Form E

calculating eligible indirect costs for the purpose of calculating the Community contribution on research projects.<sup>5</sup>

7. Institutions are free to develop any other costing system that they may currently be using, in order to establish eligible personnel and real indirect costs, should they wish. However, this report does not cover systems other than TRAC-fEC and TRAC EC-FP7.

## TRAC-fEC

8. TRAC EC-FP7 is based on TRAC-fEC. TRAC-fEC is an integrated suite of systems for costing activity in higher education institutions. TRAC-fEC was first developed in 1999. It is in place in all 165 HEIs in the UK. It is a requirement of the UK Government for all UK HEIs to implement TRAC-fEC and this is monitored and supported in each country by the relevant Higher Education Funding Council.<sup>6</sup>
9. The first part of TRAC-fEC (annual TRAC) was formally accepted by the UK Government in 1999. Its extension to research projects (TRAC fEC) was then endorsed by the UK Government in 2004. It was then extended to Teaching (TRAC (T)) in England, Northern Ireland and Scotland, and the Funding Councils in those countries endorsed this in October 2006.
10. TRAC-fEC results are used by various parts of the UK Government to inform funding policy (on the funding of Teaching and Research). TRAC-fEC produces charge-out rates for research projects. The funding for research projects made by the UK Research Councils is calculated by taking a percentage of the TRAC-fEC cost of each project, which includes costs based on these charge-out rates. Other Government Departments are expected by the UK Government to fund research at 100% of this TRAC-fEC cost. TRAC-fEC is also used to provide information on Teaching to inform the funding models for teaching operated by the Higher Education Funding Council for England.
11. TRAC-fEC is a holistic system, covering all activities within HEIs. The information is used internally by many HEIs for their own decision-making, planning and management.
12. The suite of systems under TRAC-fEC is as follows:
  - i. annual TRAC
  - ii. annual TRAC: charge-out rates
  - iii. TRAC fEC
  - iv. TRAC (T).
13. A short summary of these systems is given in this Section – Section C-1 contains a more detailed description.

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<sup>5</sup> However, institutions that can identify real indirect costs but have opted to use the flat rate instead will receive a lower Commission contribution than those institutions that are using the flat rate because they cannot identify real indirect costs.

<sup>6</sup> HEFCE – Higher Education Funding Council for England; SFC – Scottish Funding Council; DELNI – Department for Education, Northern Ireland; HEFCW – Higher Education Funding Council for Wales

14. It is recommended that readers of this report also read the Overview to TRAC at <http://www.icpsq.ac.uk/guidance/downloads/Overview.pdf>
15. **Annual TRAC** is a system that takes the costs from the audited financial statements, and adds on two cost adjustments (for infrastructure and cost of capital<sup>7</sup>) so that the costs better reflect full economic costs. These costs are then attributed between four activities: the three core activities of Teaching, Research and Other (Other includes consultancy and students residences); and Support activities.
16. Support activities cover central services, information services, estates, the two cost adjustments, and Support activities carried out in academic departments. Support costs are then attributed to the three core activities. All costs are also attributed to academic departments. Attributions are made through robust cost drivers, such as staff time surveys, reviews of estates use, and student numbers.
17. Each year, institutions produce a report that shows the cost, and income, of each of the three core activities, reconciled to the audited financial statements.
18. **Annual TRAC: charge-out rates** is a system that take the Support costs produced from the annual TRAC process. It calculates charge-out rates for Research. These mainly cover indirect costs and estates costs. They are expressed as a £ per academic/researcher full-time-equivalent (FTE) member of staff who is working on Research.
19. **TRAC FEC** is a system that calculates the full costs of a research project, in a way that can be used by institutions and sponsors to price the work. It then provides a method for recording, reporting and auditing these costs over time. These costs include the indirect and estates costs calculated by use of the charge-out rates.
20. **TRAC (T)** or TRAC for Teaching provides an analysis of the costs of teaching.
21. There are a comprehensive set of quality assurance methods in place in TRAC-FEC. They include internal checks and testing, internal audit, and external reviews. A review of annual TRAC implementation in every institution in the UK was undertaken by an audit team commissioned by the Funding Councils in 2004/05. The Research Councils are now introducing an external quality assurance and validation process which is to provide assurance to all sponsors of research projects that institutions are correctly applying the annual TRAC costing methodology, and are correctly calculating the charge-out rates for research.<sup>8</sup>
22. TRAC-FEC is based on a set of common costing standards, and accounting principles, which are being followed by every institution in the UK. This ensures that results are robust and comparable and fit for purpose across every one of the 165 institutions in the UK. However, HEIs are encouraged to embed and use TRAC-FEC themselves, and to help with this a variety of methods can be adopted by different institutions, as long as they comply with the formal TRAC standards and principles.

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<sup>7</sup> the adjustment for cost of capital is now called the return for financing and investment

<sup>8</sup> This process is being carried out from 2007, and will be done in parallel with the existing Research Council 'dipstick' programme which will be extended to review the application of the charge-out rates on individual research projects.

23. A set of comprehensive TRAC-fEC Guidance contains the formal requirements and also gives helpful material to HEIs implementing TRAC-fEC. This Guidance is available on <http://www.jcpsg.ac.uk/guidance/index.htm>.

## TRAC EC-FP7 – changes to TRAC-fEC

24. TRAC EC-FP7 requires four changes to be made to the TRAC-fEC processes:
1. exclusion of ineligible costs from the indirect cost rate;
  2. the completion of project timesheets by academic staff working on the FP7 projects (who are not spending 100% of their time working on a project);
  3. reflection of the actual time and salary of academics working on FP7 projects;
  4. additional quality assurance.
25. These are described in full in Section C-2 of this report and are summarised below.

### 1. Indirect costs

These are defined for the purposes of this report as covering TRAC-fEC indirect costs, and the directly allocated charges for estates costs, major research equipment/facilities, and laboratory technicians. (However, the charge-out rates for each of these are still calculated and applied separately under TRAC EC-FP7, as for TRAC-fEC.) As for TRAC-FEC, Research charge-out rates are project-related and do not include any indirect costs related to Teaching or Education, or to Other activities not related to Research.

Some activities on FP7 research projects, such as project management, can be carried out by an academic, an academic-related member of staff or an administrator. These staff **should** be considered the equivalent to academic members of staff, and indirect cost charge-out rates **should** be applied to the time they charge to the project. This direct time **should** be included in the denominator when the TRAC-fEC rates are next calculated.

The two TRAC-fEC cost adjustments **should** be excluded from TRAC EC-FP7 indirect costs. When excluding these costs:

- the net infrastructure charge **should** be excluded;
- the gross return for financing and investment **should** be excluded; (i.e. interest costs **should** also be excluded).

Historical cost depreciation **should** be included for buildings and equipment, not depreciation on a current cost revaluation method.

Irrecoverable VAT **should** be excluded as it is an identifiable indirect tax.

Charges made to a provision for enhanced pension payments **should** be excluded, as it is a provision. When the payments are actually made from the provision (to the pension scheme), these payments **should** be included in indirect costs.

If an institution makes any other charges to a provision, these **should** be excluded from the indirect costs for Research (e.g. restructuring, bad debts if separately provided for).

As for TRAC-fEC, Research indirect cost rates that are in place at the project application stage apply throughout the life of the project.

## 2. Academic staff time

Academics or researchers who work on more than one project or activity **should** complete monthly timesheets (or their equivalent). These **should** show the hours worked on each Commission project, by activity (i.e. with reference to the relevant 'action' or 'work package'). They need not show work on other projects or activities. The project timesheets **should** be signed by the principal investigator and (where appropriate) their manager/supervisor.

As 1650 hours is the Government-approved productive hours to be used throughout TRAC-fEC, and applied to all staff, no record of total time is required for academics.

## 3. Use of actual staff time and costs

The costs of academics, as well as researchers, **should** be charged to FP7 projects as a directly incurred cost.

The academics' timesheets (or equivalent) give the hours that can be charged to the project. These then determine the FTEs to which indirect costs are applied.

Charge-out rates for academic salaries **should** be based on either the actual salary for each individual, or the average salary of the relevant pay band for that individual, whichever is the university's standard practice in their TRAC-fEC system.

Where a charge-out rate for a pay band or pay group is used, this **should** be calculated from the real average of actual salaries being paid to individuals in that group. These will not, therefore, differ significantly from actual costs.

The charge-out rates **should** be recalculated at least once a year. The rate applied to academic staff time recorded on FP7 projects **should** relate to the time period when they did the work.

A 1650 hour working year **should** be used to calculate the hourly rate. The use of 1650 hours is standard practice in TRAC-fEC.

## 4. Quality assurance and validation

### For TRAC-fEC

Each institution's application of the TRAC-fEC methodology and calculation of the TRAC-fEC indirect cost charge-out rates **should** be reviewed under the TRAC-fEC quality assurance and validation process. A new process is being specified and introduced by the UK Research Councils (2007). As part of this a quality assurance and validation visit and review **should** be carried out by the Research Councils, or by an institution's auditors.

### For TRAC EC-FP7

In addition, every three years, the HEI **should** commission an independent audit that verifies that the adjustments to the TRAC-fEC processes and calculations required in this TRAC EC-FP7 Guidance have been implemented.

The FP7 audit requirements at a project level, i.e. for the Certificate on the Financial Statements, will be in addition to this. However, in terms of the procedures for this Certificate that cover charge-out rates, the auditors will just need to satisfy themselves that the rates calculated from the (previously verified) TRAC EC-FP7 process have been correctly applied.

## C. Technical guidance for TRAC EC-FP7

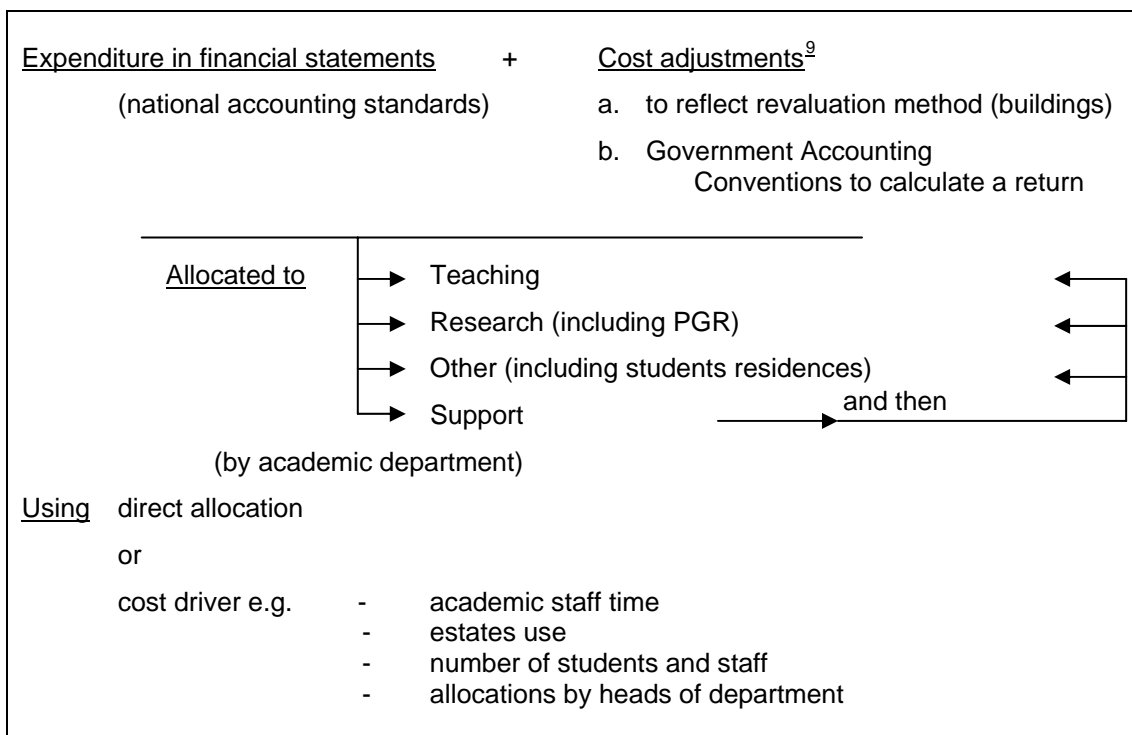
### Section C-1 TRAC-fEC

1. This Section describes the TRAC-fEC methods in more detail. The four TRAC-fEC systems are:
  - i. annual TRAC
  - ii. annual TRAC: charge-out rates
  - iii. TRAC fEC
  - iv. TRAC for Teaching.

#### **(i) Annual TRAC**

2. Annual TRAC is the initial public accountability exercise flowing from the 1999 Transparency Review. Part III of the TRAC Guidance covers annual TRAC. This involves the annual retrospective reporting of the costs, and (since 2006) income, of Teaching, Research, and Other principal activities of institutions (Other includes consultancy and students residences). These terms are very precisely defined and costs are separately identified at all times (see Annex 6 of the TRAC-fEC Guidance).
3. As part of this, information is separately recorded on the costs and income by research sponsor type (UK Research Councils, Other UK Government Departments, European Union, industry/ commerce/ overseas governments, UK charities) and on institution-/own-funded research (which has no external sponsor) and on the training of postgraduate research students (PhD students or PGRs).
4. Costs and income are also separately recorded for publicly-funded and non-publicly funded teaching.
5. TRAC is based on institutions' audited financial statements. These are prepared in accordance with the Further and Higher Education Statement of Accounting Practice, issued in accordance with the Accounting Standards Board guidelines – see footnote to paragraph 37.
6. Two cost adjustments are then made to the expenditure in the audited financial statements. An infrastructure adjustment is made to ensure that all institutions use the equivalent of the revaluation method of depreciating assets (rather than historical costs); and a return for financing and investment is included to provide a cost of capital. Precise formula are given for these adjustments (they are, however, ineligible costs under TRAC EC-FP7, see below).
7. All institutional costs are then allocated to academic departments (and to other income-generating departments), and to Teaching, Research and Other activities. This is done through either direct allocation (e.g. the costs of the international office are allocated to non-publicly funded Teaching; students residences are allocated to Other); or through cost drivers. These cost drivers must reflect the main cause or driver of the costs. Allocations of academic staff time to Teaching, Research and Other are based on the academic time surveys. Other costs are not allocated on this basis as it is not considered a sufficiently good driver of these other costs. A variety of cost drivers are used –

- estates use (weighted by the relative costs of different types of space); staff and student numbers; informed allocations from Heads of Department; etc.
8. As part of the annual TRAC process, the Support costs of Teaching, the Support costs of Research and the Support costs of Other activities are identified separately. These form the top-line (numerator) of the charge-out rates for each activity.
  9. No cost that is allocated to Teaching or to Other activities (for example, student residences) are ever allocated to Research, and therefore they are always excluded from the charge-out rates for Research.
  10. The diagram below is an overview of the annual TRAC processes. This is a retrospective process, carried out each year. The financial and academic years of HEIs finish on 31 July of each year. The annual TRAC return must be made to the Funding Councils no later than 31 January of the following year. Rates (calculated from annual TRAC figures) are recalculated, and indexed and verified rates are applied from 1 February of that following year.



Relevant data produced:

- a. the amount of time that academics, researchers and PGR students have spent on Research (in FTEs: with each FTE expressed as 1650 hours of staff time per year)<sup>10</sup>
- b. the amount of time that academics have spent on Support activities (activities that cannot directly be allocated to Teaching courses, Research projects or Other activities e.g. management, administration, professional development etc)
- c. the costs of this Support time, and the allocation of this between Teaching, Research and Other activities

<sup>9</sup> These are removed under TRAC EC-FP7, see later

<sup>10</sup> For an explanation of this figure, see Section C-2 paragraph 20

- d. all other Support costs. These include estates, central service departments, support staff (secretaries and technicians) and non-staff costs not directly allocated to Teaching, Research or Other activities. Again these are separately allocated and identified separately for each of Teaching, Research and Other.

**(ii) Annual TRAC: Charge-out rates**

11. The Support or indirect costs identified in the annual TRAC process are then used to calculate charge-out rates for Research. Part IV of the TRAC-fEC Guidance covers this.
12. These charge-out rates cover indirect costs, estates costs, infrastructure laboratory technicians, and major research facilities (referred to as major research equipment in this report). These costs are known variously as indirect costs, overhead costs or Support costs.
13. The charge-out rates for Research are based on actual, audited costs, which are relevant only to Research. They are not estimates or forecasts; nor do they include any costs relevant to Teaching or Other activities.
14. The following diagram gives an overview of the calculation of the charge-out rates for Research. Although one calculation is shown here for ease of understanding, under TRAC-fEC a number of calculations are done, one for each charge-out rate (as described in the second box below).

Numerator (top line)	<p><u>actual Support costs (of Research)</u> (This excludes all Teaching and Other costs and excludes all direct costs (e.g. of research contracts))</p> <p>It includes:</p> <ul style="list-style-type: none"> <li>- academic Support time (management, administration, professional development)</li> <li>- support staff in academic departments (administrative staff, technicians etc)</li> <li>- non-staff costs in academic departments</li> <li>- central services (adjusted under TRAC EC-FP7, see later)</li> <li>- estates (of academic departments and central service departments, but not of student residences)</li> <li>- cost adjustments (removed under TRAC EC-FP7, see later)</li> </ul>
over	<p><u>divided by</u></p>
Denominator (bottom line)	<p><u>full time equivalent (FTE) numbers (working directly on Research)</u></p> <ul style="list-style-type: none"> <li>- research staff;</li> <li>- the time that academic staff (who carry out both Teaching and Research duties) spend on Research projects;</li> <li>- post graduate research students (weighted).</li> </ul>

Relevant data produced:

- a. a Research indirect cost rate expressed as a £ per full-time equivalent researcher/academic or PGR student. An FTE equates to 1650 hours a year. Only the direct Research time of academic staff is included.<sup>11</sup> PGR student numbers are weighted to reflect their lower use of resources.
- b. a Research estates cost rate for each of laboratory/clinical, and non-laboratory disciplines. Again this is expressed as a £ per FTE researcher/academic or PGR student.
- c. laboratory technician rates for pool technicians and for infrastructure technicians who do not complete timesheets.
- d. charge-out rates for each major research equipment or facility.

These are all referred to generically as 'indirect cost rates' in this report, but they will continue to be separately identified and applied under TRAC EC-FP7, as for TRAC-fEC.

**(iii) TRAC fEC**

15. TRAC full economic costing for Research or TRAC fEC was developed in 2004 as part of the UK Government's reform of the dual support system. Part V of the TRAC-fEC Guidance covers this.
16. TRAC fEC provides a method to calculate (and then record) the full economic costs of research projects (usually forwards over a 3-5 year time span) as a basis for improving the sustainability of research. The calculation of the full economic costs of research projects allows a cost-based price to be calculated for the UK Research Councils and Other Government Departments. These costs are then recorded during the life of the project.
17. All costs on research projects are classified in one of three ways. This reflects the extent to which they can be directly linked to a particular project:

directly incurred – the expenditure is represented by an invoice or equivalent, and is wholly charged to one project. These include research assistants' salaries, payments made to PGR students, consumables, technicians. If the staff are not wholly engaged on a single project, then they complete project-level timesheets, signed off by their manager or supervisor, each month, which are then reflected in monthly charges to the project. Actual staff charge-out rates are applied to this time, calculated either individually, or in pay groups or bandings. These are verified as part of the TRAC-fEC quality assurance and validation process.

directly allocated – costs are allocated to projects using some sort of measure of use. Directly allocated costs include the costs of estates, laboratory technicians, and major research equipment. The actual charge-out rates calculated from the output of the annual TRAC system,

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<sup>11</sup> unlike some costing systems, outside TRAC-fEC, which do not include the Support time and costs of academics in the top-line of the indirect cost rate calculation, but include the Support time in the bottom-line by using an annual hours total of 1350 or similar.

(ii) above, are applied to projects using TRAC fEC rules. (Under TRAC EC-FP7 these costs are defined as indirect costs – see later.)

Directly allocated costs also include the costs of permanent academic staff who work on more than one project (and carry out Teaching as well as Research). As they do not complete project-level timesheets under TRAC fEC they are not defined as directly incurred staff. Under TRAC EC-FP7 they would complete timesheets, see later.

indirect costs – costs are allocated to projects using an indirect cost rate per full time member of staff – using the indirect cost charge-out rates calculated from annual TRAC (see (ii) above).

18. Directly incurred costs are recorded as they are incurred (cash is spent). Actual costs incurred during the year are recorded against the project. Under TRAC fEC directly allocated and indirect costs are allocated to projects based on full time equivalent staff time.
19. For example, an estimate of the principal investigator's time is made, and a cost per hour applied (based on 1650 hours and either the actual salary for that individual or one that reflects a pay group average). Under TRAC fEC, this cost is then recorded against the project during its life; and forms the basis for the Research Council funding. Under TRAC EC-FP7, the hours eventually spent on the project by the principal investigator would be recorded on a timesheet or equivalent, and the actual (or pay group average) costs for each period calculated at the end of the project or period.
20. Under TRAC fEC, costs charged to projects using charge-out rates are not changed from those estimated on the proposal. They are based on estimated time. However, under TRAC EC-FP7, charge-out rates allocated to projects according to hours (i.e. FTEs) will be applied only to the number of hours (FTEs) that staff record as actually spent on the project.
21. Indirect cost rates are calculated robustly at the beginning of the project. They are based on the latest actual costs relevant to and attributable only to Research, and are verified as such. They are not estimates. The rates in place at the beginning of the project remain in place throughout the project as they are considered a fair and reasonable reflection of the cost incurred by the institution and applicable to that project throughout its lifetime.

#### **(iv) TRAC for Teaching**

22. TRAC for Teaching or TRAC (T) is being implemented in England, Northern Ireland and Scotland from 2006. Parts VII and VIII of the TRAC-fEC Guidance cover TRAC (T). This provides methods (which are optional) for institutions to use in costing and managing their core business; and methods that will produce data that could inform the public funding of teaching (there are 'minimum requirements' to be met for this). TRAC (T) develops the TRAC-fEC costs of Teaching, which are kept separate from those of Research - this area is not covered further in this report.

## Section C-2 FP7 requirements

1. This Section describes the current Commission requirements for a costing model that calculates the eligible personnel costs and real indirect costs on research projects within Framework Programme 7<sup>12</sup> for use as a basis for Community funding, and how TRAC-fEC either satisfies these or could be developed to satisfy these. The costing system thus developed is called TRAC EC-FP7. The adjustments to TRAC-fEC to develop TRAC EC-FP7 are given in boxed text in this Section. They were summarised in Section B of this report.
2. TRAC EC-FP7 is a system that provides charge-out rates for indirect costs to form part of the eligible costs of appropriate research projects under FP7. It does not define all direct eligible costs, the charges for permanent academic staff time which form part of the 'eligible personnel costs' of research projects.
3. TRAC EC-FP7 is a costing system specifically designed to provide a basis for calculating a price – the Community financial contribution - for these research projects. It does not reflect the full economic cost of those projects, which is calculated by TRAC-fEC. TRAC EC-FP7 calculates the total amount of the cost calculated under TRAC-fEC that is considered to be eligible by the Commission.
4. Only part of the TRAC EC-FP7 costs will be reimbursed through the Community financial contribution.
5. Alternative models for determining the costs of FP7 projects exist (for example, using a flat rate for indirect costs; or developing any other costing model that HEIs may currently be using, in order to determine eligible costs for FP7). The choice of the costing model used under FP7 is up to each HEI. This report, however, only describes the TRAC EC-FP7 system. The endorsement given in this report by Universities UK and the Office of Science and Innovation and the Note provided by KPMG LLP only apply to the TRAC EC-FP7 costing method.

### The requirements

6. The requirements to be met when establishing the eligible costs of research projects that were studied for this report are those set out in Annex II and Annex VII (Form E) to the draft FP7 Model Grant Agreement dated 22 December 2006.
7. These have been interpreted in the light of the requirements for FP6 which are set out in the Rules of Participation contained in Regulation (EC) No 2321/2002 of the European Parliament and of the Council of 16 December 2002<sup>13</sup> and in Annex II to the Model Contract, which sets out the financial issues in more detail. These are further described in the Guide to Financial Issues relating to Indirect Actions of the Sixth Framework Programmes.<sup>14</sup>

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<sup>12</sup> Networks of excellence, Collaborative projects, Research projects for the benefit of specific groups (SMEs), Co-ordination and Support Actions.

<sup>13</sup> Version April 2004, dated 22 February 2005.

<sup>14</sup> These can be obtained from <http://cordis.europa.eu/fp6/find-doc.htm#fp6project> The FP7 drafts are available on [http://cordis.europa.eu/fp7/calls-grant-agreement\\_en.html](http://cordis.europa.eu/fp7/calls-grant-agreement_en.html)

## Direct and Indirect costs

8. From Annex II of the draft FP7 Model Grant Agreement for FP7:<sup>15</sup>

**Direct costs** are all those eligible costs which can be attributed directly to the project and are identified by the beneficiary (HEI) as such, in accordance with its accounting principles and usual internal rules.

**Indirect costs** are all those eligible costs which cannot be identified by the HEI as being directly attributed to the project but which can be identified and justified by its accounting system as being incurred in direct relationship with the eligible direct costs attributed to the project.

Indirect costs shall represent a fair apportionment of the overall overheads of the HEI. The real indirect cost method is one method of identifying these.<sup>16</sup>

9. Directly Incurred (DI) costs in TRAC-fEC meet the above definition of direct costs. They are items or services incurred or purchased specifically for a project. As well as Research Assistants they include consumables, travel and subsistence, equipment purchase, dedicated technicians (DI) or other support staff, and payments to PGR (PhD) students. They can include sub-contractors costs. Actual costs are charged to projects. Full audit records are available.<sup>17</sup>
10. Principal investigator costs (Directly Allocated or DA in TRAC-fEC) are defined under TRAC EC-FP7 as direct costs. Full audit records need to be available under TRAC EC-FP7.
11. All other costs charged to research projects – whether directly allocated or indirect in TRAC-fEC – are defined as indirect costs under TRAC EC-FP7.

### Adjustment for TRAC EC-FP7

Indirect costs under TRAC EC-FP7 are defined for the purpose of this report as covering:

- the TRAC-fEC Support costs of Research (indirect costs in TRAC Guidance),
- plus the TRAC-fEC Estates costs of Research (DA costs in TRAC Guidance),
- plus the TRAC-fEC major research equipment charge-out rates (DA),
- plus the TRAC-fEC laboratory technician charge-out rates (both sets of DA rates).

However, each rate is still calculated and applied separately under TRAC EC-FP7, as for TRAC-fEC.

Principal investigator costs are defined as directly incurred costs, not directly allocated costs, as full audit records are required.

<sup>15</sup> II.15 clauses 1 and 2.

<sup>16</sup> There is no further definition of the 'real indirect cost' method in the draft FP7 Model Grant Agreement. However, the principles laid down in the FP7 and FP6 papers give a good indication of the requirements for this method.

<sup>17</sup> See Part V of the TRAC Guidance, Section D, paragraphs 3 and 4.

12. It is worth reiterating TRAC-fEC guidance here concerning indexation. All eligible costs on FP7 projects, direct and indirect, should be indexed to allow the costs to be expressed in future years' prices.<sup>18</sup>

## Direct staff costs

13. This Guidance focuses primarily on indirect costs. However, it is useful to state here how TRAC-fEC meets the Commission's requirements for recording and costing staff time.
14. The time and costs of academics (e.g. principal investigators), research assistants, PGR students, academic-related staff and technical, support or administrative staff who are working directly on a project are chargeable as direct costs to that project. Under TRAC-fEC, and in compliance with Commission requirements, none of these costs form part of the indirect costs.

## Time recording

15. Under TRAC-fEC, all Support, academic and research staff charged as a direct cost (DI) onto a project who are not spending 100% of their time working on that project, must complete monthly timesheets or an equivalent project-based, monthly, time recording method. This is also required under TRAC EC-FP7. (If they do not complete timesheets, they cannot be charged as a DI cost.)
16. Under TRAC EC-FP7, all academics working on a FP7 project need to complete a timesheet or equivalent which will indicate the hours that can be charged to that project.<sup>19</sup> This is not required under TRAC-fEC.
17. All academic staff will also have completed time allocation schedules for annual TRAC in order to attribute their time between Teaching, Research, Other and Support. This will continue.<sup>20</sup>

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<sup>18</sup> In the UK, the only projects not indexed by institutions are those for the Research Councils, however, the Research Councils apply indices on receipt of the project applications.

<sup>19</sup> Features of timesheets that would meet the requirements for time recording under FP6 are described in FP6 contracts – personnel costs, Brussels 22.07.2006, RTD B.3 (2006) D/531547.

This requirement applies to all staff working on a TRAC-fEC project, whether they are to be charged to the project or not.

<sup>20</sup> The minimum requirements for the annual TRAC time allocation schedules are laid down in the TRAC-fEC Guidance. The methods might, for example, involve statistical sampling (of staff or periods of time), they are unlikely to include academic-related or secretarial staff, they might record percentages of time, rather than hours, they might be anonymous (and not countersigned by their manager), and they would not generally record time by individual project. These time allocation schedules are not timesheets.

**Adjustment for TRAC EC-FP7**

Academics or researchers who work on more than one project or activity need to complete monthly timesheets or an equivalent time recording method. The minimum requirement is for them to show the hours worked on each Commission project, by activity (i.e. with reference to the relevant 'action' or 'work package').<sup>21</sup> These need not show work on other projects or activities. The project timesheets should be signed by the principal investigator and (where appropriate) their manager.

The timesheets give the hours that can be charged to the project. This also determines the FTE (hours) to which indirect costs are applied.

As 1650 hours is the Government-approved productive hours to be used throughout TRAC-fEC, and applied to all staff, no record of total time is required for academics.

Staff costs

18. The time spent by an academic on a project forms the basis of the calculation of actual salary costs on the project, and therefore the amount of funding. Total annual salary cost (including all superannuation, national insurance, allowances, etc), divided by the total hours worked in a year, gives an hourly rate for that individual. This is multiplied by the hours worked to give the salary charged to each project.
19. The calculation of the hourly rate in TRAC EC-FP7 is the same as for TRAC-fEC. However, TRAC-fEC requirements for DI staff will now apply to academic staff.

**Adjustment for TRAC EC-FP7**

Academic staff charge-out rates should be based on either the actual salary for each individual, or the average salary of the relevant pay band for that individual, whichever is the university's standard practice in their TRAC-fEC system.

Where a charge-out rate for a pay band or pay group is calculated, this should be calculated from the real average of actual salaries being paid to individuals in that group. They will not, therefore, differ significantly from actual costs.

The charge-out rates should be recalculated at least once a year. The rate applied to academic staff time recorded on FP7 projects should relate to the time period when they did the work.

A 1650 hour working year should be used to calculate the hourly rate. The use of 1650 hours is standard practice in TRAC-fEC.

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<sup>21</sup> 'Actions' include research, management, dissemination, coordination, support, training, and career support. These actions are reimbursed by the Commission at different rates.

20. The 1650 hour working year takes into account the real average actual working year of academics. This is generally longer than any 'standard' working year which might be based on 35 or 37 hours a week, however, most academic contracts of employment in the UK do not refer to any such 'standard working week'. The 1650 hours a year takes into account normal average sickness, maternity/paternity leave, bank holidays, annual leave etc. and includes all time (including management and administrative, professional development activity etc).<sup>22</sup> It has been developed after extensive discussion with the Research Councils, the Office of Science and Innovation and the UK Funding Councils during the development of TRAC-fEC. It is a standard accounting principle in use in the UK HE sector, and is considered by the UK Government to be a fair and reasonable estimate of time worked by academics. As a result, academics do not have to record the total number of hours they work each year.
21. The working year of 1650 hours is used (a) as the divisor of a full-time salary to provide a hourly salary charge-out rate; and (b) to translate hours worked on a project into FTEs onto which indirect costs and estates costs are allocated.
22. Periodic entries of actual time should be made on the project cost record, for each member of staff, initiated by the timesheets. These should be costed using the hourly salary charge-out rate for that individual or their pay band average that applies to the period being worked.

### Technicians

23. The treatment of technicians under TRAC-fEC and TRAC EC-FP7 is almost exactly the same.
24. TRAC-fEC now requires laboratory technicians to be identified in one of three ways - as DI, DA (pool) or DA (infrastructure). Under TRAC-fEC, costs for the DI technicians are entered and verified via timesheets, signed off by the person in charge of their work. This is the same under TRAC EC-FP7.
25. Under TRAC-fEC, time charged for DA technicians (whether pool or infrastructure) do not have to be backed up by timesheets. Separate charges are however made. This is the same under TRAC EC-FP7 – but the costs are treated as indirect costs, not direct.

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<sup>22</sup> There are three ways of allocating the management, administrative and professional development time of academics to individual projects:

- a) the inclusion of these costs in the top-line of the indirect cost rate calculation; and use of the full working year (i.e. 1650 hours) both in the bottom-line of that calculation, and in the calculation of the salary hourly rate. This is the method used in TRAC-fEC;
- b) dividing indirect costs and salaries by 1350 hours (1650 less whatever the management and administrative time is estimated to be). In this case the costs of this management/administration time would not be included in the top-line of the indirect cost rate;
- c) dividing salaries and indirect costs by 1650 hours, but ensuring that the direct time on every project is uplifted to include some general management/administrative work. Under this method this Support time would not be included in the top-line of the indirect cost rate calculation.

TRAC-fEC and TRAC EC-FP7 use the first of these methods (a).

## Summary of the indirect cost requirements

26. A comprehensive list of the requirements for indirect costs follows. These are based on the FP6 requirements, as those are all that are currently available.
27. The requirements for FP7 are not likely to differ significantly from this. The 22nd December 2006 draft FP7 Model Grant Agreement seemed to differ only in that it did not specifically mention the exclusion of 'current' costs – however, it is assumed that this exclusion remains, as current costs are not 'incurred' by the HEI (a FP7 requirement).
28. The references in the first two columns are to the FP6 documents. A direct quote has not always been given – the requirement has, where appropriate, been expressed in terms suitable for implementation by UK HEIs.

Reference to FP6 Model Contract	Reference to the FP6 Guide to the Financial Issues	Reference in this report	The requirement
	2.2.2	1.	Indirect costs are associated with or caused by two or more cost objectives (e.g. projects), but are not directly traceable to or related to each of them individually. It is not possible to measure directly how much of the cost is attributable to a single cost objective.
	2.2.2	2.	Indirect costs are not identified as direct costs, and do not include any costs already directly charged to the project.
II.19 1a)	2.1.2.1  2.2.2	3.	<p>Necessary for the implementation of the project. Directly linked to the subject matter and scope. Present in the budget or in the description of activities (Annex 1) annexed to the contract.</p> <p>Indirect costs are in direct relationship with the direct eligible costs of the project.</p> <p>They are charged to the project to the extent that they represent a fair apportionment of the overall overheads of the organisation.</p> <p>Indirect eligible costs that do not relate to EC research should not be included in indirect costs for EC-funded projects.</p> <p>Different methods and keys (e.g. cost drivers) may be used for the distribution (e.g. attribution) of the indirect eligible costs, in compliance with the usual accounting principles of the HEI.</p> <p>No arbitrary or subjective cost drivers can be accepted.</p>
11.19 1d)  II.19 1a)	2.2.2 2.1 2.1.2.1  2.1.2.1  2.1.1	4.	<p>Indirect costs must be reasonable and capable of verification.</p> <p>And reconcilable with the published financial statements.</p> <p>Eligible costs must be actually incurred (real costs). They must not be estimated, budgeted or imputed.</p> <p>Subjective estimations are not allowed.</p> <p>Therefore non-eligible costs include:</p> <ul style="list-style-type: none"> <li>• Current costs (e.g. revaluation of buildings)</li> </ul>

	2.1.2.1		<ul style="list-style-type: none"> <li>• Notional rents (e.g. estimated rentals)</li> <li>• Opportunity costs</li> <li>• internal invoices.</li> </ul>
II.19 1a)	2.1.2.1	5.	<p>Eligible costs must be - Economic. Efficient and effective. Reasonable. Comply with the principles of sound financial management, with the objectives of the project, and with the formal reporting requirements. In relation with the normal behaviour of the HEI's staff.</p> <p>Ineligible costs include - Excessive or reckless expenditure</p>
II.19 2 (h)			
II.19 1b)	2.1.2.2	6.	<p>Determined in accordance with the usual accounting principles or conventions of the HEI. e.g. using the usual definition of types of eligible costs, and of direct and indirect costs.</p>
II.19 1d)	2.1		<p>Prepared using usual accounting procedures and principles which respect the UK HE sector's accounting rules.</p>
II.19 1c)	2.1.2.1	7.	<p>Incurred during the duration/lifetime of the project.</p>
II.19 1d)			<p>Recorded in the HEI's accounts no later than the date of the audit certificate.</p> <p>Or, if not available, a closest possible estimate can be declared as actual where this conforms to the HEI's accounting principles. Except for the last reporting period, where only actual costs can be declared.</p>
II.19 2		8.	<p>The following non-eligible costs cannot be included:</p> <ul style="list-style-type: none"> <li>a) any identifiable indirect taxes, including VAT or duties;</li> <li>b) interest owed;</li> <li>c) provisions for future losses or charges;</li> <li>d) exchange losses;</li> <li>e) costs declared, incurred or reimbursed in respect of another EU project;</li> <li>f) costs related to return on capital;</li> <li>g) debt and debt service charges.</li> </ul>

### Interpretation of the requirements

29. The following criteria have been used when interpreting these requirements. They are listed in order of importance. The methods for TRAC EC-FP7 have been developed in a way that ensures that:

- the Commission's requirements are met to the satisfaction of an international firm of accountants and auditors (KPMG LLP), the university sector (Universities UK) and the UK Government (Office of Science and Innovation);
- they adhere to Parts II to V of the TRAC-fEC Guidance (annual TRAC, charge-out rates and TRAC fEC);

- they are practical (capable of being implemented) in as least burdensome a way as possible;
- they are at least as robust as those in a Full Cost model applied by a university in The Netherlands under the last four Framework Programmes; and real indirect cost models for FP7 being considered by other universities in that country.

## TRAC EC-FP7, the Guidance

### 1. Definition of indirect costs

Indirect costs are associated with or caused by two or more cost objectives (e.g. projects), but are not directly traceable to or related to each of them individually. It is not possible to measure directly how much of the cost is attributable to a single cost objective.

30. TRAC-fEC satisfies these requirements, as shown in costing standard 4 and the definition of Support costs in the TRAC-fEC Guidance (reference Annex 6, p19).

#### **Adjustment for TRAC EC-FP7**

The TRAC-fEC DA costs of laboratory technicians, major research equipment, and estates are also defined as indirect costs under TRAC EC-FP7. This is because these costs are also attributed, and cannot be directly charged, to a particular project.

### 2. Indirect costs are not direct costs

Indirect costs are not identified as direct costs, and do not include any costs already directly charged to the project.

31. TRAC-fEC satisfies this requirement. All institutional costs are identified as either a direct cost (they relate directly to one of the three core activities of Teaching, Research and Other (consultancy)) or as a Support cost. Refer, for example, to the note at the end of paragraph 10, Section A, Part IV of the TRAC-fEC Guidance. These terms are very specifically defined.
32. Direct costs of EC-FP7 projects are direct costs under TRAC-fEC and cannot therefore be included as part of the indirect costs of Research (or any other activity).

### 3. Fair and reasonable cost drivers are used to attribute costs to projects

Necessary for the implementation of the project. Directly linked to the subject matter and scope. Present in the budget or in the description of activities (Annex 1) annexed to the contract.

Indirect costs are in direct relationship with the direct eligible costs of the project. They are charged to the project to the extent that they represent a fair apportionment of the overall

overheads of the organisation. Indirect eligible costs should not be included in indirect costs for research projects funded by the Community.

Different methods and keys (e.g. cost drivers) may be used for the distribution (e.g. attribution) of the indirect eligible costs, in compliance with the usual accounting principles of the HEI. No arbitrary or subjective cost drivers can be accepted.

33. TRAC-fEC satisfies these requirements. Parts III and IV of the TRAC-fEC Guidance cover the attribution of costs in considerable detail.

34. In summary TRAC-fEC methods are as follows:

- all institutional costs (reconciled to financial statements) are identified as either a direct cost that can be directly allocated to one of the three core activities, or as a Support cost;
- Support (indirect) costs are then attributed to Research, Teaching and Other core activities, using detailed methods and principles, which ensure that the indirect costs are in as direct relationship as possible with the eligible direct costs. For example, estates costs must be attributed to activities using space used by each department, for each activity, weighted for the type of space;
- Research Support costs therefore do not contain any Support costs associated with Teaching or with Other activities (e.g. consultancy or students residences). Three specified methods are used to calculate charge-out rates that ensure that the Support costs of Research relate to the characteristics of each research project being costed:
  - the estates costs of Research are categorised as either a Research estates cost of laboratory/clinical departments, or that of generic/classroom subjects. Each estates cost total is then divided by the direct Research time of academics, Research Assistants and PGR students (with mandatory weightings to reflect the lower use of estate by PGRs), in the relevant departments, to arrive at two £/direct FTE estates rates for Research (one for laboratory, one for non-laboratory);
  - the costs of major research facilities/equipment and of laboratory technicians that are attributable to Research, are identified and separate charge-out rates are calculated;
  - the balance of the Support costs of Research are then divided by the direct time of academics, Research Assistants and PGR students (with mandatory weightings) to arrive at a £/direct FTE indirect cost rate for Research. This is quoted as a £/hour rate based on 1650 hours a year.<sup>23</sup>

All charge-out rates are based on actual costs of institutions, not estimated, budgeted or imputed costs.

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<sup>23</sup> extensive testing of TRAC-fEC during the development of that system led to a clear decision to use FTEs to allocate indirect costs onto research projects. This method was found to be significantly better at reflecting the costs used by any one project than the alternatives of indirect costs calculated as a % salary, or as a % direct costs.

- these £/hour charge-out rates are then charged to projects based on the direct time of the academics, research assistants and PGR students working on each project. The charge-out rates applied to PGR students are weighted, consistent with the original calculation. This means that indirect costs of PGR students are identified and allocated separately from the indirect costs on academic or research staff;
- if any other Support or indirect costs are recharged to projects, through separate charge-out rates, then the total recharge for each year is deducted from the Support or indirect cost total to ensure that there is no double-counting or inadvertent inclusion of a profit margin;
- no Support or indirect costs are applied to the time of support staff on projects, such as secretaries or technicians (the figures to calculate charge-out rates were not considered sufficiently robust and would have led to the inappropriate allocation of cost onto research projects);
- there are rules specifying the indirect costs which can be charged to projects which take into account the different nature of projects (e.g. work done off-campus, by staff in other departments or universities etc).

#### **Adjustment for TRAC EC-FP7**

Although the term indirect cost rate is used in this report to cover the charges for all indirect costs, estates, major research facilities and laboratory technicians costs, the separate rates for each type of indirect cost that are calculated separately under TRAC-fEC are still to be calculated and applied separately under TRAC EC-FP7.

As with TRAC-fEC, indirect costs, estates costs and laboratory technicians costs should be allocated to FP7 projects based on the hours (FTE) of research assistants, principal investigators and PGR students.

Some activities on FP7 research projects, such as project management, can be carried out by an academic, an academic-related member of staff or an administrator. The costs of their time are charged as a direct cost and are not included in the indirect cost charge-out rates. These staff should be considered equivalent to academic members of staff, and charge-out rates (indirect costs, laboratory technicians, estates) should be applied to the time they charge to the project. This direct time should be included in the denominator when the TRAC rates are next calculated, where material. These rates would then apply to all projects, including for the Research Councils.

#### **4. Verifiable and based on published financial statements**

Indirect costs must be reasonable and capable of verification. And reconcilable with the published financial statements. Containing no imputed costs.

35. TRAC-fEC costs being reported for a year are based on and must be reconcilable with the audited financial statements for the year (refer Part II, Chapter B.3, paragraph 21 of the TRAC-fEC Guidance). UK accounting conventions do not allow imputed or estimated costs to be included in financial statements, with the exception of provisions (see (8) below).

#### **Adjustment for TRAC EC-FP7**

The two TRAC-fEC cost adjustments must be excluded from TRAC EC-FP7 indirect costs. When excluding these costs:

- the net infrastructure charge should be excluded;
- the gross return for financing and investment should be excluded; (i.e. interest costs should also be excluded).

Historical cost depreciation should be included for buildings and equipment, not depreciation on a current cost revaluation method.

### **5. Economic and reasonable**

Eligible costs must be – economic, efficient and effective, reasonable.

Comply with the principles of sound financial management, with the objectives of the project, and with the formal reporting requirements. And incurred in relation with the normal behaviour of the HEI's staff. Ineligible costs include excessive or reckless expenditure.

36. TRAC-fEC and existing institutional management policy and processes, and quality assurance procedures, including internal audit, help to ensure that costs recorded in financial statements satisfy these requirements.

### **6. Follow accounting conventions**

Determined in accordance with the usual accounting principles or conventions of the HEI.

e.g. using the usual definition of types of eligible costs, and of direct and indirect costs.

Prepared using usual accounting procedures and principles which respect the UK HE sector's accounting rules

37. TRAC-fEC satisfies these requirements. Institutions comply with the UK 'Statement of Recommended Practice: accounting for further and higher education' (the FE/HE SORP) when drawing up their financial statements.<sup>24</sup>

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<sup>24</sup> Universities UK ASBN 1 84036 101 8

The FE/HE SORP is issued by Universities UK and is produced in cooperation with sector groups in higher education and the funders of the higher education sector.

The SORP Board operates according to the guidelines of the Accounting Standards Board (ASB). The ASB has confirmed that the FE/HE SORP does not appear to contain any fundamental points of principle that are unacceptable in the context of current accounting practice or to conflict with an accounting standard or the ASB's plans for future standards.

The ASB is an operating body of the Financial Reporting Council which is the UK's independent regulator for corporate reporting and governance. The ASB sets, monitors and enforces accounting and auditing standards, and has statutory authority to issue accounting standards, under Section 256 (1) Companies Act 1985 as amended by the Companies Act 1989. As part of this, the ASB collaborates with accounting standard-setters from other countries and the International Accounting Standards Board (IASB) both in order to influence the development of international standards and in order to ensure that its standards are developed with due regard to international developments.

38. All institutions comply with TRAC-fEC. This contains additional cost accounting rules that are mandatory. These requirements are enforced by all UK Funding Councils and the Research Councils.

## **7. Relating to the project's lifetime**

Incurred during the duration/lifetime of the project. Recorded in the HEI's accounts no later than the date of the audit certificate. Or, if not available, a closest possible estimate can be declared as actual where this conforms to the HEI's accounting principles. Except for the last reporting period, where only actual costs can be declared.

39. TRAC, and TRAC-fEC, indirect cost rates are calculated on actual costs, not forecast, estimated, budgeted or imputed costs. Costs incurred in 2005/06, for example, which form part of the annual TRAC return reported on 31 January 2007, are used to calculate the indirect cost rates applied to projects from 1 February 2007. These costs are indexed to current price levels.
40. The indirect cost rates applying in the year that the project budget is agreed then form the basis of the indirect costs during the lifetime of the project (appropriately indexed). This is considered under the HEIs' accounting principles (as defined by TRAC-fEC) to form the closest possible estimate of an HEI's costs.

## **8. Specified non-eligible costs cannot be included:**

- a. any identifiable indirect taxes, including VAT or duties;
  - b. interest owed;
  - c. provisions for future losses or charges;
  - d. exchange losses;
  - e. costs declared, incurred or reimbursed in respect of another Commission project;
  - f. costs related to return on capital;
  - g. debt and debt service charges;
  - h. excessive or reckless expenditure.
41. These items are dealt with in one of three ways:
- i. already excluded from the TRAC-fEC Support costs of Research:
    - it is normal HE sector accounting practice that provisions for bad debts do not appear as a cost in the financial statements as the income relating to the debt is not recognised and they are therefore not a cost within TRAC-fEC;
    - exchange losses – (d) above – are only an issue in terms of calculating the direct costs of a project. There is no adjustment required to indirect costs;
    - costs in respect of another Commission project – (e) above – are not included in TRAC-fEC Support costs;
    - excessive or reckless expenditure – (h) above – was covered under point (5) above.

- ii. included in TRAC-fEC, but already excluded from TRAC EC-FP7.
  - interest owed (b) above; debt and debt service charges (g) above; and costs related to return on capital (f) above; are excluded from TRAC EC-FP7, see point (4) above.
- iii. included in TRAC-fEC, but specifically excluded from TRAC EC-FP7, as specified below.
  - identifiable indirect taxes - (a) above - include irrecoverable VAT. The UK HE sector is working towards agreeing a partial exemption method with the Government (H M Revenue and Customs). Institutions will be able to calculate the amount they can recover and therefore the amount they cannot recover. An estimate of the irrecoverable VAT that is in the TRAC-fEC indirect cost total should be made, followed by an estimate that is in the TRAC-fEC Research indirect cost total. This should be excluded when calculating the TRAC EC-FP7 Research indirect cost rate.

Before the partial exemption method is agreed for the sector, universities should use their current partial exemption methodology to inform the calculation of the irrecoverable VAT total. The method for this will vary by institution. This will necessarily be a high-level calculation;

- charges made to a provision for enhanced pension payments must be excluded, even though they are charged to income and expenditure statements under the FE/HE SORP.<sup>25</sup> However, when the payment is actually made by the HEI to the pension scheme (i.e. a cash payment is actually made by the HEI) the amount paid can be included in the TRAC EC-FP7 indirect cost total.
42. Other indirect taxes (such as airport taxes) cannot be comprehensively identified but are also not material, compared to the level of indirect costs overall, and no estimates or deductions need to be made to the indirect cost total. (However, they continue to be ineligible direct costs.)

#### **Adjustments for TRAC EC-FP7**

Irrecoverable VAT should be excluded. A reasonable estimate should be made of amount, which can be at a high-level. The method for doing so will depend on each institution's records and systems, and will improve once the new partial exemption methods for the UK are agreed.

Charges made to a provision for enhanced pension payments should be excluded. When the payments are actually made from the provision (to the pension scheme), these payments should be included in indirect costs.

<sup>25</sup> Employers' contributions to a pension scheme that are paid through the payroll continue to form part of the eligible costs. The only ineligible cost is the one-off charge made as an accounting entry or addition to a provision. Only cash expenditure is allowable expenditure under TRAC EC-FP7.

If an institution makes any other charges to a provision, these should be excluded from the indirect costs for Research (e.g. for restructuring, or bad debts if separately provided for).

## Quality assurance

43. The following relates to the quality assurance of the TRAC EC-FP7 methodology and the calculation of the TRAC EC-FP7 rates.
44. As part of TRAC EC-FP7, institutions must:
  - a) carry out their own internal quality assurance processes, as specified in TRAC-fEC;
  - b) obtain an independent quality assurance and validation review of the TRAC-fEC methods and the rate calculations (carried out by the Research Council Quality Assurance Review Team, or by the institution's own auditors);
  - c) obtain an audit verification that the changes have been made to TRAC-fEC so TRAC EC-FP7 is being applied;
  - d) produce a Certificate on the Methodology as described in Form E of Annex VII. This will be a standard certificate appropriate for institutions complying with TRAC EC-FP7.
45. TRAC-fEC already requires an extensive amount of quality assurance to be carried out by HEIs (involving their senior managers, Committees, and internal auditors).
46. Following a previous quality assurance process, the Research Councils, in association with the Funding Councils, are carrying out a process of external quality assurance and validation in 2007-09. This external quality assurance and validation process is to provide assurance to the sponsors of Research on the operation of TRAC-fEC to ensure that the annual TRAC methodology is being applied appropriately, and the indirect cost rates are being calculated correctly.
47. Institutions, and the Commission, can rely on this quality assurance and validation process to provide assurance on the TRAC-fEC rates.
48. Not all HEIs in the UK will be reviewed by the Research Councils. Some institutions may not have had a Research Council sponsored quality assurance/validation review before they start claiming costs for reimbursement under FP7. In this case, they should arrange for a similar quality assurance/validation review by their own auditors. They should use the Research Council processes and audit programme for this.
49. In addition, before they start claiming costs for reimbursement under FP7 institutions should commission their auditors to verify that the adjustments to the TRAC-fEC processes and calculations required in this TRAC EC-FP7 Guidance have been implemented. This should be done every three years. This should cover the requirements listed in the boxes at the end of Section B of this report.

50. As a result of these quality assurance and validation processes, the institution should be able to complete a Certificate on the Methodology (Form E) for approval by the Commission. A standard Certificate on the Methodology is likely to be produced in the UK for use by institutions who comply with TRAC EC-FP7, to facilitate this process across the UK sector and in the Commission.
51. A full description of the audit requirements on each project, as for FP6, will be in the FP7 guidance documents (see, in particular, Annex VII, Form D – terms of reference for the Certificate on the Financial Statements). It is expected that the approval of the institution's Certificate on the Methodology (Form E) by the Commission will satisfy the audit requirements for the methods that are used at a project level in several areas.
52. In particular: in procedure 1 - the methods used to confirm the actual productive hours (which is covered by the Government-approved 1650 average); in procedures 1 and 4 – the methods used to calculate average pay band costs; and in procedures 10 and 11 – the methods used to calculate overheads. The auditors will then just need to confirm that the rates calculated from these methods are correctly applied. The other requirements for the Certificate on the Financial Statements are not covered further in this report.

#### **Adjustment for TRAC EC-FP7**

##### For TRAC-fEC

Each institution's application of the TRAC-fEC methodology and calculation of the TRAC-fEC indirect cost rates should be reviewed under a quality assurance/validation process every three years. A new process is being specified and introduced by the UK Research Councils (2007). As part of this a quality assurance and validation visit and review should be carried out by the Research Councils, or by an institution's auditors.

##### For TRAC EC-FP7

In addition, every three years, the HEI should commission an independent audit that verifies that the adjustments to the TRAC-fEC processes and calculations required in this TRAC EC-FP7 Guidance have been implemented.

The FP7 audit requirements at a project level, i.e. for the Certificate on the Financial Statements, will be in addition to this. However, in terms of the procedures for this Certificate that cover charge-out rates, the auditors will just need to satisfy themselves that the rates calculated from the (previously verified) TRAC EC-FP7 process have been correctly applied.

## Implementing this Guidance

53. The process for finalising this Guidance was outlined in Section B.
54. The UK Government will present TRAC EC-FP7 to the Commission in early 2007, as the UK costing system that meets the FP7 costing guidelines, and will invite the Commission to indicate if it has any reservations or observations to make. The aim is for TRAC EC-FP7 to provide the means for auditors,

working with institutions, to provide an 'independent report on factual findings in methodology concerning a Grant Agreement financed under FP7'. It is planned that there will be a standard 'Certificate on the Methodology' for TRAC EC-FP7. The fact that any particular institution is using the TRAC EC-FP7 system and is eligible for this Certificate must of course be separately verified by that institution's auditors.

55. Subject to the outcomes of the discussion with the Commission on the national TRAC EC-FP7 system, it is likely that institutions which are using systems that are in compliance with TRAC EC-FP7, once verified as such by their auditors through the TRAC EC-FP7 quality assurance and validation process, will be in compliance with the Commission's FP7 costing guidelines. They and their auditors should be able to complete the standard TRAC EC-FP7 Certificate on the Methodology for approval by the Commission.
56. Individual institutions should choose whether they wish to implement this Guidance now (and include real indirect costs on their FP7 project budgets); or implement it once the UK Government has presented it to the Commission; or develop any other system that they currently use, in order to calculate real indirect costs.
57. A training course may be made available for HEIs implementing TRAC EC-FP7.