# Issue

# Cost of Goods Sold can be calculated using either the periodic inventory system or the perpetual inventory system. The FMR and the NAFSGL Chart of Accounts only have GLACs associated with the periodic inventory system but the Services and the Naval Academy use both the periodic and perpetual inventory systems.

# Research

Below outlines the permissibility of using the periodic and perpetual inventory systems in current regulations, accounting guidance and industry standards.

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| Inventory System used to Calculate Cost of Goods Sold | Periodic | Perpetual |
| DoDI 1015.15: Silent on matter. | N/A | N/A |
| FMR Volume 13, Chapter 5, 050603. Cost of Goods Sold (COGS) (April 2013): “The COGS is equal to the sum of the beginning inventory for the period and net purchases (purchases less discounts, returns and allowances, transfers in from other funds or locations, transfers out to other funds or locations, and other inventory increases or decreases as applicable) less the ending inventory.” | Yes | No |
| NAFSGL Chart of Accounts: GLAC 500 – “Purchases: Amount of merchandise purchased for sale less discounts taken. This account includes the cost of freight deemed to be material and readily assignable to individual inventory items or items transferred from other cost centers.” | Yes | No |
| Air Force: Periodic and perpetual inventory systems appear in AFI34-209 and AFMAN34-214. | Yes | Yes |
| Army: DFAS-IN Regulation 37-1, Chapter 32 allows for the periodic and perpetual inventory systems. | Yes | Yes |
| Navy: CNICINST 7000.3 allows for the periodic and perpetual inventory systems. | Yes | Yes |
| Naval Academy: USNA Chart of accounts has Purchases accounts (periodic) and COGS accounts (perpetual). | Yes | Yes |
| Marines: MCO 7010.19 allows for the periodic and perpetual inventory systems. | Yes | Yes |
| GAAP: FASB 330-10-3-15 requires consistency in inventory measurement. It does not directly address the periodic or perpetual inventory systems. | Yes | Yes |
| Industry Practice: Industry practice is to use the periodic and/or the perpetual systems. Companies typically use the perpetual inventory system when an automated point of sales system records transactions. Companies use the periodic inventory system when unable to record transactions in real time. | Yes | Yes |

# Discussion

There are two accepted methods used to calculate the cost of goods sold. The first is the perpetual inventory method. Under this method, goods purchased for resale are debited to an inventory account. Once the goods are sold, the inventory account is credited for the cost of the goods sold and a cost of goods sold expense account is debited. This method requires a chart of accounts to have a cost of goods sold GLAC.

The second acceptable method is the periodic inventory method. Under this method, goods purchased for resale are debited to a purchases account. When the goods are sold, no entry is made to the purchases account or to an inventory account. Only the revenue from the sale is recorded (ex. Dr: Accounts Receivable and Cr: Sales). At the end of the accounting period, the cost of goods sold for the period is calculated as Beginning inventory + Purchases during the period - Ending inventory.

The key difference between the two methods is that the perpetual method records cost of goods sold after every sale while the periodic method calculates the cost of goods sold only at the end of the accounting period. The perpetual method is typically used in conjunction with a point of sales system that is capable of making real-time journal entries after every sale. The periodic method is typically used when a real-time point of sales system is not used. Industry practice is to use one or both methods depending on accounting and/or system capabilities. U.S. GAAP literature does not endorse one method over the other, nor does it prohibit the use of both systems.

The current FMR chart of accounts and the new NAFSGL chart of accounts only include GLACs used to calculate cost of goods sold under the periodic inventory method. However, all four Services and the Naval Academy require GLACs for the perpetual method as well since they all use both methods to calculate the cost of goods sold in their respective income statements.

# Recommendation

Given the fact that the Services and the Naval Academy use both the perpetual and periodic inventory systems, it is recommended that a cost of goods sold GLAC be added the NAFSGL chart of accounts. The cost of goods sold GLAC may allow for the use of the perpetual inventory system. The new cost of goods sold GLAC should be inserted as GLAC number 502 after Purchases (500) and Purchase Discounts and Allowances (501). To accommodate inserting the cost of goods sold GLAC as number 502, the subsequent GLACs in the 5XX series of the chart of accounts should all be renumbered by adding 1 to the current GLAC number. GLACs 530-599 should be reserved for future use.

The newly inserted GLAC 502 should read as follows:

**502. Cost of Goods Sold:** Cost paid for merchandise sold. Cost of Goods Sold includes the cost of freight deemed to be material and readily assignable to individual inventory items or items transferred from other cost centers. This GLAC is to be used in conjunction with the perpetual inventory accounting method.

GLACs 500 and 501 should be rewritten as follows:

**500. Purchases:** Amount of merchandise purchased for sale less discounts taken. This account includes the cost of freight deemed to be material and readily assignable to individual inventory items or items transferred from other cost centers. This GLAC is to be used in conjunction with the periodic inventory accounting method.

**501. Purchases Discounts and Allowances:** Amount of merchandise returned or allowance taken. This GLAC is to be used in conjunction with the periodic inventory accounting method.

# Service Concurrence

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| Service | Concurrence | Reason for Non-concurrence |
| Air Force | Emailed concurrence on 6/3/2015. **Re-concurred 10/19/2018.** |  |
| Army | Emailed concurrence on 5/14/2015. **Re-concurred 11/2/2018.** |  |
| Marines | Emailed concurrence on 7/7/2015. **Re-concurred 10/31/2018.** |  |
| Navy | Emailed concurrence on 5/18/2015. **Re-concurred 11/2/2018.** |  |

# USD(P&R)/MC&FP Disposition

No further action. Changes incorporated in NAFSGL Version 2.0.

**DFAS Disposition**

Revise DoD FMR to include the three GLACs above.

# Forward to DoDIG?

No DoDIG equities.