

JCPSG standard definitions for costing and pricing

JCPSG

This leaflet gives standard definitions for costing and pricing. In order to avoid confusion, the Joint Costing and Pricing Steering Group (JCPSG) strongly advises all higher education institutions and their sponsors to adopt these definitions when using costing and pricing terminology in a higher education context.

Section one contains terms that are used by the higher education sector and commercial organisations alike. It gives the definition of each, drawn from the Chartered Institute of Management Accountants (CIMA) Official Terminology, and explains how the term is used in higher education. Section two lists terms that are specific to costing and pricing within universities and colleges, and gives the JCPSG definition.

The document can also be downloaded from the JCPSG web-site, www.jcpsg.ac.uk on the 'Costing and pricing' page.

Section one: General terms

Term	CIMA standard definition*	Use in higher education context
Activity based costing (ABC)	An approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities and activities to cost objects (e.g. product lines) based on consumption estimates. The latter utilise cost drivers to attach activity costs to outputs.	<p>The core principles of ABC have been incorporated into all the JCPSG's guidance, including 'Management information for decision making: costing guidelines for higher education institutions', July 1997; and 'Transparent Approach to Costing (TRAC): Volume II Reference Manual', July 2000.</p> <p>The adoption of ABC within institutions can lead to the development of sophisticated cost drivers in order to apportion indirect costs to academic departments. The JCPSG advises institutions to develop and refine their cost driver model to the point where it provides a fair and reasonable reflection of the costs of their activity cost pools (see definition below), and not to pursue spurious accuracy.</p>
Activity cost pool	A grouping of all cost elements associated with an activity.	<p>The TRAC guidance manual describes HE outputs or activity cost pools for Transparency Review purposes thus:</p> <p>'The core activities of Teaching (T), Research (R), Other (O) and Support (S).</p> <p>Lower-level activity cost pools: Publicly Funded Teaching (PFT); Non-publicly Funded Teaching (NPFT); the six research sponsor types included in R; residences and catering; non-Teaching trading companies; Other (Clinical Services) and rest of Other included in O.'</p>

Term	CIMA standard definition*	Use in higher education context
Allocate	To assign a whole item of cost, or of revenue, to a single cost unit, centre, account or time period.	The terms 'allocation' and 'apportion' (see below) can easily be confused. The TRAC guidance manual clarifies which costs can be directly allocated to activities and which need to be apportioned. For example, it is appropriate to allocate directly the costs of externally funded research staff to Research (R).
Apportion	To spread revenues or costs over two or more cost units, centres, accounts or periods.	Some HEI costs cannot be directly allocated to one single activity, institutions then need to apportion these costs to activities via cost drivers (see below for definition). A prime example is permanent academic staff costs, the cost driver in this case being the split of academic staff time.
Break-even point	The level of activity at which there is neither profit nor loss. It can be ascertained by using a break-even chart or by calculation.	Institutions are most likely to calculate the break-even point when they make decisions on the viability of services with numerous customers, e.g. courses, conferences, residential lettings or publications.
Contract cost	Aggregated costs of a single contract; usually applies to major long-term contracts rather than short-term jobs.	HEIs make extensive use of contract costing in order to calculate the costs of teaching, research or consultancy projects. In the past some of these contract cost calculations have been based on either the marginal cost or the costs the sponsor will fund, rather than the true full cost to the institution. The information derived from the implementation of the TRAC methodology will mean that institutions will be able to calculate the full economic cost (see definition below) of a contract.

Term	CIMA standard definition*	Use in higher education context
Contribution	Sales value less variable cost of sales. It may be expressed as total contribution, contribution per unit or as a percentage of sales.	In an HE context, the level of contribution for a contract relates to the degree to which the price supports the fixed costs (primarily permanent staff, premises and equipment infrastructure and other indirect costs) of the institution.
Cost centre	A production or service location, function, activity or item of equipment for which costs are accumulated.	Most HEIs have divided their institutions into cost centres for financial management. These could be either academic departments or schools, or support cost centres, such as the finance office or the library. Many institutions operate a resource allocation model (RAM) where academic cost centres are the level at which devolved financial management operates and at which income and costs are accumulated.
Cost driver	Any factor which causes a change in the cost of an activity. An activity may have multiple cost drivers associated with it.	The TRAC guidance manual stipulates that four to six robust cost drivers need to be used by institutions when apportioning support costs to activities. Common examples of cost drivers used by HEIs would be student numbers (full-time equivalent – FTE – or headcount); staff numbers (FTE or headcount); square metres of usable space occupied by a department; or total expenditure. Many institutions operate a resource allocation model that incorporates several cost drivers in order to apportion support costs to academic departments. Some of the support areas may be apportioned using a multiple cost driver; a good example of this would be the library, where a driver combining both staff and student numbers would be most appropriate.

Term	CIMA standard definition*	Use in higher education context
Direct cost	Expenditure which can be economically identified with and specifically measured in respect to a relevant cost object.	<p>In the past, HEIs have often incorrectly used the term 'direct cost' in relation to specific projects or contracts, when they were actually referring to the marginal cost of that project. The major discrepancy in this area is the omission of the direct time on the project of a member of the permanent academic staff.</p> <p>The TRAC guidance manual requires all HEIs to identify the full direct and indirect costs associated with all activities. The collection of academic staff time as part of this process will help institutions to calculate the full direct and indirect costs of a single project or contract.</p> <p>It is good accounting practice to treat all identifiably direct costs as direct, and all JCPSG guidance reflects this good practice.</p>
Indirect cost	Expenditure on labour, materials or services which cannot be economically identified with a specific saleable cost unit.	<p>These are costs that cannot be treated as direct and are sometimes referred to as indirect support costs or erroneously as 'overheads'. They do not vary with changes in levels of activity, or only in the medium term.</p> <p>In the higher education sector, the term is often used to describe the level at which a sponsor will make a contribution to project costs. For example, a member of the academic staff may say: 'Research Councils pay indirect costs of 46 per cent on staff costs'. This statement contains two fundamental misunderstandings. Firstly, the staff costs to which the academic refers are usually only the additional (or marginal) staff that are employed on the project, for example, research assistants or research associates. Secondly, the blanket rate of 46 per cent bears no relationship to the actual indirect costs of that project.</p> <p>HEIs and their sponsors are advised to calculate robust full economic costs (see definition below) for projects and contracts, and to use this information in future pricing decisions.</p>

Term	CIMA standard definition*	Use in higher education context
Marginal cost	The part of the cost of one unit of product or service which would be avoided if that unit were not produced, or which would increase if one extra unit were produced.	<p>The marginal cost of a research or consultancy project or a teaching programme is only the additional or incremental cost the institution will incur in order to undertake that activity. The marginal cost is usually considerably lower than the direct cost and bears no relationship to either the full economic cost (see definition below) or the value of that activity to the customer.</p> <p>If marginal costing is used to arrive at the price for a project or programme, then the institution is subsidising some of the costs of that activity from other sources. HEIs and their stakeholders have relied far too heavily on marginal costing in the past, resulting in both a low-price culture and a lack of resources to fund investment for the development of future capability and capacity.</p>
Timesheet	A record of how a person's time has been spent. Used to calculate pay, to assess the efficient use of time or to charge for work done.	<p>Employees of companies and public corporations often complete weekly or monthly timesheets, either for management purposes or to charge out their time to clients.</p> <p>Within the HE sector, many academic staff have experience of completing project timesheets as part of the audit trail of sponsors (e.g. the European Commission). The TRAC guidance manual does not require academic staff to complete timesheets, as robust time data can be collected using time allocation schedules (see definition below).</p>
Uniform costing	The use by several undertakings of the same costing systems, i.e. the same basic costing methods, principles and techniques.	The TRAC guidance manual, being implemented in all UK universities and colleges, represents a uniform approach to the costing of all HE activities.

* Definitions from *Management Accounting Official Terminology* (1996), Chartered Institute of Management Accountants (CIMA), London. ISBN 1 874784 49 3

Section two: Specific terms used by universities and colleges

Term	JCPSPG definition
Auditability	<p>Auditability is one of the key principles on which the TRAC methodology is built. The TRAC guidance manual describes it as follows:</p> <p>‘Institutions should be able to demonstrate the validity of their cost calculations by appropriate audit trails between summary reporting and base data. Audit to meet Transparency Review requirements is to be carried out as part of the institution’s normal audit process and will probably be included as part of the rolling internal audit programme.</p> <p>Auditability means that the reported figures should be reconciled to the institution’s externally audited annual financial statements; traceable; supported (verified) by surveys; and supported by managers’ statements that they fairly reflect cost attribution.’</p>
Cost adjustments	<p>The TRAC methodology requires the calculation of three cost adjustments: infrastructure, cost of capital employed and exceptional items. Cost adjustments form part of the indirect cost of an activity.</p>
Cost-based pricing	<p>A pricing methodology that uses the cost of a product or service to determine its price. It is a means of calculating the ‘should-be-price’ for publicly-funded contracts. In these cases the price is equal to the full economic cost (see definition below) of the product or service.</p>
Department	<p>An institutionally defined management unit; this may be an individual academic department or a faculty or school.</p>
Department type	<p>The TRAC methodology uses three department types: classroom, laboratory and clinical. The grouping of departments into department types is defined by each institution.</p>
Direct staff cost	<p>Incorporates the cost of the direct time of permanent academic staff and the cost of all other categories of staff charged directly to non-support activities (i.e. Teaching, Research or Other). The total of these costs for the core activities of Teaching (T), Research (R) and Other (O) for each department/department type forms the denominator of the indirect cost calculation.</p>
Double-charging/ double-counting	<p>This is not permissible under the TRAC methodology. In particular, institutions must ensure that costs are not included in both the direct costs and the indirect cost rates when calculating a cost-based price.</p>

Term	JCPSG definition
Full economic cost (FEC)	<p>The full economic cost of an activity is calculated by adding all direct and indirect costs, including all cost adjustments (see definition above) required under the TRAC methodology.</p> <p>This term is particularly appropriate when considering the cost-based pricing (see definition above) of a project.</p> <p>Under the dual support system, the funding of the full economic cost of Research Council projects is provided from two sources. The Research Councils are responsible for funding direct costs (excluding permanent academic staff cost) and making a contribution to indirect costs. The HE funding councils contribute to permanent academic staff costs and to indirect costs, on the basis that the total contribution will be equal to the full economic cost, in aggregate, over time. When an HEI has a strong market position and is being funded by a commercial sponsor it may be possible to obtain a price above FEC.</p>
Indirect cost rates	<p>A means of attributing Support costs to a product or service, usually on the basis of direct staff cost. The accepted calculation of an indirect percentage cost rate for a department/department type by activity being:</p> $\frac{\text{Support costs}}{\text{Direct staff cost}} \times 100$
Knock-for-knock arrangements	<p>Describes the nature of the partnership between an HEI and an NHS Trust. It refers to the uncosted mutual assistance from sharing arrangements with medical and dental schools.</p>
Market-based pricing	<p>A pricing methodology that uses the demand for a product or service to determine its price. The price reflects the perceived value derived by the customer and is independent of the costs of providing the product or service.</p>
Materiality	<p>This is an important concept in the TRAC methodology. The guidance manual describes it as follows:</p> <p>‘The effort applied to costing should be proportionate to the significance of the costs being measured. The general principle to be followed is not putting undue effort or precision into very small costs, but equally being careful to take proper account of significant costs... The way to test this is for institutions to consider whether their proposed treatment of a particular cost could make a significant difference to the results for the particular purposes they are costing. As a starting point in such considerations, a difference of 10% or more is worth further consideration.’</p>
Non-public sponsors	<p>Organisations that support non-publicly-funded (NPF) contracts, i.e. UK-based charities, UK industry, commerce and public corporations, EU government bodies (excluding the EC) and all other overseas bodies.</p>

Term	JCPSG definition
Public sponsors	Are those bodies that support publicly-funded (PF) contracts, i.e. UK central government/local authorities, health and hospital authorities, funding councils, Research Councils and the European Commission (EC).
Rate abatements	Are figures to be deducted from indirect cost rates specifically to avoid the double counting of costs to projects. They are used where a cost assumed as support has been charged as a direct cost to a project. There are three rate abatements: technicians in academic departments; clerical staff in academic departments; and support time of permanent academic staff. The detailed calculation of rate abatements can be found in 'The use of indirect cost rates in costing government contracts – technical guidance' published by the JCPSG in September 2001.
Strategic pricing policy	The JCPSG strongly advises all HEIs to develop and regularly review their strategic pricing policy. The 'Pricing toolkit for the higher education sector', published by the JCPSG in October 2000, offers institutions the following advice: 'Strategic pricing policy means having a longer-term view of the pricing of services and products being delivered by the HEI. It should come out of the HEI's corporate strategy and should aim to enable achievement of the HEI's overall strategy. Strategic pricing policy should lay down guidelines for pricing against which individual pricing decisions should be assessed.'
Support costs	Are those which cannot be allocated to a specific activity. Support costs and indirect costs are treated synonymously under the TRAC methodology. Support costs consist of: the cost of the support time of academic staff; the costs of support staff; the support elements of non-staff costs in academic departments; the total costs of support or service cost centres and the cost adjustments. The total of these costs for the core activities of Teaching (T), Research (R) and Other (O) for each department/department type forms the numerator of the indirect cost calculation.
Time allocation schedule	The TRAC methodology relies heavily on the use of time allocation schedules. The guidance manual defines the term as follows: 'The phrase time allocation schedule refers to any form that is used to collect data on the time that an individual spends on activities. This could be daily, weekly, monthly or annually; in hours or percentages; completed by individuals or their head of department.'
Transparent Approach to Costing (TRAC)	A uniform approach to the costing of activities undertaken by all UK HEIs. The TRAC methodology was established to meet the requirements of the Transparency and Accountability Review of Higher Education. The TRAC methodology is described in the 'Transparent Approach to Costing: Volume II Reference Manual' published by the JCPSG in July 2000.