Circular 18/97  Treatment of I.T. Assets in Assets Registers and Related Matters

A Dhuine Uasal,

1. I am directed by the Minister for Finance to refer to the three-year programme of change to the Appropriation Accounts and in particular to the requirement that Departments maintain an Assets Register on all capital assets. Arising from the recommendations of an Interdepartmental Working Group convened in 1996, new guidelines are attached in regard to the treatment of computer hardware and software. These guidelines supplement the guidelines set out in Circular 31/95 on software valuation and in the other circulars in the series dealing with the changes to the Appropriation Accounts.

2. As far as possible, a pragmatic approach should be taken to the recording of I.T. assets in order to ensure that the ensuing system is easy to understand/maintain.

3. Procedural changes will have to be made in I.T. areas to ensure that asset acquisitions and changes are notified promptly to the area responsible for the maintenance of the Assets Register. Departments will have to decide on a breakdown of responsibilities between staff in I.T. areas and those involved in the maintenance of the information on the Assets Register.

4. The guidelines consist of:

   (1) a statement of general principles - page 2
   (2) detailed guidelines by type of I.T. asset - page 3
   (3) inventory control issues - page 9

   There is an example of the treatment of an upgrade to an I.T. asset at Appendix A - page 12. There is a glossary of terms at page 11.

5. Any queries on this circular should be addressed in the first instance to Government Accounting Section, Department of Finance Tel 7109-5803 /5583.

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Colm Gallagher
Assistant Secretary

To:/  ALL DEPARTMENTS ETC.
1. **Statement of General Principles:**

(1) In general I.T. assets, including peripherals to a mainframe or minicomputer and including software, should be depreciated over 5 years. An exception is Major Operational Software systems (see page 5) which, because of their complexity, usually should have a life of 10 years. Where such systems have already been entered on the Register with a 5 year life these should be readjusted on the basis set out in para 6 (iii) (f) of Circular 1/96 regarding a change in depreciation categories.

(2) Computer cabling in a building should be entered on the Assets Register as a single asset at total installation cost.

(3) In general, if an upgrade/enhancement to computer hardware or software has no material effect on the life of the asset, the expenditure should be treated as maintenance expenditure and not capitalised (e.g. if a feature is added to a system to ensure the system can handle a larger volume of transactions, this upgrade should be regarded as maintenance as it merely ensures that the system remains viable for the rest of its economic life).

(4) If the upgrade has a material effect on the life of the asset, the outlay should be treated as capital expenditure and the following adjustments should be made to the Assets Register:- the value of the asset should be increased by adding the cost of the upgrade. It will not be necessary to recalculate depreciation for previous years. The life of the asset should be extended as appropriate. See example A in the Appendix.

(5) If the upgrade has an existence independent of the mainframe, minicomputer, microcomputer or peripheral, it may warrant capitalisation in its own right.

(6) It may be considered prudent to group together into a single asset, for purposes of the Register, a number of hardware or software assets which individually fall below the specified threshold if the total value represents a significant investment on the part of the Department.

(7) If it is desired, for reasons of control, to have an entry for I.T. assets older than the threshold specified for entry on the Register, such assets should be entered at zero value.
2. In addition to the general principles set out above, detailed guidelines are set out below in regard to classes of I.T. asset:

A. Mainframes and Minicomputers (page 3),

B. Microcomputers (pages 4-5),

C. Software (pages 5-8).

(A) MAINFRAMES AND MINICOMPUTERS.

(i) Threshold for inclusion in the Assets Register.

- All mainframes and minicomputers less than 5 years old, which have not yet been entered on the Register, should be entered at cost. The depreciation from the date of acquisition to the end of the last year of account before entry on the Assets Register should be calculated and entered on the Register.

- Operating software should be capitalised separately.

(ii) Peripherals.

- Any peripheral item which has an existence independent of the particular mainframe or minicomputer should be noted as a separate asset in the Assets Register. As a rule, peripherals such as those listed below should be treated as independent assets, i.e. valued and depreciated separately, for purposes of the Assets Register: Terminals, Disc Units, Magnetic Tape Units (reel), Cartridge Tape Units, Switching Units, Air Conditioning Units, Printers, Front End Processors, Routers, Gateways. Departments should form their own judgement, in the light of the principles outlined in this paragraph, as to how to treat items not specifically mentioned here.

- Independent peripherals should be capitalised where the acquisition cost is £250 or more.

- These guidelines apply both to peripherals purchased at the same time as the mainframe and to those purchased later e.g. additional discs, printers etc..
(i) **Threshold for inclusion.**

- Any microcomputer asset (defined below) less than five years old which cost over £250 should be entered in the Asset Register, except where the asset forms part of a group which is to be classified as a single asset.

(ii) **Treatment of a desktop microcomputer unit (PC).**

- A PC asset consists of a system unit, (generally including the operating system software), VDU, keyboard and mouse. These should be entered collectively on the Assets Register as a single asset. The description of the PC asset should be taken to imply the existence of all parts of the asset, i.e. system unit, VDU, keyboard and mouse. The full cost of the asset should be entered on the Assets Register.

- Where a peripheral has an independent existence, an exception should be made to this guideline e.g. a stand-alone VDU used in connection with portable laptops. In such cases, the peripheral should be capitalised as a separate asset.

(iii) **Replacement of Keyboard, VDU or Mouse for a PC asset.**

- Expenditure should not be capitalised.

(iv) **Replacement of System Unit.**

- A system unit may be replaced by :

  (a) an existing system unit which is already on the Assets Register, or

  (b) a new system unit, purchased without VDU or keyboard.

Where (a) above occurs, the old asset should be regarded as having been disposed of and the replacement system unit should be treated as having been relocated to the new site.
Where (b) occurs, the new system unit should be recorded as a new asset at the time of acquisition and valued at its purchase price with a five-year life. Its description might be "replacement Pentium System Unit" to identify the fact that it will be used with an existing screen, keyboard and mouse. The old PC asset should be treated as having been disposed of. In other words, the effect is the purchase of a new computer.

(v) **Replacement of CPU or Motherboard inside the System Unit.**

If the replacement has a material effect on the life of a PC, the outlay should be treated as capital expenditure and the following adjustments should be made to the Assets Register: the value of the PC asset should be increased by the cost of the replacement and the life of the PC should be extended as appropriate. It will not be necessary to recalculate depreciation for previous years.

(C). **SOFTWARE**

Management should classify software systems as follows: -

**Major Operational systems:** i.e. software systems which are in widespread use across an organisation, supporting major operations and which are critical to the organisation meeting its mission. These systems will have a life of ten years.

**Productivity & Effectiveness systems:** software systems whose main purpose is improvement in productivity and effectiveness. The systems are based, typically, on software which is available in the market for this purpose, e.g. personal productivity software, document managers. These systems will have a life of five years.

**Short-life systems:** solutions to particular problems, where the problems being addressed or the solutions available from the market are rapidly changing. This category includes transient spreadsheet applications.

(i) **Threshold for inclusion.**

Subject to the thresholds set out below, all systems classified by management as Major Operational systems or Productivity & Effectiveness systems should be entered as assets on the Register. Short-life systems should not normally be capitalised.
- **Licensed software**: Licensed software valued at £1,000 or more should be entered on the Register.

- **Bespoke and In-house developed software**: software valued at £5,000 or more should be entered on the Register.

- Where software is of strategic importance to the operations of a Department but is of low value (whether licensed, bespoke or developed in-house) it should be entered on the Register at zero value.

(ii) **Valuation of Software**.

- **Existing Systems under 10 years old** - the entry in the Assets Register should be purchase cost where available or if not available, current replacement cost. In the case of in-house developed software, the entry should be the development cost (see below) or, if this is not available, current replacement cost.

- **New Systems** - enter purchase cost or development cost (see below).

- **Large scale software systems delivering increased functionality in stages**: Enter the cost of the basic system in the Assets Register (if purchased, the purchase price; if developed in-house, the development cost). As new functions become fully operational the cost of these should be added to the basic system cost on the Register and depreciated over the remaining life of the system. (It should not be necessary to extend the life of the system in most cases).

**Note**: In the case of **in-house developed software**, the costs associated with the development of **each module** should be entered in the Statement of Capital Assets Under Development (see Appendix 5 of Circular 19/96 on Appropriation Accounts Requirements for 1996 and related issues). When the module is "live" (as determined by management), the entry for the whole system in the Assets Register should be increased to reflect the value of the new module - usually its full development cost. If it is considered necessary to reduce the cost figure to be transferred to the Assets Register, the difference between the amount added to the Assets Register and the development cost reflected in the Statement of Assets Under Development should be entered as a negative entry under "Adjustments" in the Statement of Assets under Development.
(iii) Software costs to be capitalised

(a) Purchased software, whether licensed only or a mix of licensed and bespoke or bespoke only. (This includes end user or runtime software e.g. word processing, Lotus Notes client software, MS Mail, Oracle run-time, but excludes development software).

The cost of the purchased software should be entered on the Register as follows:-

- Initial or once-off payments should be capitalised i.e. entered in the Register of the Department which makes the payment.

- Where there are annual licence payments only, the first licence payment should be capitalised.

- Subsequent annual payments should be treated as maintenance expenditure and should not be capitalised, unless associated with a material upgrade.

(b) Development software:-

- Where development software is used to develop a single system in-house, the cost of the development software should be included in the development costs for the software system; where development software is used to develop a series of systems in-house, the development software is entered as a separate asset and the systems developed using that software are entered as separate assets; e.g. if 5 systems were developed in Oracle, the Register would show 6 assets: the Oracle development software as one asset and one asset for each of the 5 systems.

(c) In-house Developed Software: The following expenditure should be included in development costs

- internal and external staffing costs (internal costs to be computed on basis of Dept of Finance total staff cost figures);
- licensed/bespoke software purchased specifically for the development of the system (i.e. including communications software);
- external consultancy and integration costs;
- cost of preparing system documentation;
- training specific to the development of the system.
- travel and subsistence costs specifically associated with the development.

(exclude the costs of preparing and inviting tenders and of assessing tenders)

(d) **Systems Developed or Procured by a Central Department for which there is no payment:**

- Subject to the thresholds set out above, the asset should be recorded in the Register of the first user Department. When the system is installed in another Department, only the additional costs for the customisation of the software for that Department is entered in that Department’s Register. The Central Department will provide the first user Department with a value for the system based on the development costs.
3. **Inventory Control Issues: some general observations**

(i) **Peripherals to a mainframe or minicomputer:**

- In deciding on the level of inventory control to be maintained over such items, the permanence or mobility of the item should determine the type of control to be applied.

- The description and location of each asset forms part of the record for each asset in the Assets Register. For inventory control purposes, it would be advisable to assign an individual I.D. number to each asset.

- If an item is subsumed into the mainframe and not recorded as a separate asset, it will usually be sufficient for inventory control purposes to retain a record of its acquisition.

- Independent items such as computer discs could be controlled on the basis of number i.e. disc storage unit A has 24 discs and the count could be verified from time to time.

(ii) **PCs.**

- In the case of a PC "set" entered as a single asset on the Assets Register, as a minimum an I.D. number should be assigned to the System Unit. There may be no need for a separate I.D. number for the other parts of the set, as the absence of a component such as keyboard would be noticed immediately.

- If there are stand alone items they **must** be individually tagged for inventory control reasons.

- Where replacement monitors, keyboards or mouses are acquired a record should be kept of where these items have been assigned when removed from stock.

(iii) **General Control features:**

To ensure proper control over I.T. assets, there should be:

- a computer security policy, including guidelines for staff on controlling physical access to equipment.

- good security arrangements at entry and exit of buildings.
where software, other than the operating software, has been purchased as part of a microcomputer, i.e. bundled software, the software should be recorded separately for control reasons, even if not regarded as a separate asset for financial reasons.

- clear guidelines for staff on their responsibilities in relation to assets under their control. In addition, Departments should be aware that they are subject to audit by external bodies on their software licenses.

- vigilance on the part of I.T. Unit staff particularly those who visit areas to carry out maintenance or repairs. For further information on I.T. security please see CMOD (Dept. of Finance) advice notes on;

Contingency Planning
Controls for Information Systems
Security Guidelines
Security Policy
Virus Protection Strategies

These notes are available on the CMOD Publications data base on the CMOD Bulletin Board Service.
Glossary

**life**
the time over which the organisation expects to derive benefit from an I.T. asset.

**cost**
the cost of acquiring an asset, usually purchase price including VAT. The cost of inviting tenders and assessing proposals should be carried separately as an administrative overhead.

**capital**
intended for use for more than one year.

**capitalised**
entered as an asset on the Assets Register.

**current replacement cost**
the current market cost of an equivalent product.

**licensed software** "off the shelf" software used under licence from an outside supplier.

**bespoke software** system developed/enhanced by an outside supplier to meet the specific needs of the organisation, including a licensed system which has been enhanced.

**in-house software** software systems developed within the organisation, including systems which may have, as building blocks, some licensed or bespoke software.

**motherboard** circuit board containing the CPU in a computer.
Enhancement to software system

System A cost £20,000 on purchase. It is placed on a 5-year depreciation cycle per guidelines.

In year 4 it is upgraded at a cost of £8,000, leading to an extension in its life of a further 3 years.

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<th>Cost £</th>
<th>Cumulative depreciation £</th>
<th>Net Book Value £</th>
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<tr>
<td>end year 1</td>
<td>20,000</td>
<td>4,000</td>
<td>16,000</td>
</tr>
<tr>
<td>end year 2</td>
<td>20,000</td>
<td>8,000</td>
<td>12,000</td>
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<td>end year 3</td>
<td>20,000</td>
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<td>start year 4</td>
<td>20,000</td>
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<td>+ addition year 4</td>
<td>8,000</td>
<td></td>
<td>16,000</td>
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<tr>
<td>(old/upgraded)</td>
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<tr>
<td>end year 4/1</td>
<td>28,000</td>
<td>15,200</td>
<td>12,800</td>
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<td>end year 5/2</td>
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<td>18,400</td>
<td>9,600</td>
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<td>end year 0/5</td>
<td>28,000</td>
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1 In addition to increasing the net book value to £16,000, the upgrade gives 3 extra years of life to the asset. For next five years (i.e. the 2 remaining years, yr 4 and yr 5, and the three new years), the straightline depreciation is 20% of 16,000 per year = £3,200 per year.