

SSAP

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Revised January 1989

Accounting for research and development



STATEMENT OF STANDARD ACCOUNTING PRACTICE

13 (Revised)

Accounting for research and development

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STATEMENT OF STANDARD ACCOUNTING PRACTICE

Accounting for research and development

(Issued December 1977, revised January 1989)

The provisions of this statement of standard accounting practice should be read in conjunction with the Explanatory foreword to accounting standards and need not be applied to immaterial items.

Part 1 – Explanatory Note

Basic concepts

- 1 The accounting policies to be followed in respect of research and development expenditure must have regard to the fundamental accounting concepts including the ‘accruals’ concept by which revenue and costs are accrued, matched and dealt with in the period to which they relate and the ‘prudence’ concept by which revenue and profits are not anticipated but are recognised only when realised in the form either of cash or of other assets the ultimate cash realisation of which can be established with reasonable certainty. It is a corollary of the prudence concept that expenditure should be written off in the period in which it arises unless its relationship to the revenue of a future period can be established with reasonable certainty.

The different types of research and development expenditure

- 2 The term ‘research and development’ is currently used to cover a wide range of activities, including those in the services sector. The definitions of the different types of research and development used in this statement are based on those used by the Organisation for Economic Co-operation and Development for the purposes of collecting data world-wide.
- 3 Classification of expenditure is often dependent on the type of business and its organisation. However, it is generally possible to recognise three broad categories of activity, namely pure research, applied research and development. The definitions of the individual categories are set out in Part 2.
- 4 The dividing line between these categories of expenditure is often indistinct and particular expenditure may have characteristics of more than one category. This is especially so when new products or services are developed through research and development to production, when the activities may have characteristics of both development and production.
- 5 Research and development activity is distinguished from non-research based activity by the presence or absence of an appreciable element of innovation. If the activity departs from routine and breaks new ground it should normally be included; if it follows an established pattern it should normally be excluded.
- 6 Examples of activities that would normally be included in research and development are:
 - (a) experimental, theoretical or other work aimed at the discovery of new knowledge, or the advancement of existing knowledge;

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- (b) searching for applications of that knowledge;
- (c) formulation and design of possible applications for such work;
- (d) testing in search for, or evaluation of, product, service or process alternatives;
- (e) design, construction and testing of pre-production prototypes and models and development batches;
- (f) design of products, services, processes or systems involving new technology or substantially improving those already produced or installed;
- (g) construction and operation of pilot plants.

Examples of activities that would normally be excluded from research and development include: 7

- (a) testing and analysis either of equipment or product for purposes of quality or quantity control;
- (b) periodic alterations to existing products, services or processes even though these may represent some improvement;
- (c) operational research not tied to a specific research and development activity;
- (d) cost of corrective action in connection with break-downs during commercial production;
- (e) legal and administrative work in connection with patent applications, records and litigation and the sale or licensing of patents;
- (f) activity, including design and construction engineering, relating to the construction, relocation, rearrangement or start-up of facilities or equipment other than facilities or equipment whose sole use is for a particular research and development project;
- (g) market research.

The accounting treatment of research and development

Expenditure incurred on pure and applied research can be regarded as part of a continuing operation required to maintain a company's business and its competitive position. In general, no one particular period rather than any other will be expected to benefit and therefore it is appropriate that these costs should be written off as they are incurred. Expenditure on pure or applied research may not be treated as an asset (Companies Act 1985, Schedule 4, paragraph 3(2)(c)). 8

The development of new products or services is, however, distinguishable from pure and applied research. Expenditure on such development is normally undertaken with a reasonable expectation of specific commercial success and of future benefits arising from the work, either from increased revenue and related profits or from reduced costs. On these grounds it may be argued that such expenditure, to the extent that it is recoverable, should be deferred to be matched against the future revenue. 9

It will only be practicable to evaluate the potential future benefits of development expenditure if: 10

- (a) there is a clearly defined project; and
- (b) the related expenditure is separately identifiable.

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- 11 The outcome of such a project would then need to be examined for:
- (a) its technical feasibility; and
 - (b) its ultimate commercial viability considered in the light of factors such as:
 - (i) likely market conditions (including competing products or services);
 - (ii) public opinion;
 - (iii) consumer and environmental legislation.
- 12 Furthermore a project will be of value:
- (a) only if further development costs to be incurred on the same project, together with related production, selling and administration costs, will be more than covered by related revenues; and
 - (b) adequate resources exist, or are reasonably expected to be available, to enable the project to be completed and to provide any consequential increases in working capital.
- 13 The elements of uncertainty inherent in the considerations set out in paragraphs 11 and 12 are considerable. There will be a need for different persons with different types of judgement to be involved in assessing the technical, commercial and financial viability of the project. Combinations of the possible differing assessments which they might validly make can produce different assessments of the existence and amounts of future benefits.
- 14 If these uncertainties are viewed in the context of the concept of prudence, the future benefits of most development projects would be too uncertain to justify carrying the expenditure forward. Nevertheless, in certain industries it is considered that there are a number of major development projects that satisfy the stringent criteria set out in paragraphs 10 to 12. Accordingly, when the expenditure on development projects is judged on a prudent view of available evidence to satisfy these criteria, it may be carried forward and amortised over the period expected to benefit.
- 15 At each accounting date the unamortised balance of development expenditure should be examined project by project to ensure that it still fulfils the criteria in paragraphs 10 to 12. Where any doubt exists as to the continuation of those circumstances the balance should be written off.
- 16 Fixed assets may be acquired or constructed in order to provide facilities for research and/or development activities. The use of such fixed assets usually extends over a number of accounting periods and accordingly they should be capitalised and written off over their useful life. The depreciation so written off should be included as part of the expenditure on research and development and disclosed in accordance with SSAP12.

Exceptions

- 17 Where companies enter into a firm contract:
- (a) to carry out development work on behalf of third parties on such terms that the related expenditure is to be fully reimbursed, or
 - (b) to develop and manufacture at an agreed price calculated to reimburse expenditure on development as well as on manufacture,

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any such expenditure which has not been reimbursed at the balance sheet date should be dealt with as contract work-in-progress.

Expenditure incurred in locating and exploiting oil, gas and mineral deposits in the extractive industries does not fall within the definition of research and development used in this accounting standard. Development of new surveying methods and techniques as an integral part of research on geological phenomena should, however, be included in research and development. 18

Disclosure

While there are uncertainties inherent in research and development projects, such activities are important in forming a view of a company's future prospects. Detailed disclosure raises considerable problems of definition and the disclosure requirements of this standard are therefore limited to: 19

- (a) accounting policy as required by SSAP2;
- (b) disclosure of the total amount of research and development expenditure charged in the profit and loss account, distinguishing between the current year's expenditure and amounts amortised from deferred expenditure;
- (c) the movements on deferred development expenditure during the year.

Having regard to the problems of definition and disclosure referred to above, the scope of disclosure required under paragraph 19(b) is (except in the case of Republic of Ireland companies) restricted in effect to companies which are public limited companies, or special category companies, or subsidiaries of such companies, or which exceed by a multiple of 10 the criteria for defining a medium-sized company under the Companies Act 1985. 20

Part 2 – Definition of Terms

The following definition is used for the purpose of this statement: 21

Research and development expenditure means expenditure falling into one or more of the following broad categories (except to the extent that it relates to locating or exploiting oil, gas or mineral deposits or is reimbursable by third parties either directly or under the terms of a firm contract to develop and manufacture at an agreed price calculated to reimburse both elements of expenditure):

- (a) pure (or basic) research: experimental or theoretical work undertaken primarily to acquire new scientific or technical knowledge for its own sake rather than directed towards any specific aim or application;
- (b) applied research: original or critical investigation undertaken in order to gain new scientific or technical knowledge and directed towards a specific practical aim or objective;
- (c) development: use of scientific or technical knowledge in order to produce new or substantially improved materials, devices, products or services, to install new processes or systems prior to the commencement of commercial production or commercial applications, or to improving substantially those already produced or installed.

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Part 3 – Standard Accounting Practice

Scope

- 22 This standard applies to all financial statements intended to give a true and fair view of the financial position and profit or loss, but, except in the case of Republic of Ireland companies (see paragraphs 45 and 46), the provisions set out in paragraph 31 regarding the disclosure of the total amounts of research and development charged in the profit and loss account need not be applied by an entity that:
- (a) is not a public limited company or a special category company (as defined by Section 257 of the Companies Act 1985)* or a holding company that has a public limited company or a special category company as a subsidiary; and
 - (b) satisfies the criteria, multiplied in each case by 10, for defining a medium-sized company under Section 248 of the Companies Act 1985, as amended from time to time by statutory instrument and applied in accordance with the provisions of Section 249 of the Act.†

Accounting treatment

- 23 The cost of fixed assets acquired or constructed in order to provide facilities for research and development activities over a number of accounting periods should be capitalised and written off over their useful lives through the profit and loss account.
- 24 Expenditure on pure and applied research (other than that referred to in paragraph 23) should be written off in the year of expenditure through the profit and loss account.
- 25 Development expenditure should be written off in the year of expenditure except in the following circumstances when it may be deferred to future periods:
- (a) there is a clearly defined project, and
 - (b) the related expenditure is separately identifiable, and
 - (c) the outcome of such a project has been assessed with reasonable certainty as to:
 - (i) its technical feasibility, and
 - (ii) its ultimate commercial viability considered in the light of factors such as

*There is no exact equivalent of 'special category companies' in the Republic of Ireland. The Sixth Schedule to the 1963 Act refers to 'special classes of company' which include banking, discount and assurance companies but not shipping companies.

†Equivalent legal references

Great Britain	Northern Ireland	Republic of Ireland
<i>Companies Act 1985</i>	<i>Companies (Northern Ireland) Order 1986</i>	<i>Companies (Amendment) Act 1986</i>
Section 248	Article 256 (as amended)	Section 8
Section 249	Article 257	Section 9 <i>Companies Act 1963</i>
Section 257	Article 265	Sixth Schedule, paragraph 23

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likely market conditions (including competing products), public opinion, consumer and environmental legislation, and

- (d) the aggregate of the deferred development costs, any further development costs, and related production, selling and administration costs is reasonably expected to be exceeded by related future sales or other revenues, and
- (e) adequate resources exist, or are reasonably expected to be available, to enable the project to be completed and to provide any consequential increases in working capital.

In the foregoing circumstances development expenditure may be deferred to the extent that its recovery can reasonably be regarded as assured. 26

If an accounting policy of deferral of development expenditure is adopted, it should be applied to all development projects that meet the criteria in paragraph 25. 27

If development costs are deferred to future periods, they should be amortised. The amortisation should commence with the commercial production or application of the product, service, process or system and should be allocated on a systematic basis to each accounting period, by reference to either the sale or use of the product, service, process or system or the period over which these are expected to be sold or used. 28

Deferred development expenditure for each project should be reviewed at the end of each accounting period and where the circumstances which have justified the deferral of the expenditure (paragraph 25) no longer apply, or are considered doubtful, the expenditure, to the extent to which it is considered to be irrecoverable, should be written off immediately project by project. 29

Disclosure

The accounting policy on research and development expenditure should be stated and explained. 30

The total amount of research and development expenditure charged in the profit and loss account should be disclosed, analysed between the current year's expenditure and amounts amortised from deferred expenditure. 31

Movements on deferred development expenditure and the amount carried forward at the beginning and the end of the period should be disclosed. Deferred development expenditure should be disclosed under intangible fixed assets in the balance sheet. 32

Date from which effective

The accounting and disclosure requirements set out in this statement should be adopted as soon as possible and regarded as standard in respect of financial statements relating to accounting periods beginning on or after 1 January 1989. 33

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Part 4 – Note on Legal Requirements in Great Britain and Northern Ireland

All paragraph references unless otherwise indicated are to the Companies Act 1985 and the Companies (Northern Ireland) Order 1986.

- 34 Paragraph 3(1) of Schedule 4 enables any items required to be shown in a company's balance sheet or profit and loss account to be shown in greater detail than required by the format adopted.
- 35 Paragraph 3(2)(c) of Schedule 4 provides that a company's balance sheet or profit and loss account may include an item representing or covering the amount of any asset or liability, income or expenditure not otherwise covered by any of the items listed in the accounts format adopted. Cost of research shall not be treated as an asset in any company's balance sheet.
- 36 Paragraph 19(1) of Schedule 4 does not allow provision to be made for a temporary diminution in value other than for a fixed asset investment.
- 37 Paragraph 19(2) of Schedule 4 requires provision for diminution in value to be made in respect of any fixed asset which has diminished in value if the reduction is expected to be permanent (whether its useful economic life is limited or not) and the amount to be included in respect of it to be reduced accordingly. Any such provisions not shown in the profit and loss account shall be disclosed (either separately or in aggregate) in a note to the accounts.
- 38 Paragraph 19(3) requires that where the reasons for which any provision was made have ceased to apply to any extent, then the provision shall be written back to the extent that it is no longer necessary. Any amounts written back in accordance with this sub-paragraph which are not shown in the profit and loss account shall be disclosed (either separately or in aggregate) in a note to the accounts.
- 39 Paragraph 20(1) of Schedule 4 requires that notwithstanding that an item in respect of development costs is included under fixed assets in the balance sheet formats set out in Part 1 of Schedule 4, an amount may only be included in a company's balance sheet in respect of development costs in special circumstances.
- 40 Paragraph 20(2) of Schedule 4 requires that if any amount is included in a company's balance sheet in respect of development costs the following information shall be given in a note to the accounts:
- (a) the period over which the amount of those costs originally capitalised is being or is to be written off; and
 - (b) the reasons for capitalising the development costs in question.
- 41 Paragraph 6(c) of Schedule 7 requires the Directors' Report to contain an indication of the activities (if any) of the company and its subsidiaries in the field of research and development.

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Section 269(2)(b) of the Companies Act 1985 on the treatment of development costs requires that where the unamortised development expenditure carried forward is not treated as a realised loss when determining distributable reserves, the notes to the financial statements shall disclose: 42

- (a) the fact that the amount of the unamortised development expenditure is not to be treated as a realised loss for the purposes of calculating distributable profits; and
- (b) the circumstances that the directors relied upon to justify their decision not to treat the unamortised development expenditure as a realised loss.

Part 5 – Note on Legal Requirements in the Republic of Ireland

References are to the Companies (Amendment) Act 1986 and to the Schedule to that Act unless otherwise stated.

Section 4(5) of the Act enables any items required to be shown in a company's balance sheet or profit and loss account to be shown in greater detail than required by the format adopted. 43

Section 4(12) of the Act provides that the balance sheet, or profit and loss account, of a company may include an item representing or covering the amount of any asset or liability or income or expenditure not otherwise covered by any of the items listed in the format adopted but that costs of research shall not be treated as assets in the balance sheet of a company. 44

Paragraph 43(4) of the Schedule requires the amount expended on research and development in the financial year, and any amount committed in respect of research and development in subsequent years, to be stated. 45

Paragraph 43(5) of the Schedule provides that where, in the opinion of the directors, the disclosure of any information required by Paragraph 43(4) would be prejudicial to the interests of the company, that information need not be disclosed, but the fact that any such information has not been disclosed shall be stated. 46

Paragraph 7(1) of the Schedule does not allow provision to be made for a temporary diminution in value other than for a fixed asset investment. 47

Paragraph 7(2) of the Schedule requires provision for diminution in value to be made in respect of any fixed asset which has diminished in value if the reduction is expected to be permanent (whether its useful economic life is limited or not) and the amount to be included in respect of it shall be reduced accordingly. Any such provisions which are not shown in the profit and loss account shall be disclosed (either separately or in aggregate) in a note to the accounts. 48

Paragraph 7(3) of the Schedule requires that where the reasons for which any provision was made have ceased to apply to any extent, then the provision should be written back to the extent that it is no longer necessary. Any amounts written back in accordance with this sub-paragraph which are not shown in the profit and loss account shall be disclosed 49

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(either separately or in aggregate) in a note to the accounts.

- 50 Paragraph 8(1) of the Schedule requires that notwithstanding that an item in respect of development costs is included under fixed assets in the balance sheet formats set out in Part 1 of the Schedule, an amount may only be included in a company's balance sheet in respect of development costs in special circumstances.
- 51 Paragraph 8(2) of the Schedule requires that if any amount is included in a company's balance sheet in respect of development costs, the following information shall be given in a note to the accounts:
- (a) the period over which the amount of those costs originally capitalised is being or is to be written off, and
 - (b) the reasons for capitalising the development costs in question.
- 52 Section 13(c) of the Act requires the Directors' Report to contain an indication of the activity, if any, of the company and its subsidiaries, if any, in the field of research and development.
- 53 Section 45A of the Companies (Amendment) Act 1983 on the treatment of development costs, provides that where development costs are shown in a company's accounts any amount shown as an asset in respect of those costs shall be treated as a realised loss for the purpose of determining profits available for distribution. This provision does not apply to any part of that amount representing an unrealised profit made on revaluation of these costs; nor does it apply if:
- (a) there are special circumstances justifying the directors of the company concerned in deciding that the amount mentioned in respect thereof in the company's accounts shall not be treated as a realised loss, and
 - (b) the note to the accounts required by paragraph 8(2) of the Schedule states that the amount is not to be so treated and explains the circumstances relied upon to justify the decision of the directors to that effect.

Part 6 – Compliance with International Accounting Standard No.9 'Accounting for research and development activities'

- 54 The requirements of International Accounting Standard No. 9 'Accounting for research and development activities' accord very closely with the content of the United Kingdom and Irish Accounting Standard No.13 (Revised) 'Accounting for research and development' and accordingly compliance with SSAP13 (Revised) will ensure compliance with IAS 9 in all material respects.

