

GENERAL INSTRUCTION MANUAL**Approved****202.320**

ISSUING ORG. ACCOUNTING POLICIES, & SYSTEMS DEPARTMENT

ISSUE DATE
11-05-08REPLACES
05-03-3SUBJECT: **Accounting for the Costs of Computer Software Developed or
Obtained for Internal Use**

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CONTENT

This instruction stipulates the appropriate accounting treatment for costs incurred for the purchase or development of software to be used by Saudi Aramco. It includes the following sections:

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5. Costs to be Expensed as Incurred
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1. GLOSSARY**ABBREVIATIONS & ACRONYMS**

AcSEC	- Accounting Standards Executive Committee
AM	- Asset Management
APSD	- Accounting Policies & Systems Department
AUC	- Assets Under Construction
BI	- Budget Item
PFAAD	- Projects & Fixed Assets Accounting Department
GAAP	- Generally Accepted Accounting Principles
WBS	- Work Breakdown Structure

INSTRUCTIONS

AI 728	- Interest Income and Expense
GI 20.161	- Rentals/Leases/Charters
GI 207.050	- Form SA-630 Capital Assets Change Authorization

FORMS

SA-630	- Capital Assets Change Authorization
MCC	- Mechanical Completion Certificate

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2. BACKGROUND

This accounting policy is intended to encompass the requirements contained in IAS 38 - *Intangible Assets*, AcSES Statement of Position (SOP) 98 1 - *Accounting for the Costs of Computer Software Developed or Obtained for Internal Uses* and two pronouncements issued by EITF/FASB that provide guidance on the *Accounting for Costs Incurred in Connection with a Consulting Contract or an Internal Project That Combines Business Process Reengineering and Information Technology Transformation*.

3. SCOPE

This policy is for each project/purchase contract where total costs for a particular type of software are expected to reach \$4 million or more **and** have an estimated useful life of three or more years. The estimated useful life of computer software depends on the effects of obsolescence and generally corresponds to the software license terms. Such software purchases or projects should be budgeted for, and funded by, either stand-alone or Master Appropriation Capital Budget Items. Exceptions include:

- Internal-use software used in research and development activities (e.g., laboratory, exploration or petroleum engineering research and development activities) or software that represents a pilot project.
- Software to be sold leased or otherwise marketed.

4. STAGES OF COMPUTER SOFTWARE DEVELOPMENT

The following table illustrates the various stages and related processes typically associated with computer software development projects to assist with the classification of the software costs in accordance with Sections 5 and 6. It is recognized that the development of internal use software may not follow the order shown below. For costs incurred subsequent to the Preliminary Project Stage, the capital and expense guidelines contained herein should be applied based on the nature of the costs incurred, not the timing of their incurrence.

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Preliminary Project Stage (Expense)	Application Development Stage (Capital)	Post-Implementation/ Operation Stage (Expense)
<ul style="list-style-type: none"> - Conceptual formulation of alternatives - Evaluation of alternatives - Determination of existence of needed technology - Final selection of alternatives 	<ul style="list-style-type: none"> - Design of chosen path, including software configuration & interfaces - Coding - Installation of hardware - Testing, including parallel processing phase 	<ul style="list-style-type: none"> - Training - Application Maintenance

5. COSTS TO BE EXPENSED AS INCURRED

The following costs incurred in connection with software purchases or development projects are to be expensed as they are incurred:

- The costs of any internal-use software purchase/project whose total expected costs do not meet the scope of this policy, as described in Section 3.
- Preliminary Project Stage costs, such as: feasibility studies, vendor/contractor selection or costs incurred as described in the table in Section 4 above.
- All training costs incurred, at any stage.
- General and administrative or overhead costs.
- Internal application maintenance costs. However, external costs related to maintenance, unspecified upgrades and enhancements, and costs under agreements that combine the costs of maintenance and unspecified upgrades and enhancements should be recognized in expense over the contract period on a straight-line basis unless another systematic basis is more representative of the services received. If a distinction cannot be made between maintenance and relatively minor upgrades/enhancements, the costs should be expensed as incurred.
- Data conversion costs, other than the costs to develop or obtain software that allows for access to, or conversion of, old data by new systems (see Section 6 for further discussion).
- The costs of business process reengineering activities, whether done internally or by third parties. Reengineering activities include activities such as the preparation of a request for consulting proposal, analyzing the current business process (i.e., current state assessment), business process reengineering or restructuring of the work force.

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- All costs incurred after the computer software is substantially complete and ready for its intended use (i.e., all substantial testing is complete).

6. COSTS REQUIRED TO BE CAPITALIZED

The following costs incurred in connection with software purchases or development projects that meet the scope of this policy, as described in Section 3, are to be capitalized:

- Internal and external Application Development Stage project costs incurred as described in the table in Section 4.
- External costs of materials and services consumed in obtaining/developing software. These costs include fees paid to third parties for services provided to obtain/develop the software during the application development stage (as defined in Section 3), costs incurred to obtain computer software from third parties (e.g., software contracts that benefit three years or more) and travel expenses incurred by employees in their duties directly associated with developing software. Costs incurred to obtain software licenses are to be accounted for similar to capital leases as described in General Instruction No. 20.161.
- The costs incurred to obtain/develop software that allows for access to, or conversion of, old data by new systems.
- Upgrades and enhancements that will result in additional functionality – Upgrades and enhancements are defined as modifications to existing internal-use software to enable the software to perform tasks that it was previously incapable of performing. Upgrades and enhancements normally require new software specifications and may also require changes to all or part of the existing software specifications.
- Payroll and related costs, based on Saudi Aramco standard labor rates, for employees who are directly associated with the software purchase/project. Project Managers should develop a method of tracking or estimating internal labor cost directly associated with the project for capitalization.
- Borrowing cost incurred while developing the software, consistent with the guidance contained in Accounting Instruction No. 728, *Interest Income and Expense*, Section 4.

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7. AMORTIZATION OF CAPITALIZED COSTS

Once the appropriate accounting treatment has been determined based on the discussion in Sections 3 to 5, the amounts that have been capitalized should be amortized as follows:

- Amortization of the obtained/developed software should begin as soon as the software is ready for its intended use. If a computer software project is implemented based on modules, amortization of a module should begin when it is ready for its intended use and all other modules upon which it is functionally dependent, if any, are also ready for their intended uses. The Project Manager or proponent should send the MCC to the PFAAD advising when the software is ready for its intended use and amortization should begin.
- The capitalized costs of computer software should be amortized on a straight-line basis unless another systematic and rational basis is more representative of the software's use.
- The estimated useful life for computer software depends on the effects of obsolescence and should generally correspond to the term of software license.
- The Project Manager or proponent is in the best position to determine the estimated useful life of the software.

8. ADDITIONAL POLICY CONSIDERATIONS

In addition to the discussion in the previous sections, the following should also be considered when applying this policy:

- When existing software is being replaced by the newly obtained/developed software, unamortized costs of the old software, if any, should be written off when the new software is ready for its intended use. Included with the MCC from the proponent or Project Manager to PFAAD regarding the beginning of amortization of the new software, PFAAD should also be sent a Form SA-630, *Capital Assets Change Authorization* (GI 207.050), stipulating when the unamortized cost of the software being replaced should be written-off.
- When computer software is purchased from third parties and the purchase price includes multiple elements, such as: software, training, maintenance fees, data conversion costs, reengineering and rights to future upgrades and enhancements, the capitalizable/expense costs should be allocated among the individual elements as stipulated in Section 7. The allocation should be estimated by the proponent based on objective evidence of fair value of the elements in the contract, not necessarily on the separate prices stated within the contract for each element. If a distinction cannot be made between maintenance and relatively minor upgrades and/or enhancements, the costs should be expensed as incurred.

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- If it becomes no longer probable that the computer software project will be completed and placed in service, no further costs should be capitalized and an analysis of the future benefit of amounts previously capitalized should be performed. The non capitalized computer software project costs should be charged to Project Abandonment Expense 427210. The proponent or Project Manager should send Form SA-630 to PFAAD outlining the capitalized costs that have no future benefit to Saudi Aramco so they can be written-off to Loss on Software Write-Off 427460.

9. ACCOUNTING FOR CAPITALIZED SOFTWARE

The accounting process for capitalization of purchased/developed software is similar to the accounting treatment for other capital projects.

- All costs, both capital and expense, will be accumulated in Project Type Prefix 10 (WBS) element that will consolidate to account 2045001 *Incomplete Construction – BI Prefix Type 10*, in Saudi Aramco's General Ledger. This account is classified as AUC. The Project Type Prefix 10 WBS element should be segregated into phases representing costs that will be capitalized and costs that will be expensed to ensure that expense items are properly cleared automatically through a Settlement Rule and capital items remain in AUC until project completion.
- When the MCC, representing the point at which the software is ready for its intended use, has been received by PFAAD, Settlement Rule will be applied to properly reclassify the costs included in AUC to the appropriate asset account by means of the following entry:

2008050	Comp Sftwr Develop/Acquisition	(DR)
10-XXXXX-XXXX-999 (CJ88)	Project Type Prefix 10 WBS element	(CR)

- PFAAD will execute the SAP's AM Module depreciation run for calculating amortization on the capitalized software and automatically record the amortization as follows:

7989854	Amort Exp – Comp Sftwr	(DR)
2058051	Acc Amort – Software	(CR)

Note: A Software project that is funded by a Gas BI has to be capitalized and amortized to Gas asset and amortization General Ledger accounts. APSD has the responsibility for determining the appropriate accounts to be used and shall be consulted by PFAAD prior to the capitalization process.

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- When capitalized software is being replaced or retired, the proponent should prepare Form SA-630 for PFAAD outlining the asset being replaced or retired. Processing retirement in the SAP's AM Module can be run by initiating Transaction Code ABAVN, Transaction Types:

- XC1 or ZC1 (for normal retirement), or
- XC2 or ZC2 (for abnormal retirement)

The system will automatically generate the following accounting entry against the asset record:

2058051	Acc. Amort. – Software	(DR)
427460	Loss on Software Write-Off	(DR)
2008050	Comp Software Develop. /Acquisition	(CR)

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The decision table below can be used to assist Saudi Aramco organizations in determining the proper accounting treatment for software costs in accordance with this policy:

Description of Activity	Expense As	
	Incurred	Capitalize
Purchase/Development Projects whose total costs < \$4 million or benefits < 3 years	X	
Business Process Re-engineering:		
Preparation of request for consulting proposal	X	
Analyzing current business process	X	
Process re-engineering	X	
Restructuring the workforce	X	
Preliminary Project Stage Costs:		
Feasibility study	X	
Vendor/contractor selection	X	
Conceptual formulation, evaluation and selection of alternatives	X	
Training Costs (any stage)	X	
Application Maintenance:		
Maintenance only (internal or external)	X	
Unspecified upgrades or enhancements bundled with maintenance (if distinction can be made)		X
Data Conversion Costs:		
Costs to develop software that allows for access to, or conversion of, old data by new systems (see other elements of this table to determine which costs should be capitalized)		X
Other data conversion costs	X	
Application Development Stage Costs (internal and external):		
Design of chosen path		X
Software configuration and interface design		X
Coding		X
Installation to hardware and testing		X
Payroll & payroll related costs (using SAOC standard labor rates) directly associated with the software project/purchase		X

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Description of Activity	Expense As Incurred	Capitalize
Other Costs Incurred in Obtaining/Developing Software:		
Costs to obtain software from 3 rd Parties		X
Costs incurred under contracts that benefit only one year	X	
Travel costs directly associated with developing software		X
Costs Incurred After Software is Ready for Intended Use	X	

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