

Chapter -4

Over head cost control

Meaning of overhead costs

According to CIMA (London) "Overhead is the aggregate of indirect materials, indirect wages and indirect expenses".

Classifications of Overhead Costs

Overhead costs may be classified according to

1. Functions
2. Elements
3. Behaviour

Classification according to functions

(a) Production overhead: It is also called as factory overhead, works overhead or manufacturing overhead, it means indirect expenditure incurred in connection with production operations. It is the aggregate of factory indirect material cost, indirect wages and indirect expenses.

Examples: lubricants, consumable stores, indirect wages, factory power and light, depreciation of plant and machinery etc.

(b) Administration overhead: These overheads are general in nature and consist of all costs incurred in the direction, control and administration which are not related directly to the production or selling and distribution function.

Examples: general management, salaries, audit fees, legal charges, postage and telephone, stationery and printing office rent and rates etc.

(c) Selling and distribution overhead: Selling overhead is the cost of seeking to create and stimulate demand or securing orders.

Examples: advertising salaries and commission of sales personnel, showroom expenses, traveling expenses, bad debts, catalogues and price lists etc.

Distribution overhead: It comprises all expenditure incurred from the time the product is completed in the factory till it reaches its destination or customer. It includes packing cost, carriage outward, delivery van expenses, warehousing costs, etc.

Selling overhead and distribution overhead are both related to sales function and thus are combined into one category or selling and distribution overhead. These are often referred to as 'after production costs' because these costs are incurred after production work is over.

1. Element wise classification

Under this method, the classification is done according to the nature and source of the expenditure. This method follows logically from the definition of overhead costs. On this basis, expenses are classified under three main groups given below.

(a) Indirect materials: Material costs which cannot be allocated but which are to be apportioned to or absorbed by cost centres or cost units.

Examples are fuel, lubricants, tools for general use, etc.

(b) Indirect wages: Indirect wages are those which cannot be allocated but which appear to be apportioned to or absorbed by cost centres or cost units.

Examples are wages of sweeper, idle time wages, maintenance and repair wages, leave pay, employer's contribution to ESI, etc.

(c) Indirect expenses: Expenses which cannot be allocated but which are to be apportioned or absorbed by cost centres or cost units are indirect expenses. For example, power, depreciation, insurant taxes, rates and rent etc.

Classification according to behavior or variability

Different overhead costs behave in different ways when volume of production changes. On the basis of behavior, overheads may be classified into: (a) Fixed overhead, (b) Variable overhead, and (c) Semi-fixed or semi-variable method.

Fixed overhead: These overheads remain unaffected or fixed in total amount by fluctuations in volume of output.

Examples are rent and rates, managerial building depreciation, postage, stationery, legal expenses etc.

Variable overhead: This is the cost which, in aggregate, tends to vary indirect proportion to changes in the volume of output. Variable overhead per unit remains fixed.

Examples are indirect materials, indirect labour, salesmen's commission, power, light, fuel etc.

Semi-variable overhead: This overhead is partly variable. In other words, semi-variable overhead costs vary in part with the volume of production and in part they are constant, whenever there is a change in volume of production.

Examples are supervisory salaries, depreciation, repairs and maintenance etc.

Accounting of Overheads:

Direct costs are charged directly to the cost centres or cost units without much difficulty. But this is not possible in overhead costs. One of the most complex problems of cost accounting is distribution of overhead costs to cost units. Therefore, such costs are analysed & distributed to various cost centres & cost units on an arbitrary basis.

Steps in distribution of overheads:

The procedure of distribution of overhead costs is as below:

- Collection of overhead
- Classification & codification of overheads

- Allocation & apportionment to production depts. & service depts..
- Re-apportionment of total overheads of each service dept to production depts
- Absorption of overhead by production units.

Allocation & apportionment of overhead to cost centres:

When all the items are collected properly under suitable account headings, next step is allocation & apportionment of such expenses to cost centres. This is known as primary distribution of overhead.

A factory is administratively divided into sub-divisions known as departments for running it smoothly & efficiently. This subdivision is done in such a manner that each department represents a division of activity of the concern such as repairs dept, power dept, stores dept.

Allocation of overhead expenses:

Allocation is the process of identification of overheads with cost centres. An expense that is directly identifiable with a specific cost centre is allocated to that centre. So, it is the allotment of whole item of cost to the cost centres or cost units. It refers to the charging of expenses that can be identified wholly with a particular dept. For example, the cost of repairs & maintenance of a particular machine should be charged to that particular dept. wherein the machine is located.

Apportionment of overhead expenses:

It refers to the allotment of expenses that cannot be identified wholly with a particular department. Such expenses require division & apportionment over two or more cost centres or units. So, cost apportionment will arise in case of expenses common to more than one cost centre or unit. Common items of overheads are rent, depreciation, lighting etc.

Bases of apportionment:

Suitable bases have to be found out for apportioning the items of overhead cost to production & service dept & then for reapportionment of service depts. Costs to the production depts. The bases adopted should be such by which the expenses being apportioned must be measurable by the bases adopted & there must be proper correlation between the expenses & the bases. The process of such distribution is known as primary distribution.

Bases of Apportionment of Overhead

Different items of overhead are apportioned on different bases. Some of the common bases of apportionment of different items of overhead are illustrated in the following table:

Overhead Cost	Bases of Apportionment
1. (i) Rent and other building expenses (ii) Lighting and heating (iii) Fire precaution service	Floor area, or Volume of department

(iv) Air condition	
2. (i) Fringe benefits (ii) Labour welfare expenses (iii) Time-keeping (iv) Personnel office (v) Supervision	Number of workers
3. (i) Compensation to workers (ii) Holiday pay (iii) ESI and PF contribution (iv) Fringe benefits	Direct wages
4. General overhead	Direct labour hours, or Direct wages, or Machine hours
5. (i) Depreciation of plant and machinery (ii) Repairs and maintenance of plant and machinery (iii) Insurance of stock	Capital values
6. (i) Power/steam consumption (ii) Internal transport (iii) Managerial salaries	Technical estimates
7. Lighting expenses	No. of light points, or Area
8. Electric power	Horse power of machines, or Number of machine hours, or Value of machines
9. (i) Material handling (ii) Stores overhead	Weight of materials, or Volume of materials, or Value of materials.

It should be noted that some overheads in the above list can be apportioned on more than one basis. The choice of an appropriate basis is really a matter of judgment. For example, welfare expenses may be apportioned on the basis of number of employees or total wages. Similarly lighting expenses may be apportioned on the basis of number of light points in each department or on the basis of floor area.

Re-Appportionment of Service Department Costs (Secondary Distribution)

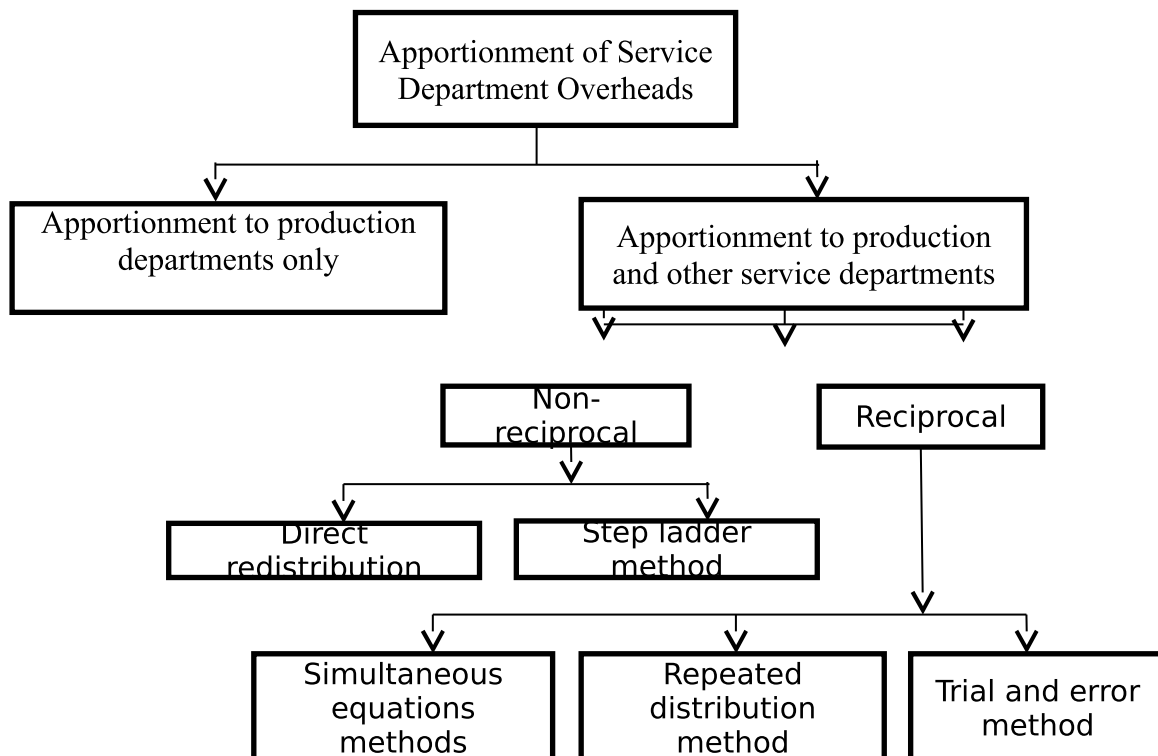
Once the overheads have been allocated and apportioned the production and service departments totaled, the next step is to re-apportion the service department costs to the production departments. This is necessary because our ultimate objective is to charge overheads to cost units, and no cost units are produced in service departments. Therefore, the costs of service departments must be charged to production departments, which directly come in contact with cost units. This is called secondary distribution.

Some of the important bases of apportionment of service department costs to production department are as follows:

Service department	Bases of apportionment
1. Store-keeping Department	Number of material requisitions, or value/quantity of materials consumed in each department.
2. Purchase Department	Value of materials purchased for each department, or number of purchase orders placed.
3. Time-keeping Department and Payroll department	Number of employees, or total labour or machine hours.
4. Personnel Department	Rate of labour turnover, or number of employees in each department.
5. Canteen, Welfare and Recreation Services	Number of employees, or total wages
6. Maintenance Department	Number of hours worked in each department.
7. Internal Transport Service	Value or weight of goods transported, or distance covered.
8. Inspection Department	Direct labour hours or machine operating.
9. Drawing Office	No. of drawings made or man hours worked.

Thus, the costs of service departments are apportioned on the basis of service rendered, i.e., the benefits received by the beneficiary departments.

The various methods of apportionment of service department costs are summarized.



Methods of secondary distribution

1. Direct-Redistribution:

Under this, the service department expenses, are directly distributed to only production departments without considering the service rendered to other service departments

2. Step Ladder Method:

Under this, the expenses of services department which has rendered service to maximum number of other departments are distributed, first to all the other departments including other service departments and this process continues in that order till all the service department expenses are re-distributed.

3. Apportionment on reciprocal basis

This method is used when service departments are mutually dependent. This means a service department not only provides its services to other service departments but also receives services of other service departments.

The following methods may be used for apportionment of overhead costs on a reciprocal basis:

1. Simultaneous Equations Method
2. Repeated Distribution Method
3. Trial and Error Method.

Module- 5 Reconciliation of Cost & Financial Accounts

Meaning

Reconciliation of cost and financial accounts mean, tallying the profit or loss revealed by both set of accounts. A statement which is prepared for reconciling the profit between financial accounts and cost accounts is known as cost reconciliation statement.

Reasons for the difference of Profit or loss in cost and financial accounts

1. Items shown only in financial accounts
 - a) Purely financial incomes
 - b) Purely financial expenses
 - c) Appropriation of profits
2. Items shown only in cost accounts
3. Absorption of overheads

4. Methods of stock valuation
5. Abnormal losses and gains
6. Different methods of charging depreciation

Methods of reconciliation

1. Reconciliation Statement: When reconciliation is attempted by preparing a reconciliation statement, profit shown by one set of accounts is taken as base profit and items of difference are either added to it or decided from it to arrive at the figure of profit shown by other set of accounts

2. Memorandum Reconciliation Account: Reconciliation can also be done by preparing a Memorandum Reconciliation Account. This account is a memorandum account only and does not form part of the double entry. When reconciliation is attempted through Memorandum Reconciliation Account, profit to be taken as "base profit" is shown like opening balance of this account. All items of differences required to be deducted are debited and those to be added are credited to this account, the balancing figure of this account is the profit shown by other set of accounts

Procedure of Reconciliation:

When there is a difference between the profits disclosed by cost accounts and financial accounts, the following steps shall be taken to prepare a Reconciliation Statement:

- I. Ascertain the various reasons of disagreement (as discussed above) between the profits disclosed by two sets of books of accounts.
- II. If profit as per cost accounts (or loss as per financial accounts) is taken as the base.

Add:

- Items of income included in financial accounts but not in cost accounts.
- Items of expenditure (as interest on capital, rent on owned premises etc.) included in cost accounts but not in financial accounts.
- Amounts by which items of expenditure have been shown in excess in cost accounts as compared to the corresponding entries in financial accounts.
- Amounts by which items of income have been shown in excess in financial accounts as compared to the corresponding entries in cost accounts.
- Over absorption of overheads in cost accounts.
- The amount by which closing stock of inventory is undervalued in cost accounts.
- The amount by which the opening stock of inventory is overvalued in cost accounts.

Deduct:

- Items of income included in cost accounts but not in financial accounts.
- Items of expenditure included in financial accounts but not in cost accounts.
- Amounts by which items of income have been shown in excess in cost accounts over the correspondence entries in financial accounts.
- Amounts by which items of expenditure have been shown in excess in financial accounts over the corresponding entries in cost accounts.
- Under absorption of overheads in cost accounts.
- The amount by which closing stock of inventory is overvalued in cost accounts.
- The amount by which the opening stock of inventory is undervalued in cost accounts.

I. After making all the above additions and deductions, the resulting figure will be profit as per financial accounts.

Proforma of Reconciliation Statement: -

Particulars	Amount	Amount
Profits as per cost accounts		XXX
Add:		
1. Overvaluation of overheads	XX	
2. Financial items not recorded in cost a/cs.	XX	
	XX	
3. Items charged only in cost a/cs	XX	
4. Overvaluation of opening Stock in cost books	XX	XX
		XXX
5. Under valuation of closing Stock in cost books	XX	
	XX	
Less:	XX	
1. Under absorption of overheads	XX	XXX
2. Purely financial Charges		XXX
3. Under valuation of opening Stock in cost books		
4. Over valuation of closing Stock in cost books		
Profits as per financial books		

Note: The above treatment of items will be reversed when the starting point is the profit as per financial accounts (or loss as per cost accounts) is taken as the base

Memorandum Reconciliation Account:-

Reconciliation can also be done by preparing a Memorandum Reconciliation Account. This account is a memorandum account only and does not form part of the double entry. When reconciliation is attempted

through Memorandum Reconciliation Account, profit to be taken as “base profit” is shown like opening balance of this account. All items of differences required to be deducted are debited and those to be added are credited to this account, the balancing figure of this account is the profit shown by other set of accounts.

Proforma of Memorandum Reconciliation Account
Memorandum Reconciliation Account

To Financial expenses:		By profit as per Cost accounts	XXX
Discount	XXX	By Financial income:	
Fines and penalties	XXX	Rent	XXX
Bank Interest	XXX	Interest	XXX
Underwriter's Commission	XXX	Dividend	XXX
Donations	XXX	Profit on sales of assets	XXX
Goodwill written off	XXX	By items charged in cost accounts:	XXX
To Under-absorption of overheads	XXX	Interest on own capital	XXX
To Under-valuation of opening stock in Cost accounts	XXX	Rent on own Building	XXX
To Over-valuation of closing stock in Cost accounts	XXX	By Over-absorption of overheads	XXX
To Under-charge of depreciation in cost accounts	XXX	By Over-valuation of opening stock in cost accounts	XXX
To Profit as per Financial Accounts (b/f)	XXX	By Under-valuation of closing stock in Cost accounts	XXX
		By Over-charge of depreciation in Cost Accounts	XXX
	XXX		XXX