Introduction

FASB Statement No. 86, Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed, was issued in August 1985 and applies to costs incurred in fiscal years beginning after December 15, 1985. The Statement changes the predominant practice of charging all costs of creating a computer software product to expense. Software companies and others involved in the creation of computer software products have raised a number of detailed implementation questions subsequent to the Statement's issuance.

FASB staff members are frequently asked for their personal views on questions about implementing a new standard. This Highlights summarizes the staff's responses to the questions received about Statement 86. Those who have not yet had to deal with Statement 86 in financial statements may find these questions and responses useful. An important point is that the responses constitute the views of the author and are not positions of the FASB.

A brief synopsis of the principal provisions of Statement 86 precedes the questions and responses. A more detailed understanding of the Statement's provisions may be needed as background for some of the more complex questions.

Overview

Statement 86 specifies the accounting for the costs of computer software to be sold, leased, or otherwise marketed as a separate product or as part of a product or process. In other words, the Statement applies to the costs of (a) a software product, (b) software contained in a product having a software component that cannot function or be sold separately from the product as a whole, and (c) software used in providing a service from which the company derives revenues and that is dependent upon the software for its timeliness, accuracy, capacity, or other qualities that contribute to its marketability. The Statement applies to computer software developed internally or purchased.

Costs incurred internally in creating a computer software product are to be charged to expense when they are incurred as research and development (R&D) until technological feasibility has been established for the product. According to the Statement, technological feasibility is established when either of two sets of criteria is met: (a) the detail program design (defined in Statement 86) has been completed, documented, and traced to product specifications and its high-risk development issues have been resolved or (b) a working model of the product (also defined in the Statement) has been finished and determined to be complete and consistent with the product design.

After establishing technological feasibility, all software production costs are to be capitalized and subsequently reported at the lower of unamortized cost or net realizable value. Capitalized costs are amortized based on current and future revenue with an annual minimum equal to the straight-line amortization over the remaining estimated economic life of the product.

Questions and Responses

The following questions and responses are organized according to the topical headings presented
in the Statement. Questions related to other issues appear after the topical headings. The first group of questions and responses relates to the scope.

Scope

1. **Q**—Paragraph 2 indicates that FASB Statement No. 86, *Accounting for Computer Software to Be Sold, Leased, or Otherwise Marketed*, applies to the costs of computer software "as a separate product." What is a software product?

   **A**—A software product is most easily defined by describing its necessary qualities. As a product, it is complete and has exchange value. As software, it is a set of programs that interact with each other. A program is further defined as a series of instructions or statements that cause a computer to do work. Refer to ◊ EITF Issue No. 96-6, "Accounting for the Film and Software Costs Associated with Developing Entertainment and Educational Software Products," for additional information. [Revised 12/98.]

2. **Q**—The costs of software that is marketed "as part of a product or process" are included in the scope of the Statement. What types of software would be included in this description?

   **A**—Software is sometimes embedded in a product and sold as part of the product as a whole. Examples are calculators and robots. This type of software is sometimes known as "firmware." Also, some services provided to customers would not be possible without software. Time sharing and service bureaus are two straightforward examples. Other situations are not as clear, for example, whether software used to prepare monthly checking account statements is "part of a process" (and therefore included in the scope of Statement 86) or is for internal use (and therefore not included in the scope of the Statement—see AICPA Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*). [Revised 12/98.]

   In EITF Issue No. 00-3, "Application of AICPA Statement of Position 97-2 to Arrangements That Include the Right to Use Software Stored on Another Entity's Hardware," the Task Force observed that

   if the vendor sells, leases, or licenses software that is within the scope of SOP 97-2, then the development costs of such software should be accounted for in accordance with Statement 86. Conversely, if the vendor never sells, leases, or licenses the software in an arrangement within the scope of SOP 97-2, then the software is utilized in providing services and the development costs of the software should be accounted for in accordance with SOP 98-1. However, if during such software's development or modification, the vendor develops a substantive plan to sell, lease, or otherwise market the software externally, the development costs of the software should be accounted for in accordance with Statement 86. [paragraph 7]

   [Revised 9/01.]

3. **Q**—Do the costs of computer software that is created or purchased for internal use and is subsequently offered for sale fall under the scope of the Statement?

   **A**—[Nullified by paragraphs 39 and 40 of SOP 98-1.]

4. **Q**—Should companies use Statement 86 as a guide in accounting for the costs of software for internal use?

   **A**—No. Companies should follow SOP 98-1. [Revised 12/98.]
Research and Development Costs

5. Q—What is the relationship of Statement 86 to FASB Statement No. 2, Accounting for Research and Development Costs?

A—The FASB undertook the project on computer software largely because persons from the software industry questioned the applicability of Statement 2 (and other FASB standards based on Statement 2) to the software process. Many of them asserted that, at some point in the creation of a software product, the company had an asset with future economic benefits. The questions were when in the process this happened and how that point could be objectively identified. Statement 86 indicates which activities in the process of creating a computer software product are R&D activities, the costs of which are charged to expense as incurred, and which activities are production activities, the costs of which are capitalized.

6. Q—Can a company defer capitalization until after meeting the "working model" criteria of paragraph 4(b), even though technological feasibility had previously been established by meeting the criteria in paragraph 4(a)?

A—The lead-in phrase of paragraph 4(a) states, "If the process of creating the computer software product includes a detail program design," and specifies three criteria relating to the detail program design to be satisfied before capitalization begins. Companies whose software product process fits the description in paragraph 4(a) should look to that paragraph for the applicable technological feasibility criteria. However, if the three criteria of paragraph 4(a) are not met until a working model is completed, the Statement requires capitalization to begin upon completion of the working model and satisfaction of the other criteria of paragraph 4(b).

7. Q—Can management require more stringent criteria than specified in paragraph 4 to begin capitalizing software production costs?

A—No. As discussed in the response to question 5, one of the purposes of Statement 86 is to identify an objective point in the software product process at which research and development activities end and production activities begin. If management were to modify the Statement's criteria or impose additional criteria of its own, this objective would be thwarted.

8. Q—If a company has established technological feasibility by meeting the criteria in either paragraph 4(a) or (b) and a high-risk development issue subsequently arises, what is the proper accounting for the previously capitalized costs and the costs to resolve the high-risk development issue?

A—According to paragraph 2(d) of FASB Statement No. 154, Accounting Changes and Error Corrections, changes in accounting estimates result from new information. The discovery of a high-risk development issue after the company's personnel thought technological feasibility was established appears to meet this definition. Any previously capitalized costs for that product, as well as any additional costs incurred to establish technological feasibility, should be charged to expense as R&D until the criteria in paragraph 4 are met. [Revised 3/05]

9. Q—When a product comprises various modules that are not separately saleable, is technological feasibility established for the product as a whole or on a module-by-module basis?

A—Technological feasibility is established for a software product as a whole; that is, the detail program design or the working model of the entire product (all modules linked together) must be completed prior to capitalization.
10. **Q**—Some companies in the industry use the term *working model* to mean a prototype in which critical parts of the product have been coded or written in pseudocode. Is this definition of working model acceptable to meet the criteria in paragraph 4(b)?

**A**—The glossary of Statement 86 defines a working model as having several key characteristics not found in the above description of a prototype. To meet the Statement's criteria, the working model must be (a) operative, (b) in the same language as the product that will be marketed, (c) complete with all the major functions that were planned for the product, and (d) ready for initial customer testing.

**Production Costs**

11. **Q**—Are indirect costs appropriate for capitalization as part of the production costs of computer software?

**A**—Current accounting literature does offer precedent for capitalizing an allocated amount of indirect costs, such as overhead related to programmers and the facilities they occupy. However, an allocation of general and administrative expenses would not be appropriate because those costs relate to the period in which they are incurred.

**Maintenance and Customer Support**

12. **Q**—How should the costs incurred to keep systems software current with revisions in the hardware be accounted for if this service was promised at the time the software was sold?

**A**—This activity appears to meet the definition of maintenance because it keeps the product updated with current information. The cost of maintenance is to be charged to expense when related revenue is recognized or when those costs are incurred, whichever occurs first. The distinctions among maintenance, customer support, and product enhancements are sometimes very fine lines; in each case, the particular circumstances and intentions of the company should be evaluated in light of the definitions in the Statement for each activity.

**Purchased Computer Software**

13. **Q**—What factors, if any, may determine whether the cost of purchased software that will be integrated into another software or hardware product will be capitalized?

**A**—Assuming that purchased computer software has no alternative future use, its costs can be capitalized only if the technological feasibility of the product to be ultimately marketed has been established at the time of purchase. Such factors as the timing of receipt or the status of hardware and internal software development may be crucial in determining whether technological feasibility is established at the time of purchase.

14. **Q**—How would a company account for purchased software with a cost of, for example, $100,000 if technological feasibility was not established at the time of purchase and the software could be resold for $75,000?

**A**—The amount of $25,000 would be charged to R&D; $75,000 would be capitalized and, if the software product reached technological feasibility, included in the cost of the software product. If the technological feasibility of the software was never established, the $75,000 would be classified as inventory.
Amortization

15. **Q**—How is straight-line amortization to be computed for a software product?

   **A**—Paragraph 8 indicates that straight-line amortization is computed over the remaining estimated economic life of the product. As such, the unamortized cost of the product should be divided by its remaining life, including the current year.

16. **Q**—Is it possible that estimates of future revenues or the remaining economic life for a product will change over the period in which the software product is being amortized?

   **A**—Yes. Amortization for any asset is based upon estimates of future events, and software is no exception. The most recent information should be used to determine if changes to estimates should be made.

17. **Q**—How should amortization expense of capitalized software costs be classified in a company's income statement?

   **A**—Since the amortization relates to a software product that is marketed to others, the expense would be charged to cost of sales or a similar expense category.

Disclosure

18. **Q**—Paragraph 11(b) indicates that companies must disclose the total amount charged to expense for amortization and amounts written down to net realizable value. Should this disclosure be one combined amount or two separate amounts?

   **A**—The amortization and write-down amounts may be combined with only the total of the two expenses being disclosed.

Effective Date and Transition

19. [Question deleted 12/98 because the effective date of Statement 86 has passed.]

   **Q**—How should companies implement the transition provision of **♦** paragraph 16 for "earlier application in annual financial statements that have not previously been issued" when interim periods in the year of initial application have previously been reported on?

   **A**—Apply the guidance set forth in **♦** paragraph 14 of FASB Statement No. 16, Prior Period Adjustments. In financial reports for the interim period in which initial application occurs, disclose the effect of applying the standard on income and the related per share amounts for each prior interim period of the current fiscal year. The next time the financial information of the prior interim periods is presented, the restated amounts, not the originally reported amounts, should be shown.

20. [Question deleted 12/98 because the effective date of Statement 86 has passed.]

   **Q**—If a company cannot have the systems in place to capture all of the data necessary to implement the Statement in the first quarter after the effective date, how does the company present that quarter's results? Does the Statement permit a company to implement the standard sometime before the end of the initial year of application?

   **A**—**♦** Paragraph 16 indicates that the Statement is to be applied to costs incurred after the effective date for all projects. Quarterly reports for periods in fiscal years beginning after
Other Issues

Balance Sheet Presentation

21. Q—Where should capitalized software costs be presented in the balance sheet?

A—Software costs having a life of more than one year or one operating cycle should be presented as an "other asset" because the costs are an amortizable intangible asset.

The accounting requirements of FASB Statement No. 142, Goodwill and Other Intangible Assets, do not apply to capitalized software costs. However, the presentation and disclosure requirements of that Statement do apply to capitalized software costs. The disclosure requirements in Statement 86 continue to apply after Statement 142 is adopted. [Revised 9/01; 10/02]

Modifications to the Product

22. Q—What happens if the completed product does not include all features that had originally been planned?

A—If the product is saleable without the features that were dropped, no specific accounting is required. The net realizable value test controls the amount of capitalized costs. Application of the net realizable value test may result in a write-off of some or all of the product's capitalized costs. If the product is not saleable without the dropped features, the technological feasibility of the product is not established (question 8).

Product Enhancements

23. Q—How is the Statement applied to costs incurred for product enhancements?

A—Costs incurred for product enhancements are charged to expense as research and development until the technological feasibility of the enhancement has been established. If the original product will no longer be marketed, any unamortized cost of the original product should be included with the cost of the enhancement for purposes of applying the net realizable value test and amortization provisions. If the original product will remain on the market along with the enhancement, an allocation of the unamortized cost of the original product between the original product and the enhancement will be necessary.

24. Q—Is the estimated useful life of a product enhancement equal to (a) the remaining life of the original product, (b) the estimated life of the enhancement, or (c) the remaining life of the original product for any costs of the original product included in the enhancement and the estimated life of the enhancement for all other costs?

A—The estimated life of the enhancement. All costs of a product enhancement, including any costs carried over or allocated from the original product, should be amortized over the enhancement's estimated useful life.

25. Q—Must the technological feasibility criteria (paragraph 4) be met for a product enhancement if the criteria had been met for the original product?

A—Yes. Product enhancements are specifically included in the scope of the Statement and, as such, are subject to the same requirements as any other software product. However, technological
feasibility may be more easily established for a product enhancement than for a new product, and
capitalization of costs may, therefore, begin relatively earlier in the software process. For
example, an enhancement that adds one function to an already successful product may require
only minor modifications to the original product's detail program design to establish technological
feasibility. Similarly, in some cases, software that is ported (made available for a different piece of
hardware) may not require a new detail program design, and capitalization of the enhancement
costs may begin once any high-risk development issues have been resolved.
Endnotes

1 (Popup - Footnote *)
Q&A 86 Footnote *—Anne D. McCallion was a technical associate at the FASB at the date of issuance of this implementation guide and the positions and opinions expressed were hers. Revisions to this implementation guide have been made by current members of the FASB staff. Official positions of the FASB are determined only after extensive due process and deliberation.