BANGLADESH COST ACCOUNTING STANDARDS

VOLUME - III



ICMAB

THE INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF BANGLADESH

BANGLADESH COST ACCOUNTING STANDARDS

Volume - III



Bangladesh Cost Accounting Standards

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Published by : The Institute of Cost and Management Accountants of Bangladesh

Design & print : Modina Printers & Publishers

First Edition : October, 2019

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FOREWORD

It gives me immense pleasure to present you the Third Volume of eight more Bangladesh Cost Accounting Standards (BCAS). With this publication, the Institute has achieved new milestone of having a total of thirty-one standards in its possession. You are aware that the Institute has formed Cost Accounting and Financial Reporting Standards Committee (CAFRSC) with one of the important objectives of issuing cost accounting standards to guide cost accounting practitioners in ensuring consistency while applying cost accounting tools and techniques in practice. Cost accounting standards act as infrastructure in the process of implementing cost audit which is the long desire of the Institute. Keeping this objective in mind, the CAFRSC begins its journey. The first successful outcome came in 2014 with the publication of First volume of ten BCASs and the Second one with thirteen BCASs in 2016. As a continuation of professional proliferation, the CAFRSC presents this Third Volume. To keep the quality and gravity of the standards, CAFRSC follows the internationally accepted due process in four different stages as mentioned below:

a. Brainstorming Stage: This is the first stage where the committee members were engaged with extensive research to develop foundation for creating a standard setting environment. Major tasks at this stage were: developing generally accepted cost accounting principles (GACAP), identifying priority areas where cost accounting standards are required, developing a common framework for the standards, etc. This functionality required highest level of commitment on the part of the committee members and even at times experts were hired, where felt necessary. The brainstorming sessions paved the foundation for proceeding with the standard setting process.

b. Drafting Stage: Based on the outcome of the brainstorming stage, the committee formed different sub-groups, comprising of two to three practicing members, to prepare the initial draft of the proposed standard. The choice of the topic was at the discretion of the sub-group members based on their practicing experience on the topic. The sub-groups consulted existing standards on the same topic developed by other international cost and management accounting bodies, relevant books and research papers, and aligned with experts, etc. On completion of initial drafting, the sub-groups made presentation before the committee. Experts were also assigned to attend the presentation and provide their comments/suggestions. Based on the comments and suggestions arising out of the presentation, the sub-groups were required to make revision of the draft.

c. Validation Stage: This was a very important stage where a formal validation process was undertaken to ensure the wider applicability and acceptability of the standards. An expert was involved to review so that the disparity that may exist, if any, among different sub-groups may be rationalized. This process ensured the consistency and harmonization of presentation across different standards. Once initial updating is done, all of these standards were circulated among the members, interest groups through the website of the Institute as Exposure Draft requesting their comments on them. In order to have more interactive discussion on the Exposure Drafts four workshops were arranged in Dhaka and Chittagong. The drafts were then finalized based on the comments and feedback received from the workshop.

d. Finalization Stage: The finalized standards were further reviewed by experts to ensure conformance with Bangladesh Accounting Standards (BAS), Bangladesh Financial Reporting Standards (BFRS) and other related rules. The standards were then approved by the CAFRS Committee which in turn was approved finally by the Council of the Institute on recommend- ation of the Committee.

You will be happy to know that the present council has formed Bangladesh Cost Accounting Standards Board (BCASB) with membership from outside watchdogs in addition to members of the Institute. This Board will be the predecessor of CAFRSC. It will consist of members from ministries, trade associations, academia and Financial Reporting Council (FRC). Such composition will make the board balanced and the standard setting process will get extra momentum and acceptability. I strongly believe, the effort that the council has made in standard setting process will take the legacy of Cost Audit one step ahead.

You know that professional enrichment process never ends. In this continuous process, we try to develop ourselves inclusively. We explore the opportunity of involving multi-stakeholders to get the endorsement from the society at large. Bangladesh Cost Accounting Standards is also a sole product of the Institute which primarily targets to support the cost accounting practitioners and ultimately serve the society in ensuring efficient and effective use of resources.

I urge upon everyone to use BCASs in professional life and convince others to use it. It will surely get the endorsement from the society soon.

October 20, 2019

M. Abul Kalam Mazumdar FCMA
President, ICMAB

ACKNOWLEDGEMENT

No initiative of this world becomes successful in a single hand. Preparation of cost accounting standards warrants serious technical and intellectual exercises. The publication of Third Volume of Bangladesh Cost Accounting Standards (BCAS) is obviously ceremonial. However, it could have been impossible without the sacrifice of our members who were actively involved in this noble exercise. In this Third Edition, a new set of eight standards have been published and this makes the Institute proud owner of a total of thirty-one standards. Though a lot of Committee members have supported us in this whole process, still it will be unfair if I miss to acknowledge few of our members by name whose contribution is significant.

I appreciate the relentless support of the members of the Cost Accounting and Financial Reporting Standards Committee (CAFRSC) who have spared their valuable time to transact the business of committee meeting actively. Some of our members have taken the challenge to prepare the initial drafts of selected standards. They are: Mr. M. A. Matin FCMA (F-0057), Mr. Md. Hemeatul Islam FCMA (F-0344), Mir Mahbubul Bari FCMA (F-0456), Mr. Zillur Rahman FCMA (F-0749), Mr. Muhammad Zahirul Islam FCMA (F-0821), Mr. Sandip Halder FCMA (F-0979), Mr. Muhammad Khourshed Alam ACMA (A-1300), Mr. Muhammud Shakyet Hossain ACMA (A-1321) and Mr. Md. Humayan Kabir ACMA (A-1348). I am thankful to all of them for the support they have extended to me to complete the task successfully.

I am also thankful to the members who have responded to the Exposure Drafts. Their suggestions and comments improved the quality of the standards greatly.

Last, but not the least, I appreciate the contribution of Dr. Nikhil Chandra Shil FCMA (F-0771) who has taken the trouble of reviewing and editing the standards to bring them in its present format.

The contribution of all the above would be engraved in the history of the Institute.



October 20, 2019

M. Abul Kalam Mazumdar FCMA
Chairman
CAFRS Committee, ICMAB, Dhaka.

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BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 24

Material Costs

BCAS 24: Material Costs

24.1 Introduction

Material is a very important component of cost of a cost object. A significant part of the total cost is consumed for material. For lot of reasons, material costs become a concern for cost accountant. Thus, a standard is prepared hereby to guide the practitioners dealing with material in terms of costing, controlling, recording and reporting.

24.2 Objectives

The objective of this standard is to prescribe the classification, measurement and asignment of material cost, for determination of the cost of cost object, and the presentation and disclosure of related information in cost statements.

24.3 Scope

24.3.1 The standard deals with the following issues:

a) Principles of valuation of receipt of materials;

b) Principles of valuation of issue of materials; and

c) Assignment of material cost to cost objects.

24.3.2 This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of material costs including those requiring attestation.

24.3.3 The standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

24.4 Key Features

The key features of this standard are given below –

a) It explains the principles relating to measurement of materials;

b) It explains the principles of valuation of materials issues; and

c) It explains the principles relating to assignment of cost of materials.

24.5 Definitions

The following terms are used in this standard with the meanings specified –

24.5.1 Cost Object: As defined in BCAS 3.5.5.

24.5.2 Abnormal Cost: Cost that is avoidable or unexpected under normal, efficient operating conditions is abnormal cost. It is not inherent in a particular production process.

24.5.3 Normal Cost: Cost that is inherent in particular production process and arises even under efficient operating conditions is normal cost.

24.5.4 Administrative overheads: As defined in BCAS 6.5.7.

24.5.5 Defectives: These are imperfect end product and/or intermediate products units arise

because of faults in materials, labor, or machines. This may include reworks or rejects.

a) Reworks: Defectives which can be brought up to the standards by putting in additional resources. Rework includes repairs, reconditioning and refurbishing.

b) Rejects: Defectives which cannot meet the quality standards even after putting in additional resources. Rejects may be disposed off as waste or sold for salvage value or recycled in the production process.

24.5.6 Imputed costs: As defined in BCAS 6.5.11.

24.5.7 Materials: It may be direct or indirect.

a) Direct Materials: The acquisition costs of all materials that a company/organization identifies as a part of the manufactured goods and traces to the manufactured goods in an economically feasible way.

b) Indirect Materials: Material costs that cannot be identified specifically and exclusively with a given cost object in an economically feasible way.

24.5.8 Indirect Production costs (indirect manufacturing costs, factory burden, factory overhead, manufacturing overhead, works overhead): All costs associated with the production process that a company cannot trace to the goods or services produced in an economically feasible way. Usually all production costs except direct materials and direct labor.

24.5.9 Scrap: Discarded material having some value in few cases and which is usually either disposed of without further treatment (other than reclamation and handling) or reintroduced into the production process in place of raw materials.

24.5.10 Standard Cost: A predetermined cost for the production of goods or services that serves as a benchmark against which to compare the actual cost.

24.5.11 Standard-costing system: A cost-control and product-costing system in which cost variances are computed, if any, and analyze the causes of variances and take proper measure to control them.

24.5.12 Waste: Material loss during production or storage due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage, etc., and discarded material which may or may not have value.

24.5.13 Spoilage: Production that does not meet with dimensional or quality standards in such a way that it cannot be rectified economically and is sold for a disposal value. Net Spoilage is the difference between costs accumulated up to the point of rejection and the salvage value.

24.6 Standards

24.6.1 Principles of Measurement.

24.6.1.1 Principles of valuation of receipt of materials:

a) The costs of purchase of materials comprise the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and

other similar items are deducted in determining the costs of purchase;

b) Finance costs incurred in connection with the acquisition of materials shall not form part of material cost;

c) An entity may purchase materials on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase prices for normal credit terms and the amount paid, is recognized as interest costs over the period of the financing;

d) Self-manufactured materials shall be valued including direct material cost, direct labor cost, direct expenses, factory overheads, share of administrative overheads relating to production but excluding share of other administrative overheads, finance cost (limited circumstances);

e) Spares which are specific to an item of equipment shall not be taken to inventory, but shall be capitalized with the cost of the specific equipment. Cost of capital spares and/or insurance spares, whether procured with the equipment or subsequently, shall be amortized over a period, not exceeding the useful life of the equipment;

f) Normal loss or spoilage of material prior to reaching the factory or at places where the services are provided shall be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal;

g) Losses due to shrinkage or evaporation and gain due to elongation or absorption of moisture etc., before the material is received shall be absorbed in material cost to the extent they are normal, with corresponding adjustment in the quality. The adjustment for moisture will depend on whether dry weight is used for measurement;

h) The forex component of imported material cost shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the material cost;

i) Any demurrage or detention charges, or penalty levied by transport or other authorities shall not form part of the cost of materials; and

j) Subsidy/Grant/Incentive and any such payment received/receivable with respect to any material shall be reduced from cost for ascertainment of the cost of the cost object to which such amounts are related.

24.6.1.2 Principles of valuation of issue of material:

a) The cost of materials of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs;

Note: Specific identification of cost means that specific costs are attributed to identify items of Material. This is the appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. However, specific identification of costs is inappropriate when there are large numbers of items of material that are ordinarily interchangeable.

b) The cost of Materials, other than those dealt with in above paragraph, shall be assigned by using the first-in, first-out (FIFO), last in first out (LIFO), weighted average cost formula. An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For materials with a different nature or use, different cost formulas may be justified;

Note: For example, materials used in one operating segment may have a use to the

entity different from the same type of materials used in another operating segment. However, a difference in geographical location of materials (or in the respective tax rules), by itself, is not sufficient to justify the use of different cost formulas.

c) Where materials are accounted at standard cost, the price variances related to materials shall be treated as part of material cost;

d) Any abnormal cost shall be excluded from the material cost;

e) Whenever, material costs include transportation costs, determination of costs of transportation shall be governed by applicable cost accounting standards; and

f) Material cost may include imputed costs not considered in financial accounts. Such costs which are not recognized in financial accounts may be determined by imputing a cost to the usage or by measuring the benefit from an alternate use of the resource.

24.6.1.3 Self-manufactured components and sub-assemblies shall be valued including direct material cost, direct labor cost, direct expenses, factory overheads, share of administrative overheads relating to production but excluding share of other administrative overheads, finance cost and marketing overheads.

24.6.1.4 The material cost of normal scrap/defectives which are rejects shall be included in the material cost of goods manufactured. The material cost of actual scrap/defectives, not exceeding the normal shall be adjusted in the material cost of goods production. Material Cost of abnormal scrap/defectives should not be included in material cost but treated as loss after giving credit to the realizable value of such scrap/defectives.

24.6.2 Assignment of costs: The basis of assignment of costs to the cost of production or service is dealt in this section.

24.6.2.1 Assignment of costs- Materials:

a) Assignment of material costs to cost objects: Material costs shall be directly traced to a cost object to the extent it is economically feasible and /or shall be assigned to the cost object on the basis of material quantity consumed or similar identifiable measure and valued as per the principles laid under paragraph 24.6.1.; and

b) Where the material costs are not directly traceable to the cost object, these may be assigned on a suitable basis like technical estimates.

24.6.2.2 Assignment of costs- Direct Expenses:

a) Where a material is processed or part manufactured by a third party according to specifications provided by the buyer, the processing/manufacturing charges payable to the third party shall be treated as part of the material cost; and

b) Wherever part of the manufacturing operations/ activity is subcontracted, the subcontract charges related to materials shall be treated as direct expenses and assigned directly to the cost object.

24.6.2.3 Assignment of costs- Indirect materials:

a) The cost of indirect materials shall be assigned to the various cost objects based on a suitable basis such as actual usage or technical norms or a similar identifiable measure;

b) The cost of materials like catalysts, dies, tools, moulds, patterns, etc. which are

relatable to production over a period of time shall be amortized over the production units benefited by such cost; and

c) The cost of indirect material with life exceeding one year shall be included in cost over the useful life of the material.

24.7 Recording and Reporting

24.7.1 Direct materials shall be classified in the cost statement under suitable heads, like, raw materials, components, semi-finished goods, work in process and sub-assemblies, etc.

24.7.2 Direct materials shall be classified as purchased, indigenous, imported and self-manufactured.

24.7.3 Indirect materials shall be classified in the cost statement under suitable heads.

24.7.4 Indirect materials may be grouped under major heads like tools, stores and spares, machinery spares, jigs and fixtures, consumable stores, etc., if they are significant.

24.7.5 The following information should be disclosed in the cost statements dealing with determination of material cost:

a) Quantity and rates of major items of materials shall be disclosed. Major items are defined as those who form at least 5% of cost of materials;

b) The basis of valuation of materials shall be disclosed;

c) Any change in the cost accounting principles and methods applied for the determination of the material cost during the period covered by the cost statement which has a material effect on the cost of the material shall be disclosed. Where the effect of such change is not ascertainable wholly or partly, the fact shall be indicated;

d) Any abnormal cost excluded from the material cost shall be disclosed;

e) Any demurrage or detention charges, penalty levied by transport or other authorities excluded from the material cost shall be disclosed;

f) Any subsidy/Grant/Incentive or any such payment reduced from material cost shall be disclosed;

g) Cost of materials procured from related parties shall be disclosed. Note: Related parties will be determined by the applicable laws and rules;

h) Any cost imputed in arriving at the material cost shall be disclosed;

i) Only material items will be disclosed; and

j) Disclosures may be made in the body of the cost statement or as a footnote or as a separate schedule.

24.8 Effective Date

This standard will be effective from December 1, 2019.



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 25

Employee Costs

BCAS 25: Employee Costs

25.1 Introduction

Every organization or entity must have employees to run its operations - from manufacturing to selling and distributing products or providing of services. The entity needs to pay for the services provided by employees at various stages of its operations. Some amount are paid to employees directly whilst some amount are not directly paid to employees but need to pay for other resources that are required for enabling the employees to perform its activities. Whilst most of the employee related costs are visible in records, there might have some expenses in relation to employees, which are not visible in records - might be hidden. To determine appropriate cost of a product or service or a department or function it is required to understand the components of employee costs properly, how the employee functions are linked to a particular product or service (and/or department/ function). Sometimes, it is also required to justify the existence and/or employment of a particular set of employees comparing with the value they will add to the organization i.e. an employee cost-benefit analysis where the employee costs may include both reported/explicit and hidden costs. Therefore, a standard in this regard showing the methods of calculating employee costs, tracing and/ or allocating the employee costs to various activities/ department/ functions and products or services will be very helpful for managerial decisions.

25.2 Objectives

25.2.1 The objectives of the standard are to deal with the principles and methods on -

a) how to determine the employee costs with a reasonably accurate manner;

b) how to assign the employee costs to various products or services or departments or functions or activities; and

c) how to present the employee costs.

25.2.2 The standard will also try to highlight the hidden employee costs which the management may take into consideration for decision making purpose.

25.3 Scope

25.3.1 The organizations may use the standard to determine the employee costs as well as assigning the costs to various products or services or departments or activities.

25.3.2 Management can take the decision whether the employee costs of a particular product or service, department, or activity or an employee is justified against the value it adds to the product or service or the organization.

25.3.3 It may be used by the professionals for certification of any statement where employee cost related information is required to be provided.

25.3.4 The standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

25.4 Key Features

The key features of this standard are given below –

a) It covers the principles of determining employee costs;

b) It explains the principles of assigning employee costs to cost objects;

c) It differentiates between explicit and hidden costs related to employees; and

d) It also addresses the presentation of other employee related data for decision making.

25.5 Definitions

The following terms are used in this standard with the meanings specified –

25.5.1 Employee types: Employees may be classified/ categorized in various ways as follows:

a) Company roll or third party roll;

b) Permanent or contractual;

c) Daily rate, piece rate, monthly paid basis;

d) Temporary or regular;

e) Part timer;

f) Skilled, semi-skilled, unskilled; and

g) Managerial/ executive, non-executive level, etc.

25.5.2 Employee costs: The consideration given or becomes payable to employees for the services rendered to an entity. Employee costs include all expenses paid either in cash or the benefits given in kind. The employee costs can be direct or indirect, explicit or implicit.

25.5.3 Abnormal costs: The costs which are occurred due to unexpected, unusual, irregular and/ or abnormal situation/ condition of production or operation/ function.

25.5.4 Idle time: When workers are paid time basis, the difference between the hours/ time for which workers/ employees are paid and actual hours spent for production processes or functional activities is called the idle time.

25.5.5 Normal idle time: The part of idle time which is not avoidable and is happened in normal course of operations is considered as normal idle time. The causes of normal idle time may include travelling time from one job or department to another, the distance covered between the factory gate and actual place of work, elapse of time between finishing one job and starting another job, time spent during tea and lunch breaks, machine or job setting-up time etc.

25.5.6 Abnormal idle time: The part of idle time which is caused due to irregular, unexpected, unplanned, or abnormal conditions is considered as abnormal idle time. Abnormal idle time can be avoided or minimized by taking proper plans, care and caution is considered as abnormal idle time. The causes of abnormal idle time may include temporary lack of work, machine breakdown, power failures, shortage of raw materials, waiting for tools, waiting for jobs due to unplanned production, stoppage of work due to managerial policy decisions, strikes and lockouts, and floods, earthquakes, etc.

25.5.7 Cost object: As defined in BCAS 3.5.5.

25.5.8 Direct and indirect employee costs: The part of employee costs which can be directly attributed or traced to a cost object in an economically feasible way is considered as direct employee costs and the part which cannot directly attributed to a cost object is considered as indirect employee cost.

25.5.9 Imputed costs: As defined in BCAS 6.5.11.

25.5.10 Administrative overheads: As defined in BCAS 6.5.7.

25.5.11 Executive directors and non-executive directors: The directors, who are also responsible for daily management of operations of a company, like an employee. Non-executive directors are members of the board and independent of daily management of operations, usually work as an oversight body of management.

25.5.12 Selling & distribution overheads: Selling overheads are the cost incurred for selling function i.e. the cost of activities relating to create and stimulate demand for company's products or services. The distribution overheads are the expenses incurred on the goods to make it available to the customers. These costs include the cost of maintaining and creating demand for the product, making the goods available in the hands of customer.

25.6 Standards

25.6.1 Measurement

25.6.1.1 Employee costs will be measured at the gross amount paid or payable to employees. The employee costs will include, in addition to gross salaries, all sort of allowances, bonuses and benefits including the benefits in kind.

25.6.1.2 Remuneration paid or payable to non-executive directors will not be considered as employee costs but as an administrative overhead. The remuneration paid to executive directors or functional directors will be considered as employee costs.

25.6.1.3 Imputed costs will not be included under employee costs. However, for some decision-making purpose, imputed cost should be considered as employee costs to avoid sub-optimal decision.

25.6.1.4 Benefits provided to employees (e.g. free housing, free conveyance, free medical etc.) will be determined at the total costs of the resources consumed for providing such benefits and will be included within the employee costs.

25.6.1.5 Separation costs incurred for voluntary retirements, retrenchments, termination etc. will be included within employee costs amortizing over the periods benefiting from such costs.

25.6.1.6 Cost of normal idle time will be included within the employee costs, whereas cost of abnormal idle time will not be part of employee costs.

25.6.1.7 Any abnormal costs associated with the employees will not be part of employee costs.

25.6.1.8 Any penalties, damages etc. paid to statutory authorities; or to any third party due to any non-compliance by the organizations with respect to employees shall not be included within the employee costs.

25.6.1.9 Any amount recovered from employees towards any benefits provided or any third party; or any grants, aids etc. received from any government agency in relation to employees will be deducted from employee costs.

25.6.1.10 Cost of retirement benefits plan (gratuity, provident fund etc. or any kind defined obligation or defined contribution plan) will be determined as per relevant Accounting Standard as adopted in Bangladesh.

25.6.1.11 Any change in principle of determination of employee costs shall be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would result in a more appropriate preparation or presentation of cost statements of an enterprise.

25.6.2 Assignment

25.6.2.1 The employee costs which can be directly traced to a cost object will be assigned to the cost object on a suitable basis. Assignment can be on the basis of number of hours/ days consumed or number of employees engaged or any other appropriate basis. If a particular item of employee costs is not material, that may be ignored for assignment of costs to the cost object.

25.6.2.2 The employee costs which cannot be directly traced to an identified cost object, will be assigned to the particular cost object on an appropriate basis, e.g. estimated required time derived from the time study.

25.6.2.3 Separation costs amortized during the period will be treated as indirect costs and will be assigned on a suitable basis e.g. direct employee hours or direct employee costs. Unamortized separation costs will not be assigned to the cost object if the relevant operation is discontinued.

25.6.2.4 All costs incurred in the process of recruitment, training will be treated as administrative costs and will be assigned to the cost object on an appropriate basis, e.g. number of employees or costs for the employees recruited for a department or function.

25.6.2.5 Assignment of overtime premium will be depending on the circumstances and economic feasibility. If the overtime is paid due to the specific requirement of the job, e.g. to meet rush order of customer, it will be directly assigned to the job or cost object. In other cases, the overtime premium paid will be treated as overheads.

25.6.2.6 Cost of idle time for the anticipated reasons e.g. holidays, lunch time, etc. is directly assigned to the cost object as a part of employee costs, usually through loading this cost at the time of calculation of employee costs per hour. Idle time is to be assigned if it is economically feasible. In all other cases it will be treated as overheads.

25.7 Recording and Reporting

25.7.1 Direct employee costs should be presented separately in the statement of cost of a particular cost object; and indirect employee costs should be presented as overheads under respective functions e.g. manufacturing overhead, administrative overhead, sales and marketing overhead, etc.

25.7.2 Resources consumed on account of employee costs should be presented in the cost statement e.g. category wise wages & salaries to permanent, temporary and contractual employees; piece rate payments, overtime payments, employee benefits category wise if these form material part of employee benefits.

25.7.3 The following information should be disclosed in the cost statement of a particular cost object, either in the statement or in footnote:

a) Employee cost attributable to capital work;

b) Employee costs attributable to deferred revenue expenditures;

c) Method applied for determining the cost of such capital work;

d) Separation costs;

e) Abnormal costs excluded from employee costs;

f) Penalties, damages etc. paid but excluded from employee costs;

g) Cost of retirements benefits included in the employee costs for the period;

h) Any subsidy, grants, incentives or any payments received which have been reduced from employee costs;

i) Employee costs paid to related parties;

j) Employee costs paid in foreign currency; and

k) Impact of any change in the methods and principles applied for determining employee costs, if material.

25.7.4 The following information are encouraged to be disclosed:

a) Employee costs paid for expats; and

b) Number of employee category wise.

25.7.5 Any change in the methods and principles applied for determining and/or assignment of employee costs should be disclosed, if it has got a material impact on the employee costs. Where the effect of such change cannot be ascertained wholly or partly that fact should be indicated.

25.8 Effective Date

This standard will be effective from December 1, 2019.

Annexure-A

Examples of employee costs (the list is not exhaustive)

- Salaries, wages, allowances.
- Festival or performance bonuses.
- Various incentives.
- Contribution to provident and other funds.
- Employee welfare.
- Gratuity.
- Leave encashment.
- Other retirement/separation benefits.
- Other deferred employee cost.
- Other future benefits.
- Paid holidays.
- Leave with pay.
- Insurance against accident or health scheme.
- Provisions for workmen's compensation.
- Medical benefits to the employees and dependents.
- Free or subsidized food.
- Free or subsidized housing.
- Free or subsidized education to children.
- Free or subsidized canteen, creches and recreational facilities.
- Free or subsidized conveyance.
- Leave travel concession or leave fair assistance.
- Interest Free or subsidized Loans.
- Any other free or subsidized facility.
- Cost of employees' stock option.
- Cost of interview.
- Cost of relocation of employees.
- Cost of advertising.
- Cost of employee training.



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 26

Cost of Utilities

BCAS 26: Cost of Utilities

26.1 Introduction

Cost of utilities becomes a significant concern for cost accountants while preparing cost statements. The recognition and measurement of cost of utilities is important to understand the behavior of such cost with the volume of production. Cost accountants also need to have enough precision of such cost which becomes a significant component of manufacturing overhead. At the same time, significance of cost of utilities increases with the use of technologies in manufacturing. This standard prescribes required guidelines for cost accountants to recognize, measure, and report cost of utilities data in cost statements.

26.2 Objectives

26.2.1 The principal objective of this standard is to prescribe the principles and methods of determining the cost of utilities.

26.2.2 To support cost accounting practitioners in determining the cost of cost objects, this standard deals with-

- the methods of classification, measurement and assignment of cost of utilities, and
- the relevant presentation and disclosure issues in cost statements.

26.2.3 The standard promotes uniformity and consistency in applying the principles and methods of determining the cost of utilities with reasonable accuracy.

26.3 Scope

26.3.1 This standard shall be applicable to such organizations that use different types of utilities and shall not be applicable to organizations primarily engaged in generation and sale of utilities.

26.3.2 This standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of cost of utilities.

26.3.3 The standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

26.4 Key Features

The key features of this standard are pointed below -

a) Identifying different types of utility costs;

b) Presenting general guidelines for choosing appropriate utility costs bases;

c) Presenting the principles of measurement of utility costs;

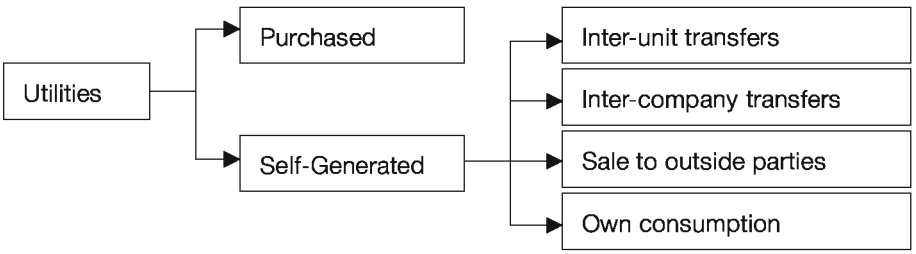
d) Identifying and calculating the utility costs for charging on products; and

e) Identifying different disclosures required related to utility costs.

26.5 Definitions

The following terms are being used in this standard with the meanings specified -

26.5.1 Utilities: Utilities are significant inputs such as power, steam, water, compressed air and the like which are used for manufacturing process but do not form part of the final product. A classification of utilities is made below:



26.5.2 Stand-by utilities: Any utility created as backup against any failure of the main source of utilities are stand-by utilities which is important for running the process smoothly.

26.5.3 Abnormal cost: Abnormal cost is an unusual or a typical cost whose occurrence is usually irregular and unexpected due to some abnormal situation of the production or operation.

26.5.4 Committed Cost: The cost of maintaining stand-by utilities which could not be stopped from incurrence shall be the committed cost.

26.5.5 Cost Object: As defined in BCAS 3.5.5.

26.5.6 Imputed Costs: As defined in BCAS 6.5.11.

26.5.7 Interest and finance charges: Interest and financing charges are interest and other costs incurred by an entity in connection with the financing arrangements. Examples are:

a) Interest and commitment charges on bank borrowings, other short term and long term borrowings;

b) Financing Charges in respect of finance leases and other similar arrangements; and

c) Exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms Interest and financing charges, finance costs, and borrowing costs are used interchangeably.

26.5.8 Normal capacity: Normal Capacity is the production achieved or achievable on an average over a number of periods or seasons under normal circumstances taking into account the loss of capacity resulting from planned maintenance. In case of any standby utility the normal capacity will be the same as actual production of the utility. The normal capacity of a utility meant for captive consumption would be based on the normal capacity for the production facility of the end product of the consuming unit.

26.5.9 Standard Cost: A predetermined cost of a product or service based on technical specifications and efficient operating conditions. Standard costs are used as scale of reference to compare the actual costs with the standard cost with a view to determine the variances, if any, and analyze the causes of variances and take proper measure to control them. Standard costs are also used for estimation.

26.6 Standards

26.6.1 Principles of measurement

26.6.1.1 Each type of utility, purchased or self-generated, shall be treated as a distinct cost object.

26.6.1.2 Cost of utilities purchased shall be measured at cost of purchase including duties and taxes, transportation cost, insurance and other expenditure directly attributable to purchase (net of trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified with reasonable accuracy at the time of purchase.

26.6.1.3 Cost of self-generated utilities for own consumption shall comprise direct material cost, direct employee cost, direct expenses and factory overheads.

26.6.1.4 Cost of utilities generated for the inter-unit transfers shall comprise direct material cost, direct employee cost, direct expenses, factory overheads and distribution cost.

26.6.1.5 Cost of utilities generated for the intercompany transfers shall comprise direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost and share of administrative overheads.

26.6.1.6 Cost of utilities generated for the sale to outside parties shall comprise direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost, share of administrative overheads and marketing overheads.

26.6.1.7 The sale value of self-generated utilities for own consumption, inter-unit transfers, intercompany transfers and sale to outside parties shall include margin in addition to cost of utilities.

26.6.1.8 Finance costs incurred in connection with the utilities shall not form part of cost of utilities.

26.6.1.9 The cost of utilities shall include the cost of distribution of such utilities. The cost of distribution will consist of the cost of delivery of utilities and all other related costs would be added up to the point of consumption.

26.6.1.10 Cost of utilities shall not include imputed costs.

26.6.1.11 Where cost of utilities is accounted at standard cost, the price variances related to utilities shall be treated as part of cost of utilities and the portion of usage variances due to normal reasons shall be treated as part of cost of utilities. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.

26.6.1.12 Any subsidy/grant/incentive or any such payment received/receivable with respect to any cost of utilities shall be reduced for ascertainment of the cost to which such amounts are related.

26.6.1.13 The cost of production and distribution of utilities shall be determined based on the normal capacity or actual capacity utilization whichever is higher and unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a stand-by utility shall include the committed costs of maintaining such a utility.

26.6.1.14 Any abnormal cost where it is material and quantifiable shall not form part of the cost of utilities.

26.6.1.15 Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of utilities.

26.6.1.16 Credits/recoveries relating to the utilities including cost of utilities provided to outside parties, material and quantifiable, shall be deducted from the total cost of utility to arrive at the net cost of utility.

26.6.1.17 Any change in the cost accounting principles applied for the measurement of the cost of utilities should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.

26.6.2 Assignment of costs

26.6.2.1 While assigning cost of utilities, traceability to a cost object in an economically feasible manner shall be the guiding principle.

26.6.2.2 Where the cost of utilities is not directly traceable to cost object, it shall be assigned on the most appropriate basis.

26.6.2.3 The most appropriate basis of distribution of cost of a utility to the departments consuming services is to be derived from usage parameters.

26.7 Recording and Reporting

26.7.1 Utilities costs shall be presented as a separate cost head for each type of utility in the cost statement, if material.

26.7.2 Where separate cost statements are prepared for utilities, cost of utilities shall be classified as purchased and generated. Such statement shall also include cost of utilities consumed along with quantitative information by individual consuming units; inter unit transfers, intercompany transfers and sale to outside parties wherever applicable.

26.7.3 The cost statements shall disclose the following:

a) The basis of distribution of cost of utility to the consuming centers;

b) The cost of purchase, production, distribution, marketing and price with reference to sales to outside parties;

c) Where cost of utilities is disclosed at standard cost, the price and usage variances including the breakdown of normal and abnormal;

d) The cost and price of utility received from/supplied to related parties;

e) The cost and price of utility received from/supplied as inter unit transfers and intercompany transfers;

f) Cost of utilities incurred in foreign exchange;

g) Any subsidy/grant/incentive and any such payment reduced from cost of utilities;

h) Credits/recoveries relating to the cost of utilities;

i) Any abnormal cost excluded from cost of utilities; and

j) Penalties and damages paid, etc. excluded from cost of utilities.

26.7.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of the cost of utilities during the period covered by the cost statement

which has a material effect on the cost of utilities. Where the effect of such change is not ascertainable wholly or partly the fact shall be disclosed.

26.7.5 Disclosures shall be made only where material, significant and quantifiable.

26.7.6 Disclosures shall be made in the body of the Cost Statement or as a foot note or as a separate schedule.

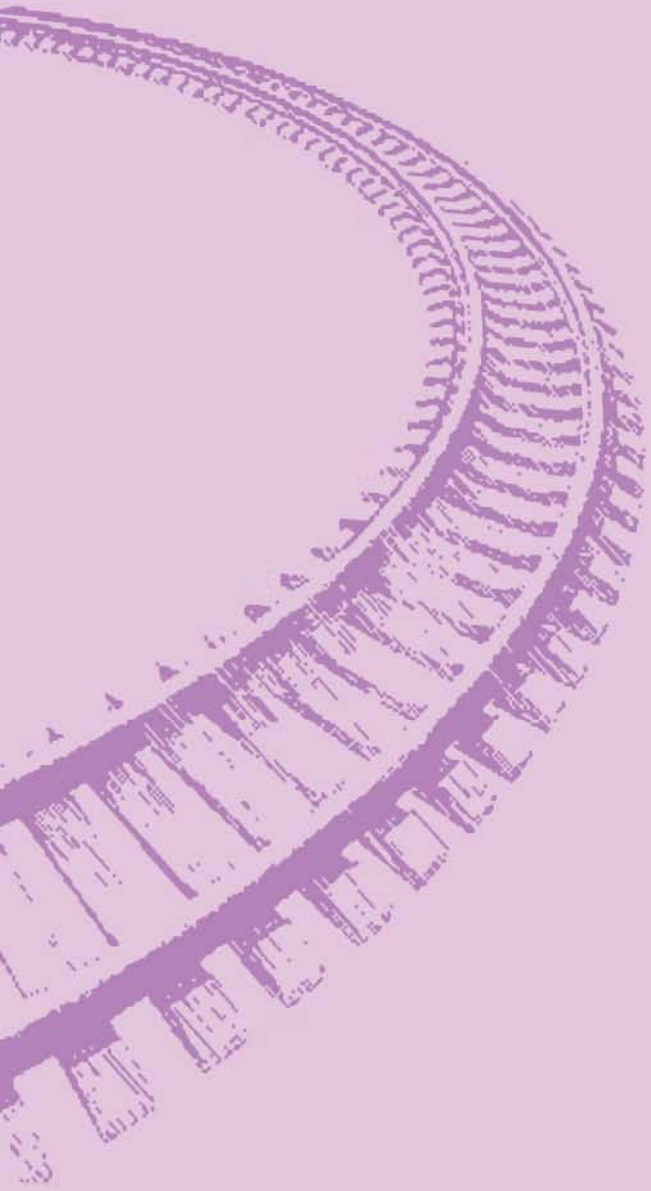
26.8 Effective Date:

This standard will be effective from December 1, 2019.

Appendix A

Cost of Utilities

Types	Elements of Costs	Excludes
Purchased utilities	cost of purchase, duties and taxes, transportation cost, insurance and other expenditure directly attributable to purchase	Finance costs, imputed costs, any abnormal costs, penalties and damages paid to statutory bodies or third parties
Self generated utilities:		
(a) Own consumption	direct material cost, direct employee cost, direct expenses and factory overheads	
(b) Inter unit transfers	direct material cost, direct employee cost, direct expenses, factory overheads and distribution cost	
(c) Intercompany transfers	direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost and share of administrative overheads	
(d) Sale to outside parties	direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost, share of administrative overheads and marketing overheads	



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 27

Cost of Production for Captive Consumption

BCAS 27: Cost of Production for Captive Consumption

27.1 Introduction

Captive consumption means the consumption of goods manufactured by one department of the same organization or related establishments for producing another product. Product costing brings extra difficulty in case of the availability of captive consumption. Some different units in a same organization get motivated to accept sub-optimal decision at the cost of organization-wide goal. Thus, a standard on the recognition and measurement of the cost of captive consumption becomes important and this standard brings harmony in related practices.

27.2 Objectives

27.2.1 The objective of this standard is to bring uniformity in the principles and methods used for determining the cost of production of goods used for captive consumption.

27.2.2 It provides guidelines to report relevant information in the cost statements and ascertain assessable value of goods used for captive consumption.

27.2.3 It will ensure better transparency in valuing of goods used for captive consumption.

27.3 Scope

27.3.1 This standard needs to be followed to determine the cost of production of goods used for captive consumption.

27.3.2 Cost of production includes various cost elements which are defined in Bangladesh cost Accounting standard (BCAS) 1: Cost Concepts and Classification. Hence, this standard needs to be read in conjunction with BCAS 1.

27.3.3 The standard is to be followed by all public limited companies where cost audit is made mandatory through Governments gazette notification from time to time.

27.4 Key features:

The key features of the standard are pointed below –

a) Identification of different cost components relating to cost of production;

b) Determination of cost of production of goods used for captive consumption;

c) Prescription of a specimen statement of cost of production; and

d) Identification of different disclosure items.

27.5 Definitions

The following terms are used in this standard with the meanings specified –

27.5.1 Captive consumption: Captive consumption means the consumption of goods manufactured by one division or unit and consumed by another division or unit of the same entity or related undertaking for producing another product.

27.5.2 Cost of production: Cost of production should comprise of all the costs relating to the production of goods including materials consumed, direct wages and salaries, other

direct expenses, manufacturing overheads, research and development cost, quality control cost, packing cost, administrative overheads relating to production. Adjustment for inventory of work in progress, finished goods, recoveries from scrap, wastage etc. shall be made to ascertain cost of production of goods dispatched for captive consumption.

27.5.3 Normal capacity: As defined in BCAS 26.5.8.

27.6 Standards

Components of Cost of Production

27.6.1 Cost of production for captive consumption includes a wide array of costs and adjustment items all of which needs to be considered at the time of costing. These costs are –

a) Material consumed;

b) Direct wages and salaries;

c) Other direct expenses;

d) Manufacturing overheads;

e) Quality control costs;

f) Research and development costs;

g) Administrative overheads; and

h) Packing costs, etc.

27.6.2 Material consumed shall include materials directly identified for production of goods such as, a) Indigenous materials, b) imported materials, c) bought out material, d) self manufactured items, e) process materials, etc.

27.6.3 Cost of material consumed shall consists of cost of material, duties and taxes, freight inward, insurance and other expenditure directly attributable to procurement. Rebates, trade discounts etc. need to be deducted to determine the cost of material consumed. Cenvat credit, credit for countervailing customs duty, sales tax, set off, VAT, duty draw back and other similar duties recovered subsequently by the enterprise shall be deducted to arrive at cost of materials.

27.6.4 Direct wages and salaries related to production shall include basic wages, house rent allowance, overtime and incentive payments made to employees directly related in the production/manufacturing activities. It will also include all fringe benefits of workers/ employees related to production activities.

27.6.5 Other direct expenses are the expenses other than direct material cost and direct labor cost that can be identified with the product. Such expenses include (i) cost of utilities i.e. fuel power, water, steam etc. (ii) royalty based on production, technical assistance (iii) amortized cost of moulds, patterns, patents, etc. (iv) hire charges for tools and equipment (v) charges for a product designing, etc.

27.6.6 Manufacturing overheads are the indirect costs incurred in the production process and consists of (i) consumable stores and spares, (ii) depreciation of plant of machinery, factory building, (iii) lease rent of production assets, (iv) repair and maintenance of plant & machinery and factory building, (v) indirect employees cost connected with production

purpose, (vi) drawing & designing cost, (vii) insurance (plant & machinery, factory building), inventory of raw materials and WIP, etc. (viii) amortized cost of jigs, fixtures, tooling, etc. (ix) service departments cost (tool room, engineering & maintenance, pollution control, etc).

27.6.7 Quality control costs are incurred to adhere to prescribed quality standard. The expenses include salaries & wages of employees related to quality control activity and other related expenses.

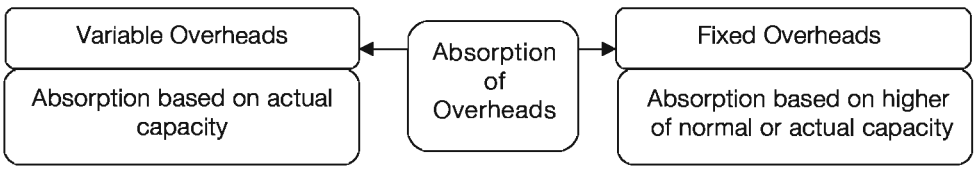
27.6.8 Research and development cost are the costs meant to development and improvement (both quality and price) of the existing products which shall be included while computing the cost of production.

27.6.9 Administrative overheads relating to production activities should be analyzed and included in cost of production. Administrative overheads relating to marketing, project management, company office expense, etc. shall be excluded from cost of production.

27.6.10 Packing cost includes both cost of primary and secondary packing required for dispatch of the goods used for captive consumption. If product is dispatched duly packed for captive consumption, the cost of this packing shall be included to cost of production.

Absorption of Overheads

27.6.11 Overhead needs to be analyzed into both variable overheads (which change with the change in volume of production like cost of utilities) and fixed overheads (whose value do not change with the change in volume of production such as salaries, rents, etc). Variable production overhead will be absorbed in production cost based on actual capacity utilization. But fixed production overhead and other similar fixed costs (quality control cost, R&D cost, Administrative overhead cost relating to production) shall be absorbed in production cost on the basis of normal capacity or actual capacity utilization whichever is higher.



Inventory Valuation

27.6.12 The inventory of work-in-progress shall be valued at cost on the basis of stages of completion. Accordingly inventory of finished goods will also be valued at cost. Opening and closing inventory of work-in-progress will be adjusted to arrive at cost of goods manufactured and similarly opening and closing inventory of finished goods will be adjusted for calculation of goods shipped for sale. In a shorter period where figures of opening and closing inventory will not be readily available, the adjustment of figures of opening and closing inventory may be ignored to determine cost of respective inventories.

Costing Joint-Products and By-Products

27.6.13 When joint products are produced, joint costs are allocated between the joint products

on a rational and consistent basis. Sales value at split off point may become the basis for allocation of joint costs to joint products. For by-products, production method may be used whereby the net realizable value of by-products should be credited to the cost of main product.

Adjustments of Scrap and Waste

27.6.14 Realized or realizable value of scrap and waste originates from production should be credited to the cost of production. Expenses incurred for making the scrap suitable for reprocessing shall be deducted from the value of scrap or waste.

Miscellaneous Income

27.6.15 Miscellaneous income relating to production shall be adjusted in the calculation of cost of production, for example, income from sale of empty containers used for dispatch of the captively consumed goods produced shall be adjusted while calculating cost of production.

Other Issues

27.6.16 The input material, whether of direct or indirect nature, including packing material supplied free of cost by the user of captive products, the landed cost of such materials shall be added to the cost of production.

27.6.17 Moulds, tools, dies, patterns etc. received free of cost shall be included in the production cost through amortization.

27.6.18 Interest and financial charges shall not be considered as a part of cost of production.

27.6.19 Abnormal and non-recurring cost which arises for unusual or unexpected occurrence of events, like heavy break-down of plants, accidents, market compelling to sale below normal levels, abnormal idle capacity, process loss and scrap & wastage, payment like retrenchment compensation, lay-off wages, etc. should not form part of cost of production.

27.7 Recording and Reporting

27.7.1 The manufacturer will be required to maintain cost records and books of accounts in a manner as prescribed in BCAS 1 to facilitate preparation and verification of the cost of production. The cost & management accountants certifying the cost of production of goods used for captive consumption shall verify the correctness of the cost from the records.

27.7.2 The manufacturer must maintain cost accounting records as per the prescribed cost accounting record rules to facilitate determination and certification of cost of production.

27.7.3 To record and report cost of production of captive consumption, a specimen format of cost sheet is given in appendix 1.

27.7.4 If there is any change in cost accounting principles and practices during the period under review which may materially affect the cost of production compared to previous period, this information should be disclosed.

27.7.5 If opening inventory and closing inventory of work-in-progress and finished goods are not readily available for certification purpose, the same should be disclosed.

27.7.6 Relevant disclosures, either in the foot or face or notes, are required for –

a) Adjustments done in computing cost of materials consumed;
b) Adjustments considered while computing cost of administrative overheads;
c) Basis of absorption of fixed and variable overheads;
d) Methods used in allocating joint costs, if any; and
e) Methods used in adjusting by-products, etc.

27.8 Effective Date:

This standard will be effective from December 1, 2019.

Appendix A

Specimen Cost Sheet

Name of the Manufacturer :

Address of the Manufacturer :

Registration No of Manufacturer :

Description of product captivity consumed :

Statement of Cost production of _____manufactured/to be manufactured during the period _____

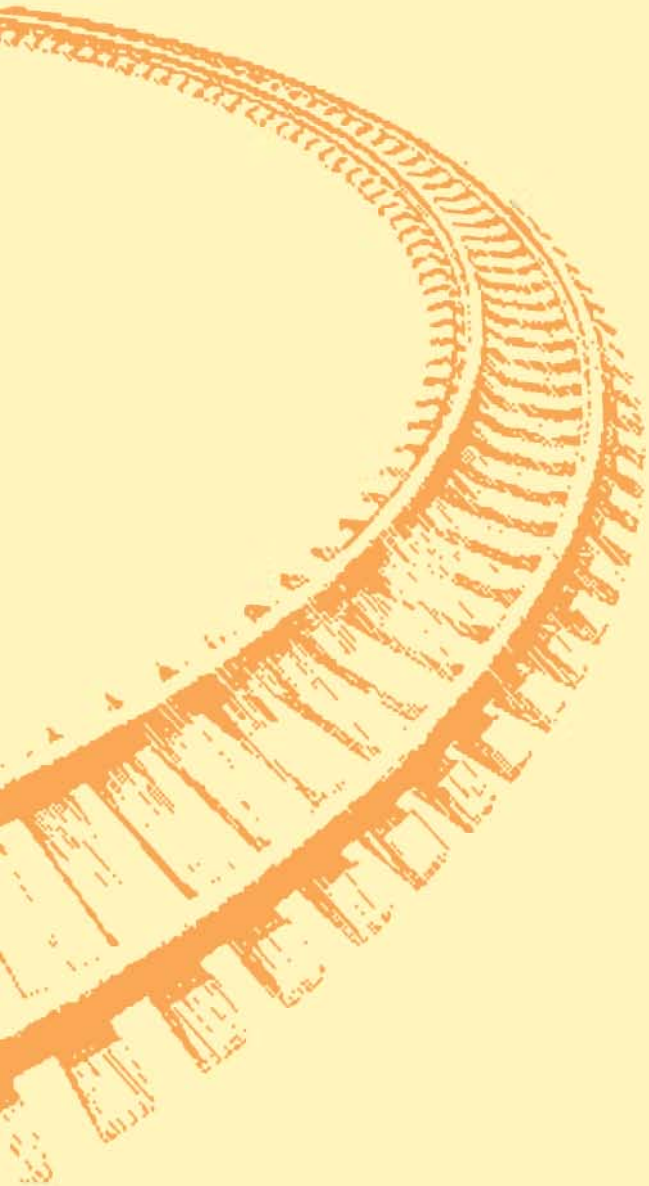
Q1	Quantity Produced (Unit of Measure)		
Q2	Quantity Dispatched (Unit of Measure)		
	Particulars	Total Cost (Tk.)	Cost/Unit (Tk.)
1.	Materials Consumed		
2.	Direct Wages and Salaries		
3.	Direct Expenses		
4.	Work Overheads		
5.	Quality Control Cost		
6.	Research & Development Cost		
7.	Administrative Overheads (relating to production activity)		
8.	Total (1-7)		
9.	Add : Opening stock of work-in-progress		
10.	Less : Closing stock of work-in-progress		
11.	Total (8+9-10)		
12.	Less: Credit for recoveries/Scrap/by-products/ miscellaneous		
13.	Packing cost		
14.	Cost of production (11-12+13)		
15.	Add : Input received free of cost		
16.	Add : Amortized cost of moulds, tools, dies & patterns, etc. received free of cost		
17.	Cost of production of goods for captive consumption		
18.	Add : Opening stock of finished goods		
19.	Less : Closing stock of finished goods		
20.	Cost of production for goods dispatched (17+18-19)		

Seal & signature of Company`s Authorized Representative

I/we, have verified above data on test check basis with reference to the books of account, cost accounting records and others records. Based on information and explanations given to me/ us and on the basis of generally accepted cost accounting principles and practices followed by the industry, I/ we certify that above cost data reflect true and fair view of the cost production.

Date: Seal & Signature of Cost and Management Accountants

Place: Membership No.



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 28

Capacity Determination

BCAS 28: Capacity Determination

28.1 Introduction

Better utilization of capacity means better utilization of resources which is an important consideration for cost determination and cost reduction. It is really essential to establish the capacity of the plant. This standard deals with the principles and methods of determining the capacity of a facility installed for producing goods or providing services by an entity. Moreover, this standard deals with the principles and methods of classification and determination of capacity of an entity for ascertainment of the cost of product or service, and the presentation and disclosure of the same in cost statements.

28.2 Objectives

28.2.1 The objective of the standard is to prescribe the method of determination of capacity to be applied uniformly and consistently.

28.2.2 The standard will help the management to identify the bottlenecks, imbalances and idle capacity for effective use of various resources.

28.2.3 The standard will help in proper allocation, apportionment and absorption of cost.

28.3 Scope

28.3.1 This standard shall be applied to the cost statements, including those requiring attestation, which require determination of capacity for assignment of overheads.

28.3.2 The standard will be followed for capacity determination required to be carried out for any purpose or under any provisions of any Act (i.e. Companies Act 1994), Rules or Regulation of Bangladesh (i.e. Cost Audit Rules).

28.3.3 The standard will be applied for an undertaking, whether existing or new, where there is material expansion in capacity due to introduction of new machines, productive resources or material reduction in capacity due to disposal or withdrawal or impairment of old machines or productive resources.

28.3.4 The standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

28.4 Key features

The key features of the standard are pointed below –

a) Explains capacity in manufacturing environment;

b) Identifies different types of capacity and their use in costing; and

c) Shows the impact of capacity determination on product or service costing.

28.5 Definitions

The following terms are used in this standard with the meanings specified –

28.5.1 Licensed Capacity: Licensed Capacity is the production capacity of the plant for which

license has been issued by an appropriate authority.

28.5.2 Installed Capacity: Installed Capacity is the maximum productive capacity according to the manufacturers' specification of machines or equipment. Installed capacity of the unit/plant is determined after taking into account imbalances in different machines or equipment in the various departments/production cost centers in the unit/plant and number of working shifts.

28.5.3 Practical or Achievable Capacity: Practical or Achievable Capacity is the maximum productive capacity of a plant reduced by the predictable and unavoidable factors of interruption pertaining to internal causes. Thus, practical capacity is the installed capacity minus the inevitable interruptions due to time lost for break downs of machines, repairs, set ups, normal delays, weekly off-days and holidays, inventory taking periods etc. Practical capacity does not consider the external factors causing reduction in production e.g. lack of orders.

28.5.4 Normal Capacity: Normal Capacity is the level of productive capacity i.e. attained or attainable over a period of time, considering the normal conditions and variations in the line of business. Normal capacity is practical capacity minus the loss of productive capacity due to external factors.

28.5.5 Actual Capacity Utilization: Actual Capacity Utilization is the volume of production achieved in relation to installed capacity. Volume may be measured in terms of units produced or services provided or equivalent machine or man hours, as applicable. Actual capacity utilization is usually expressed as a percentage of installed capacity.

28.5.6 Idle Capacity or Underutilization of Capacity: Idle Capacity or Underutilization of Capacity is the difference between installed capacity and the actual capacity utilization when actual capacity utilization is less than installed capacity.

28.5.7 Excess Capacity Utilization: Excess Capacity Utilization is the difference between installed capacity and the actual capacity utilization when actual capacity utilization is more than installed capacity.

28.5.8 Abnormal Idle Capacity: Abnormal idle capacity is the difference between practical capacity and normal capacity or actual capacity utilization whichever is higher.

28.5.9 Unutilized Capacity: Unutilized Capacity is the difference between Installed capacity and Normal capacity.

28.6 Standards

28.6.1 Installed capacity is usually determined based on:

a) Manufacturers' technical specifications;

b) Capacities of individual or interrelated production centers;

c) Operational constraints / capacity of critical machines;

d) Number of shifts; and

e) Any other factors in line with above.

28.6.2 In case of manufacturers' technical specifications are not available, the estimates by technical experts on capacity under ideal conditions may be considered for determination of installed capacity.

28.6.3 In case a product passes through different production processes and each process is having different capacity then the process which brings out effective and ultimate production, shall be considered for deciding installed capacity.

28.6.4 Practical capacity or achievable capacity shall be determined after adjustment of the following with the installed capacity:

a) Available production hours taking into consideration holidays, normal shut down days and normal idle time;

b) Normal time loss in batch change over, breakdown of machines, repairs, inventory taking periods, etc;

c) Loss in efficiency due to ageing of the machines/equipment;

d) Number of shifts; and

e) Any other factors in line with above.

28.6.5 Normal capacity is determined based on the productive capacity achieved or expected to be achieved over a period of time, say three to five years. This capacity is determined after adjustment of external factors with practical capacity.

28.6.6 In case of new plant where at the initial stage the capacity will be far below the normal capacity, normal capacity may be taken as one based on specific industry's standard, market projection etc. The period to achieve normal capacity may depend on infrastructural support, management decision, market condition, etc.

28.6.7 Normal capacity of production process involved in the production of a product or the productive capacity of the plant as a whole should be taken into account to arrive at normal capacity for a product or plant, as the case may be.

28.6.8 The periods influenced by abnormalities shall be excluded for this purpose.

28.6.9 In case the same products with different specifications and of different ranges in terms of size, type, variety etc. are manufactured, then there is a need to determine equivalence among them in order to determine the capacity.

28.6.10 In case some intermediate products / components etc. are also produced, they should be taken into consideration for determining equivalent capacity.

28.6.11 In case some job is outsourced or some machines are given on lease/ let out or taken on lease, its impact in terms of decrease/increase in capacity shall be considered separately.

28.7 Recording and Reporting

28.7.1 Cost Statements shall present Installed capacity, normal capacity and actual production of goods or services provided, in absolute terms.

28.7.2 Actual Capacity utilization shall be presented as a percentage of installed capacity.

28.7.3 The cost statements shall disclose the followings:

a) The details of basis for arriving at the capacity, variables used and assumptions made should be disclosed;

b) Any change in the installed capacity due to modifications in the machines/equipment

or addition of balancing equipment or disposal or impairment of some machines/ equipment should be disclosed;

c) The licensed capacity and installed capacity should be disclosed in absolute term of production whereas practical capacity, normal capacity and actual capacity utilization should be disclosed in absolute term as well as in percentage of installed capacity;

d) In case the same products with different specifications and of different ranges in terms of size, type, variety etc are manufactured, then there is a need to determine equivalence among them and capacity should be established in terms of equivalent units;

e) In case some machines are taken on lease or some machines are leased out, their impact in terms of increase/ decrease in capacity should be disclosed separately;

f) In case of low capacity utilization as compared to the installed capacity, reasons for the same should be disclosed. Comments on the shortfall in production should also specify the factors which are controllable and uncontrollable in short term or in long term; and

g) In case of excess capacity utilization, the same should be disclosed separately in absolute terms and in terms of percentage with reasons.

28.8 Effective Date

This standard will be effective from December 1, 2019 onwards.

Appendix 28A

Computation of Different Capacity Level

Manufacturers' Specifications - capacity per hour = 500 units

No of shifts (each shift 8 hours) = 3 shifts

Holidays in a year:

Sundays = 52 days

Other holidays = 13 days

Annual maintenance is done within these 13 holidays

Preventive Weekly Maintenance for the machine on Sunday

Normal idle capacity for batch change over, Lunch, personal need etc. = 1 hr per shift

Production based on sales expectancy in past 5 years

= 30.1, 26.9, 29.7, 24.4 and 30.2 lakh units

Actual Production for the year = 30.1

Calculation:

Installed Capacity for the machine = 365 * 8 *3 * 500 = 43.8 lakh units

Practical Capacity = (365 – 52 - 13) * (8 - 1) * 3 * 500= 31.5 lakh units

Out of the past five years, normal capacity is average of 3 normal years

Normal Capacity = (30.1 + 29.7 + 30.2) / 3 = 30.0 lakh units

Actual Capacity Utilization = 30.1 lakh units = 68.7 %

Idle Capacity = (43.8 – 30.1) = 13.7 lakh unit = 31.3 %

Abnormal idle capacity = 31.5 – 30.1 = 1.4 lakh units



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 29

Cost of Quality

BCAS 29: Cost of Quality

29.1 Introduction

Quality is often referred to as the degree or grade of excellence; thus, it is a relative measure of goodness. Operationally, a quality product or service is one that meets or exceeds customer expectations. Customer expectations relate to attributes such as product performance, reliability, durability, and fitness for use. A quality specification is the specific level of performance planned for a given quality attribute. Customers expect a quality product or service to perform according to specifications. The costs of quality can be substantial and a source of significant savings. As companies implement quality improvement programs, a need arises to monitor and report on the progress of these programs. Managers need to know what quality costs are and how they are changing over time. Reporting and measuring quality performance is absolutely essential to the success of an ongoing quality improvement program. A fundamental prerequisite for this reporting is measuring the costs of quality. Considering its significance, this standard is prepared to guide practitioners so that they can identify, measure and report cost of quality keeping uniformity and consistency in measurement and reporting.

29.2 Objectives

29.2.1 The objective of this standard is numerous quality-related activities, all of which consume resources that determine the level of quality costs incurred by a firm. Inspecting or testing parts, for example, is an appraisal activity that has the objective of detecting bad products. Detecting bad products and correcting them before they are sent to customers is usually less expensive than letting them be acquired by customers.

29.2.2 Another objective of this standard is to find ways to minimize total quality costs. Competitive forces are requiring firms to pay increasing attention to quality. Customers are demanding higher-quality products and services. Improving quality may actually be the key to survival for many firms. Improving process quality and the quality of products and services is a fundamental strategic objective that is part of any well designed Balanced Scorecard. If quality is improved, then customer satisfaction increases; if customer satisfaction increases, then market share will increase; and if market share increases, then revenues will increase. Thus, improving quality can enhance a firm's financial and competitive position.

29.2.3 Finally, this standard is to bring uniformity, consistency in the principles, methods of determining and assigning Quality Control cost with reasonable accuracy.

29.3 Scope

29.3.1 Quality cost information is needed to help managers controlling quality performance and to serve as input for decision making. It can be used to evaluate the overall performance of quality improvement programs. It can also be used to help improve a variety of managerial decisions, for example, strategic pricing and cost-volume-profit analysis. Perhaps the most important observation is that quality cost information is fundamental in a company's pursuit of continual improvement.

29.3.2 Quality is one of the major competitive dimensions for world-class competitors. Many companies now have their dedication to quality certified by an external reporting firm

under, for example, ISO 9000 specifications. This standard covers all quality dimensions used in different quality certifications.

29.3.3 The standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

29.4 Key Features

The key features of this standard are given below –

a) Explains the applicability of quality costing;

b) Provides the basic principles of quality costing;

c) Provides pricing decision & cost-volume profit analysis decision;

d) Explains the steps & principals of applying quality costing; and

e) Lists the potential benefit of using quality costing.

29.5 Definitions

Following terms are used in this standard with the meanings specified –

29.5.1 Cost of quality: Quality-linked activities are those activities performed because poor quality may or does exist. The costs of performing these activities are referred to as costs of quality.

29.5.2 Control activities: Control activities are performed by an organization to prevent or detect poor quality. Control activities are made up of prevention and appraisal activities. Control costs are the costs of performing control activities.

29.5.3 Failure activities: Failure activities are performed by an organization or its customers in response to poor quality. If the response to poor quality occurs before delivery of a bad product to a customer, the activities are classified as internal failure activities; otherwise, these are called external failure activities. Failure costs are the costs incurred by an organization because failure activities are performed.

29.5.4 Prevention costs: Prevention costs are incurred to prevent poor quality in the products or services being produced and delivered. As prevention costs increase, we would expect the costs of failure to decrease. Examples of prevention costs are quality engineering, quality training programs, quality planning, quality reporting, supplier evaluation and selection, quality audits, quality circles, field trials, and design reviews.

29.5.5 Appraisal costs: Appraisal costs are incurred to determine whether products and services are conforming to their requirements or customer needs. Examples include inspecting and testing materials, packaging inspection, supervising appraisal activities, product acceptance, process acceptance, measurement equipment, and outside certification.

29.5.6 Internal failure costs: Internal failure costs are incurred because products and services do not conform to specifications or customer needs. This nonconformance is detected prior to shipment or delivery of the products to outside parties. These are the failures detected by appraisal activities. Examples of internal failure costs are scrap, rework, downtime (due to defects), reinsertion, retesting, and design changes. These costs disappear if no defects exist.

29.5.7 External failure costs: External failure costs are incurred because products and services fail to conform to requirements or satisfy customer needs after being delivered to customers. Of all the costs of quality, this category can be the most devastating one. Costs of recalls, for example, can run into the hundreds of millions of dollars. Other examples include lost sales because of poor product performance, returns and allowances because of poor quality, warranties, repair, product liability, customer dissatisfaction, lost market share, and complaint adjustment. External failure costs, like internal failure costs, disappear if no defects exist.

29.5.8 Reworks: Defectives which can be brought up to the standards by putting in additional resources are reworks. Rework includes repairs, reconditioning and refurbishing.

29.5.9 Rejects: Defectives which cannot meet the quality standards even after putting in additional resources are rejects. Rejects may be disposed of as waste or sold for salvage value or recycled in the production process.

29.5.10 Imputed Costs: As defined in BCAS 6.5.11.

29.6 Standards

29.6.1 Quality cost incurred in-house shall be the aggregate of the cost of resources consumed in the quality control activities of the entity. The cost of resources procured from outside shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited by the Tax Authorities. Such cost shall include: (i) cost of conformance to quality: (a) prevention cost; and (b) appraisal cost & (ii) cost of nonconformance to quality: (a) internal failure cost; and (b) external failure cost.

29.6.2 Identification of quality costs shall be based on traceability in an economically feasible manner.

29.6.3 Quality costs shall be determined on the basis of amount incurred in connection therewith.

29.6.4 Finance costs incurred in connection with the self-generated or procured resources shall not form part of quality cost.

29.6.5 Quality costs shall not include imputed costs.

29.6.6 Any subsidy/grant/incentive or any such payment received/receivable with respect to any quality cost shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.

29.6.7 Any abnormal portion of the quality control cost where it is material and quantifiable shall not form part of the cost of quality.

29.6.8 Penalties, damages paid to statutory authorities or other third parties shall not form part of the quality cost.

29.6.9 Any change in the cost accounting principles applied for the measurement of the quality cost shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.

29.7 Recording and Reporting

29.7.1 Organization should have a quality cost control team consisting of members from every division who will be involved in finding the cost of quality.

29.7.2 Organization should have a mechanism of setting quality cost with reference to particular department.

29.7.3 Organization should have a formal communication process of preparing and reporting of quality costing information.

29.7.4 Organization should identify critical factors related to quality costs control.

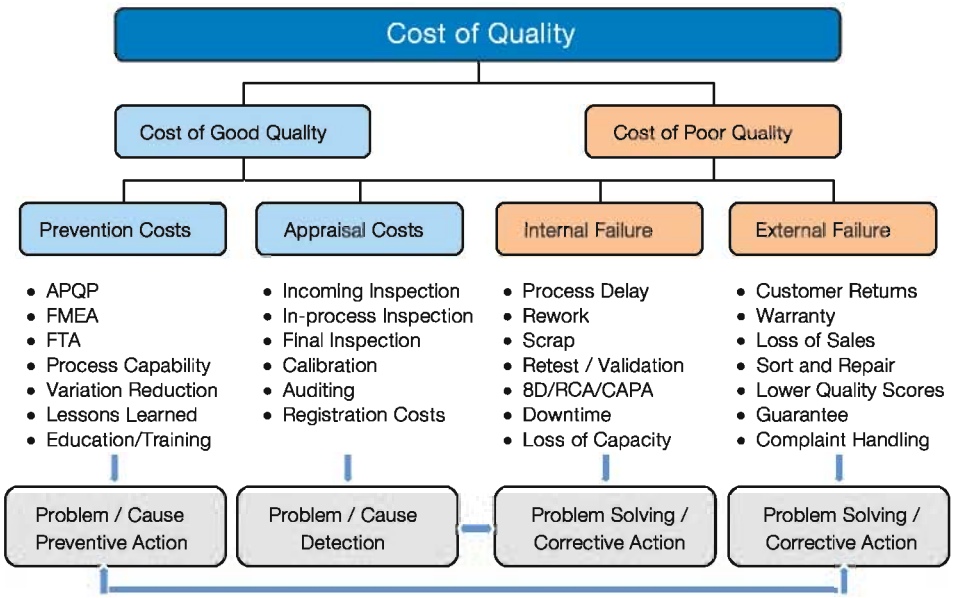
29.7.5 Organization should report cost of quality information across all the four categories as per the format prescribed in appendix or in a different format which may disclose more information with a quality of better understandability of the users.

29.8 Effective Date:

This standard will be effective from December 1, 2019.

Appendix 29A

Graphical presentation of Quality Costs



Appendix 29B

Illustration of a COQ Report

COQ report of ABC Company, a small mid-western manufacturing company with annual sales of around Tk. 9 million in year 2 is given below. The company operates in a highly competitive environment and has been experiencing increasing pressures from new and existing competitors to raise quality and lower cost.

	Year 2 (Tk.)	% of Sales	Year 0 (Tk.)	% of Sales	% Change in Cost
Prevention Costs					
Training	90,000		20,000		350%
Quality planning	86,000		20,000		330
Other quality improvement	60,000		40,000		50
Supplier evaluation	40,000		30,000		33
Total	276,000	3.07%	110,000	1.38%	151
Appraisal Costs					
Testing	120,000		100,000		20
Quality performance measurement	100,000		80,000		25
Supplier monitoring	60,000		10,000		500
Customer surveys	30,000		10,000		200
Total	310,000	3.44%	200,000	2.50%	55
Internal Failure Costs					
Rework and reject	55,000		150,000		(63)
Re-inspection and testing	35,000		30,000		16
Equipment failure	30,000		50,000		(40)
Downtime	20,000		50,000		(60)
Total	140,000	1.56%	280,000	3.50%	(50)
External Failure Costs					
Product liability insurance	70,000		250,000		(72)
Warranty repairs	100,000		1200,000		(17)
Customer losses	600,000		1,400,000		(57)
Total	770,000	8.55%	1,770,000	22.12%	(56)
Total Quality Costs	1,496,000	16.62%	2,360,000	29.50%	(37)
Total Sales	**$9,000,000**	**100.00%**	**$8,000,000**	**100.00%**	

The report shows that the external failure costs for items such as warranty repairs, customer losses and product liability insurance accounted for 75 percent of the total COQ in year 0, (22.12% / 29.5%). That is huge for ABC Company to concern about. The market share can fall down rapidly because of such kind of failure.

To be more competitive and to increase market share, ABC Company began a corporatewide three-year TQM process. The firm started with substantial increases in prevention and appraisal expenditures. The investment started to pay off in year 2. Internal failure, external failure, and total quality costs have all decreased. COQ reports over time can help document these improvements. COQ report of ABC Company's current year's quality costs is compared to those of a base year. Alternative bases for comparisons can be the budgeted amounts, flexible budget costs, or long-range goals.

To better communicate results, the accountant can transform time-series data, such as the data presented in COQ report of ABC Company into one or more histograms. Based on before-and-after histograms, managers are more able to see improvement in overall COQ spending that has occurred over time. The visual representation of the histograms also enables managers to better evaluate trade-offs, such as increased spending in prevention and appraisal with the expectation of reductions in failure costs. This process of feedback and evaluation makes COQ more than just an accounting scheme—it becomes a financial investment justification tool.

BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 30

Service Costing

BCAS 30: Service Costing

30.1 Introduction

Cost accounting provides relevant information to mainly internal management to support them with their typical decision making needs from time to time. It measures and reports various financial and non-financial information relating to the cost of acquiring and consuming resources by an organization. Cost accounting as a main part of management accounting is continuously changing, developing and improving. To produce quality product or provide quality services with optimum prices, managers of business organization are using various cost accounting techniques. Though manufacturing organizations are the primary users of different cost accounting techniques, different types of service selling organizations are also required to apply cost accounting techniques to come up with cost per unit of services they offer to customers. There exists a wide range of business organizations who offer services to customers like canteens, hospitals, boiler house operation, transportation companies, hotels etc. Pattern of services provided by different service selling organizations are different which requires the use of different types of principles and methods for costing their respective services. This is commonly termed as service costing which is also known as operating costing, period costing or terminal costing. It is called period costing because costs are collected here for a particular period, and terminal costing because a bus or truck is chartered for specific trips. It is a cost accumulation and cost allocation system for profit motivated services enterprises. Considering the wide scope of service costing, this standard prescribes a common guideline for practitioners involved with costing services to bring transparency and consistency in applying service costing as a tool for costing.

30.2 Objectives

30.2.1 The main objective of this standard is to prescribe basic principles and methods of service costing in different types of service selling organizations.

30.2.2 This standard provides guidelines to classify costs and report the same in cost statements which will eventually help the organizations in taking relevant decisions.

30.2.3 This standard plans to bring uniformity and consistency in using principles and methods of costing with the ultimate goal of standardization.

30.3 Scope

30.3.1 This standard shall be applied by such organizations involved with offering services to customers. These organizations may be related to –

a) Transport services: airways, railways, vehicle, shipping, cable car, etc;

b) Welfare services: hospital, nursing home, libraries, canteen, hotel;

c) Supply services: gas, electricity, water, telephone, etc; and

d) Municipal services: street lighting, road maintenance, etc.

30.3.2 Organizations use this standard as the concept of service costing is important in evaluating profitability, long term policy on public service pricing, essentials and other related ancillary issues.

30.3.3 This standard is directly concerned with the classification and accumulation of the costs incurred to generate services by the undertakings.

30.3.4 This standard may be used by organizations offering services to outside customers or services generated for internal use.

30.3.5 This standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

30.4 Key Features

The key features of this standard are given below –

a) Identifying direct cost associated with the service;

b) Identifying indirect cost associated with the service;

c) Prescribing the methods of calculation of cost per unit of services provided; and

d) Prescribing templates for reporting service cost data.

30.5 Definitions

Following terms are used in this standard with the meanings specified –

30.5.1 Direct cost: As defined in BCAS 1.5.8.

30.5.2 Indirect cost: As defined in BCAS 4.5.1.

30.5.3 Fixed cost: A fixed cost is a cost that does not change in total with an increase or decrease in the amount of goods or services produced or sold within relevant range of activity.

30.5.4 Cost unit: Cost unit is a form of measurement of volume of production of a product or a service which is generally selected based on convenience and industry practice.

30.5.5 Cost per unit: It is the cost of every cost unit.

30.5.6 Cost pool: As defined in BCAS 3.5.4.

30.5.7 Cost object: As defined in BCAS 3.5.5.

30.5.8 Standing or fixed charge: These are the charges which are fixed in nature and are not affected by the volume. It may be called as period cost also.

30.5.9 Maintenance charges: Maintenances charges are the expenses that are incurred for maintaining the facilities used for producing products or providing services.

30.5.10 Variable or running or operating charges: These are the charges required for keeping the facilities in operation for providing services smoothly.

30.6 Standards

30.6.1 Services provided by a particular organization to customers are treated as uniform, and thus, a cost per unit of service is possible to compute.

30.6.2 Irrespective of nature of services provided by different service selling organizations,

related costs could be conveniently classified into fixed and variable costs. The distinction is important to ascertain the total and unit cost of particular service.

30.6.3 Service undertakings do not produce physical articles for stocking and sale. However, services are sold to consumers.

30.6.4 Service costing is not connected with accounting for inventories other than those miscellaneous supplies required to render services. There is nothing like finished services inventory similar to finished goods inventory.

30.6.5 The cost unit may be simple in certain cases and composite or compound in other cases.

Service Organizations	Simple Cost Unit	Composite Cost Unit
Passenger Transport	Per kilometer	Per Passenger-KM
Goods Transport	Per kilometer	Per Ton-KM
Road Maintenance	Per KM of Road Maintained	
Water Supply	Per Kilo Liter of Water Supplied	
Canteen	Per Meal/Dish	
Electricity		Per Kilowatt-Hour
Steam/Gas		Per KG/Cubit Feet
Hospital		Per Patient - Day
Library		Per Member - Book

30.6.6 Total costs are averaged over the total amount of service rendered to compute cost per unit.

30.6.7 Service costing principles could be applied to organizations selling services to outside customers or within.

30.6.8 Selection of cost unit should be based on convenience and industry practice. Economic feasibility receives the highest attention in such selection.

Transport Services Costing

30.6.9 For costing transport services, organizations may classify costs into fixed, operating and maintenance category for cost accumulation purpose in respective cost sheet.

30.6.10 Cost unit used by organizations involved with transport services may be simple or composite. For internal use, a simple cost unit like rate per hour or rate per kilometer may be used. However, for external purpose (e.g., for charging clients) composite cost units like rate per ton-km (for goods transport) or rate per passenger-km (for passenger transport) should be used.

Canteen Services Costing

30.6.11 The principles of services costing may be extended to costing canteen services. The operating charges relating to a canteen may included the following:

a) Wages and salaries of canteen staff;

b) Provisions for foods materials, such as meat, fish curry, cakes, milk, coffee, etc;

c) Services, such as-gas, steam, electricity, water, etc;

d) Consumable stores, such as-table linen, cutlery crockery, cleaning materials, glassware mops and washing up clothes, dustpans, brushes, etc; and

e) Miscellaneous overhead, such as rent, rates, taxes, insurance, depreciation, advertisement, administration expenses, etc.

30.6.12 The revenue of a canteen includes the subsidy given by enterprise and sales of food items.

30.6.13 Cost unit used by canteen may be cost per employee, cost per meal, change in cost per employee, change in subsidy per employee etc.

Hotel Services Costing

30.6.14 Hotel services costing is adopted by those services-based concerns which are involved with the activities like provision for food and accommodation, recreation facilities, business facilities, shopping facilities, etc.

30.6.15 The expenses are usually classified into fixed and variable categories with reference to each cost centre like laundry, housekeeping, restaurant, etc.

30.6.16 Selection of the cost unit requires a careful consideration of cost-output relationships. Cost unit for measurement of output might be different for each cost centre. The 'number of clothes washed' is the most appropriate cost unit for a laundry, while for a restaurant, the number of meals provided is the most appropriate cost unit. To fix tariff for accommodation or to fix a comprehensive tariff, cost unit may be cost per 'bed-night occupied'.

30.6.17 Depending on the nature of services provided by the hotel, cost data should be presented in cost statement. The aim is to satisfy the information needs of the managers who are responsible for cost management in their respective areas.

Hospital Services Costing

30.6.18 For costing purpose, hospital services should be feasibly divided into respective cost centres like out patients department, wards, pathology centre, operation theatre, kitchen, laundry, cleaning. And costs are to be accumulated with reference to each cost centre to support critical decision making needs of hospital management.

30.6.19 The operating cost for hospital services is to be classified into fixed and variable categories. Costs that can be identified with specific cost centres are assigned to them directly. Common costs are apportioned to various cost centres on some equitable basis.

30.6.20 Cost unit to be used in hospital services depends on the types of services provided by the hospitals, cost centres with reference to which cost data is accumulated and pattern of decision made by the hospital. Due to the varied nature of services provided by hospital, it is often difficult to prescribe an appropriate cost unit for hospital services. Some of the cost units are suggested below with reference to particular cost centre:

Cost Centre	Cost Unit
Operation theatre	Cost per standard operation [each operation, minor or major, should be converted into the number of standard operations]
Pathology centre	Cost per standard test [each test, minor or major, should be converted into the number of standard tests]
Kitchen	Number of inpatient days
Laundry	Number of inpatient days
Out patients department	Number of outpatient visit
Wards	Number of patient-days available or patient-days occupied
Cleaning	Spaces cleaned

Power House and Electric Supply Services

30.6.21 Powerhouse is involved in generating power from water, steam, sunlight and gas and supplies to different organization or units. Generally the cost incurred in power house services can be divided into fixed and variable categories.

30.6.22 A powerhouse needs to prepare a statement of cost to ascertain per unit cost of energy to be supplied. The 'Board of Trade Units' may be used as a cost unit for electricity generation.

Boiler House Services

30.6.23 A boiler house is established to produce steam which is used in electric power generation, air conditioning and air compression. Cost of a boiler house needs to be disclosed with reference to steam production cost and electric generation cost.

30.6.24 Steam production cost may include cost elements like cost of fuel, labour cost, cost of water, indirect materials etc. Electric generation cost includes indirect labour, maintenance costs, and other fixed overheads.

30.6.25 Cost unit to be used in case of boiler house service is cost per unit of steam generated.

30.7 Recording and Reporting

30.7.1 Recording cost data for different types of services should be done in such a way which may serve the decision making needs of internal management. Specimen formats of 'cost of production report' for each category of services are given in appendix which are suggestive:

a) Appendix A: Cost Statement for Transport Company;

b) Appendix B: Cost Statement for Canteen Services;

c) Appendix C: Cost Statement for Hotel Services;

d) Appendix D: Cost Statement for Hospital Services;

e) Appendix E: Cost Statement for Power House and Electricity Supply Services; and

f) Appendix F: Cost Statement for Boiler House Services.

30.7.2 Cost units used in measuring the performance of respective services should be disclosed.

30.7.3 Pattern of disclosure of information in cost statement should be followed consistently. Any change in disclosure should be mentioned in the note.

30.8 Effective Date

This standard will be effective from December 1, 2019.

Appendix 30A

Cost Statement for Transport Company

X Transport Company

Cost Statement

For the month ended ----------

Particulars	Total Cost (Tk.)	Cost Per Unit (Tk.)
a) Operating and Running Costs		
Petrol		
Oil		
Depreciation		
Grease and lubricants		
Wages of conductor, attendant etc.		
b) Repair and Maintenance		
Repairs		
Overhaul		
Tires, Tube and Battery		
Spares		
c) Fixed/Standing Charge		
Salary of operating manager, supervisor etc.		
Insurance		
Motor vehicle's tax, license		
Garage rent		
General supervision		
Interest on loan		
Road tax		
d) Total Cost (a + b + c)		
e) Kilometres run		
f) Cost per KM		

Appendix 30B

Cost Statement for Canteen Services

X Canteen
Cost Statement
For the month ended ----------

Particulars	Total Cost (Tk.)		Cost Per Meal (Tk.)		Remarks
	Budgeted	Actual	Budgeted	Actual	
Expenses:					
i. Wages and Salaries					
Canteen Manager					
Supervisor					
Cooks					
Counter Persons					
Helpers, etc.					
ii. Provisions					
Meat					
Fish					
Eggs					
Vegetables					
Fruits					
Edible Oil					
Spices					
Tea					
Milk					
Bread and Cakes					
Biscuits					
Soft Drinks, etc.					
iii. Consumable Stores					
Table linen					
Cutlery					
Crockery					
Washing up clothes, etc.					
Drying up clothes					
Cleaning materials					
Brushes, etc.					
iv. Services					
Steam					
Gas					
Electricity					
Power and Light					

Particulars	Total Cost (Tk.)		Cost Per Meal (Tk.)		Remarks
	Budgeted	Actual	Budgeted	Actual	
v. Miscellaneous					
Rent and Rates					
Depreciation					
Insurance					
Maintenance					
Total Expenses [A]					
Receipts from:					
Company as subsidy [B]					
Canteen sales					
Total Receipts [C]					
Profit and Loss [D=C-A]					
No. of Employees Served [E]					
Cost per Employee [F= B ÷ E]					

Appendix 30C

Cost Statement for Hotel Services

X Hotel
Cost Statement
For the month ended ----------

Particulars	Amount (Tk.)
Fixed Expenses:	
Staff Salaries	
Linen etc.	
Repairs	
Sundries	
Interior Decoration	
Depreciation on Building	
Depreciation on Equipment's	
Interest on Capital	
Variable Expenses:	
Room Attendants' Salary	
Lighting	
Heating and Power	
Total Operating Costs	
Add: Profit	
Total Revenue	
Room Rent per room-day	

Note: In order to calculate per unit operating cost, total operating cost is to be divided by number of room days. Total room days = No. of rooms × days in a month × % occupied

Appendix 30D

Cost Statement for Hospital Services

X Hospital
Cost Statement
For the month ended ----------

Particulars	Amount (Tk.)
Fixed Charges:	
a) Salaries -	
Supervisor	
Nurses	
Ward boys	
b) Rent	
c) Repairs and Maintenance	
d) General administrative charges	
e) Cost of oxygen, x-ray etc.	
Total Fixed Charges [A]	
Variable Charges:	
a) Foods supplied	
b) Janitor and other services	
c) Laundry services	
d) Medicine supplied	
e) Doctors' fees	
f) Hire charges for extra beds	
Total Variable Charges [B]	
Total Operating Charges [C=A+B]	
Number of patient days	
Cost per patient day	
Profit per patient day	
Rent per patient day	

Appendix 30E

Cost Statement for Power House and Electricity Supply Services

X Power House and Electricity Supply Company
Cost Statement
For the month ended ----------

Particulars	Amount (Tk.)
Variable Charges:	
Cost of Steam Used	
Coal	
Lubricants and Suppliers	
Wages of operators, operating labor	
Fixed Charges:	
Depreciation	
Interest	
Administrative overhead	
Repair and maintenance	
Total Operating Costs	
Board of Trade Unit (BTU)	

Appendix 30F

Cost Statement for Boiler House Services

X Boiler House
Cost Statement
For the month ended ----------

Steam produced in 1,000 lbs		**
Less: Boiler-house use	**	
Less: Main Loss	**	(**)
Total Consumption		**

Particulars	Total Cost (Tk.)		Cost per 1,000 lbs (Tk.)		Remarks
	Current Period	Previous Period	Current Period	Previous Period	
a) Steam Production Cost					
Fuel:					
Coal, coke, oil, electric power					
Labor:					
Coal handlers, stoker, ash removal charges					
Water:					
Purchase softening, boiler cleaning					
Indirect Materials:					
Small tools, services materials					
Less: credit or account of					
Sale of assets					
Steam supplied in manufacturing concern					
Steam used in heating					
Cost of steam production					
b) Electric Generation Cost					
Indirect Labor:					
Supervisors, sweepers, cleaners					
Maintenance:					
Plant, boiler, meters, coal bunkers, finance					
Fixed Overheads:					
Rent, rates, taxes, insurance					
Depreciation on fixed assets					
Interest on capital					
Administrative expenses					
Salaries and wages to staffs					
Cost of electricity generation					
Total cost (a + b)					
Cost per unit					

Appendix 30G

Steps in Applying in Service Costing Analysis

Service Costing has been practiced in various organizations offering services to customers like airways, railways, vehicle, shipping, cable car, hospital, nursing home, libraries, canteen, hotel, gas supply, electricity supply, water supply, telephone, electricity authority, street lighting, road maintenance etc. Even it is also used for strategic pricing. Whatever may be the pattern of services an organization provides, the cost practitioners should follow the following basic steps in service costing analysis:

1) Define activities;
2) Describe the required elements;
3) Develop a Cost Breakdown Structure (CBS);
4) Estimate the costs for each required activity;
5) Identify relevant cost unit;
6) Select a computer-based model to facilitate the analysis process;
7) Develop a "Baseline" service profile;
8) Develop a cost summary and Identify fixed and variable portion;
9) Conduct a Sensitivity Analysis for semi variable and other incremental activity;
10) Identify and evaluate feasible alternatives; and
11) Select a preferred design approach.

Appendix 30H

Example of Using Service Costing in Transport Services

The Union Transport Company has been given a twenty kilometer long route to ply a bus. The bus costs the company Tk. 100,000. It has been insured at 3% per annum. The annual road tax amounts to Tk. 2,000. Garage rent is Tk. 400 per month. Annual repair is estimated to cost Tk. 2,360 and the bus is likely to last for 5 years. The salaries of the driver and the conductor are Tk. 600 and Tk. 200 per month respectively in addition to 10% of the takings as commission to be shared equally by them. The manager's salary is Tk. 1,400 per month and stationary will cost Tk. 100 per month. Petrol and oil will cost Tk. 50 per 100 kilometers. The bus will make three round trips per day carrying on average 40 passengers in each trip. Assuming 15% profit on takings and that the bus will ply on an average 25 days in a month, prepare operating cost statement on a full year basis and also calculate the bus fare to be charged from each passenger per kilometer.

Union Transport Company
Cost Statement
For the year ended on ----------

Particulars	Total Cost (Tk.)
a) Operating and Running Costs	
Petrol and oil [(36,000 km × 50) ÷ 100]	18,000
b) Repair and Maintenance	
Repairs	2,360
c) Fixed/Standing Charge	
Manager's Salary [Tk. 1,400 × 12]	16,800
Driver's Salary [Tk. 600 × 12]	7,200
Conductor's Salary [Tk. 200 × 12]	2,400
Road Tax	2,000
Insurance (3% of Tk. 100,000)	3,000
Garage Rent [Tk. 400 × 12]	4,800
Stationary [Tk. 100 × 12]	1,200
Depreciation [Tk. 100,000 ÷ 5 years]	20,000
Total fixed/standing charge	57,400
d) Total Cost (a + b + c)	77,760
Add: 10% of takings for commission of driver and conductor	
15% profit – desired on takings	
25% on total takings [(77,760 × 25) ÷ 75]	25,920
Total Revenue[(77,760 × 100) ÷ 75]	103,680
e) Kilometres run (in KM)	36,000
f) Cost per kilometre	2.88



BANGLADESH COST ACCOUNTING STANDARDS

BCAS - 31

Construction Contract Costing

BCAS 31: Construction Contract Costing

31.1 Introduction

This standard contains requirements relating to the recognition and measurement of construction contracts in terms of revenue, expenses and profit/loss by the entity that performs the construction work. A construction contract/agreement may be negotiated for the construction of a single asset such as a bridge, building, dam, pipeline, road, flyover/underpass, ship or tunnel. It may also deal with the construction of a number of assets which are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use such as the construction of refineries, sea port and other complex pieces of plant or equipment. Bangladesh, very recently, has passed through significant development initiatives and thus, the contribution of the construction sector in total GDP of the country is significant. In absence of any standard, the practitioners face lot of difficulties in recognizing construction contract related issues in their books. This standard is prepared to bring harmony in practices for this sector and establish consistency in recognition, measurement and reporting across the periods.

31.2 Objectives

31.2.1 The prime objective of this standard is to prescribe the reorganization criteria of revenue and costs associated with construction contracts. Because of the long-term nature of the activities undertaken in construction contracts, the date at which the contract activity is entered into and the date when the activity is completed usually fall into different accounting periods. Therefore, this standard resolves the primary challenge in accounting for construction contracts which is the allocation of contract revenue and costs to different reporting periods in which construction work is performed.

31.2.2 This standard also prescribes the criteria for practitioners to choose between the percentage-of-completion method and completed-contract method for recognizing construction revenue and costs in relevant situations.

31.2.3 This standard also addresses other pertinent areas relating to construction contracts like recognition of losses, reporting issues along with other administrative and control issues.

31.3 Scope

31.3.1 This standard shall be applied in -

a) Accounting for construction contracts in the financial statements of contractors;

b) Verification of fixed asset register and periodic updating;

c) Purchase of materials and equipment in terms of -

   i) Invitation of quotations.

   ii) Evaluation of quotations.

   iii) Selection of vendors.

   iv) Receipt of goods & issue procedures.

d) Payment process including handling, safe custody of cash & check in terms of -

   i) Physical verification of cash.

ii) Safe custody of cash & blank check.
iii) Verification of vouchers & their approvals.
iv) Review of Advances.
v) Review of bank reconciliation statements.

e) Evaluation of procedures adopted for awarding contracts -
i) Invitation of Tenders.
ii) Evaluation of Tenders received.
iii) Selection of the contractor/ sub contractors.

f) Reporting on compliance of provisions of Companies Act in respect of -
i) Authorized, Subscribed & Paid-up capital.
ii) Unsecured loans.
iii) Loans & advances.
iv) Board meetings & resolutions.
v) Joint Committee in case of JV/ International JV Co.
vi) Bank transfer of FC in International JV Co. (JV Commission/Dividend).
vii) Filing returns as per legal provisions.

g) Scrutiny of statutory compliances like TDS, advance tax, service tax, VAT, works contract tax, etc.

h) Scrutiny of internal control procedures at project site in respect of -
i) Record maintenance for receipt & issue of materials.
ii) Storing arrangements for unutilized inventory.
iii) Proper utilization & safeguarding of assets.
iv) Certification of project work in progress/completion of work completed.
v) Accounting procedures & reporting to head office.
vi) Proper accounting payments including classification.
h) Verification of interest during construction, accounting of loan transactions and maintaining reasonableness of internal financial controls.

31.3.2 This standard is to be followed by all public limited companies where cost audit is made mandatory through Government's gazette notification from time to time.

31.4 Key Features

The key features of this standard are given below –

a) Identifying contract revenues and costs;
b) Identifying losses;
c) Allocating contract revenue and expenses over the periods;
d) Recognizing contract revenue and costs reliably; and
e) Reporting relevant information.

31.5 Definitions

Following terms are used in this standard with the meanings specified –

31.5.1 Construction Contract: A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

31.5.2 Fixed Price Contract: A fixed price contract is a construction contract in which the contractor agrees to a fixed contract price, or a fixed rate per unit of output, which in some cases is subject to cost escalation clauses.

31.5.3 Cost Plus Contract: A cost plus contract is a construction contract in which the contractor is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed fee.

31.5.4 Contract revenue: Contract revenue is measured at the fair value of the consideration received or receivable. The measurement of contract revenue is affected by a variety of uncertainties that depend on the outcome of future events. The estimates often need to be revised as events occur and uncertainties are resolved. Therefore, the amount of contract revenue may increase or decrease from one period to the next. For example:

a. Contractor and customer may agree variations or claims that increase or decrease contract revenue in a period subsequent to that in which the contract was initially agreed;

b. The amount of revenue agreed in a fixed price contract may increase as a result of cost escalation clauses;

c. The amount of contract revenue may decrease as a result of penalties arising from delays caused by the contractor in the completion of the contract; or

d. When a fixed price contract involves a fixed price per unit of output, contract revenue increases as the number of units is increased and vice versa.

31.5.5 Contract: The Contract means the contract agreement, the letter of acceptance, the letter of tender, these conditions, and specification, the drawings, the schedules and further documents which are listed in the contract agreement or in the letter of acceptance.

31.5.6 Letter of Acceptance: The Letter of Acceptance means the letter of formal acceptance, signed by the employer of the letter of tender including any annexed memoranda comprising agreement between and signed by both parties.

31.5.7 Letter of Tender: The Letter of Tender means the documents entitled letter of tender or letter of bid, which was completed by the contractor and includes the signed offer to the employer for the works.

31.5.8 Specification: Specification means the document entitled specification as included in the contract and any additions and modifications to the specification in accordance with the contract. Such document specifies the work.

31.5.9 Drawing: Drawing means the drawings of the works as included in the contract and any additional and modification of drawings issued by the employer in accordance with the contract.

31.5.10 Schedule: Schedule means the documents entitled schedule completed by the

contractor and submitted with the letter of tender as included in the contract. Such document may include the Bill of Quantities, data, list and schedule of price / rates.

31.5.11 Tender/Bid: Tender/Bid means the letter of tender and all other documents which the contractor submitted with the letter of tender.

31.5.12 Party: Party means the employer or the contractor as the context requires.

31.5.13 Employer: Employer means the person named as employer in the contract data and legal successors in title of this person.

31.5.14 Contractor: Contractor means the person(s) named as contractor in the letter of tender accepted by the employer and the legal successors in titles of this person.

31.5.15 Engineer: Engineer means the person appointed by the employer to act as engineer for the purpose of contract and named in the contract data.

31.5.16 Contractor's Representative: Contractor's Representative means the person named by the contractor in the contract or appointed from time to time by the contractor under the clause "Contractors Representative".

31.5.17 Sub-Contractor: Sub-Contractor means any person named in the contract as a subcontractor.

31.5.18 Dispute Board: Dispute Board means the person or persons appointed in the dispute board.

31.5.19 Base Date: Base Date means the 28 days prior to the latest date of submission of tender/bid.

31.5.20 Commencement Date: Commencement date means the date notified for the commencement of work.

31.5.21 Time of Completion: Time of completion means the time for completing the work as stated in the contract data.

31.5.22 Test of Completion: Test of completion means the tests which are specified in the contract or agreed by both parties.

31.5.23 Defects Notification Period: Defects Notification Period means the period for notifying defects in the works under clause of completion of outstanding work & remedying defects.

31.5.24 Contract Price: Contract Price means the price defined in the contract price clause and includes adjustment in accordance with the contract.

31.5.25 Cost: As defined in BCAS 1.5.1.

31.5.26 Interim Payment Certificate: Interim Payment Certificate means a payment issued under clause contract price & payment other than the Final Payment Certificate.

31.5.27 Final Payment Certificate: Final Payment Certificate means a payment issued under clause Application for Final Payment Certificate.

31.5.28 Retention Money: Retention Money means the accumulated retention money which employer retains under clause of the contract.

31.5.29 Statement: Statement means a statement submitted by the contractor as part of an application under clause of Contract Price & Payments.

31.5.30 Contractor Equipment: Contractor Equipment means all apparatus, machinery, vehicles and other things required for execution and completion of the work and the remedying of any defects.

31.5.31 Materials: Materials means things of all kinds (other than plant) intended to form or forming part of the permanent works, including the supply-only materials to be supplied by the contractor under the contract.

31.5.32 Permanent Works: Permanent Works mean the permanent work to be executed by the contractor under the contract.

31.5.33 Temporary Works: Temporary Works mean temporary works of every kind required on site for the execution and completion of the permanent works and remedying of any defects.

31.5.34 Plant: Plant means the apparatus, machinery, and other equipment intended to forming part of the permanent works, including vehicle purchased for the employer & relating to the construction or operation of the works.

31.5.35 Section: Section means the part of the works specified in the contract data as a section.

31.5.36 Contractor's Document: Contractor's Document means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature supplied by the contractor under the contract.

31.6 Standards

Contract costs

31.6.1 Contract costs shall comprise costs that relate directly to the specific contract, costs that are attributable to contract activity in general and can be allocated to the contract and such other costs as are specifically chargeable to the customer under the terms of the contract.

31.6.2 Costs that relate directly to a specific contract include:

(a) Site labor costs, including site supervision;

(b) Supply of materials and goods and cost in connection therewith including wastage, delivery to and storage on site and haul to any part of the site used in construction;

(c) Depreciation of plant and equipment used on the contract;

(d) Rental cost of plant/equipment/heavy equipment used on the contract;

(e) Costs of moving plant, equipment and materials to and from the contract site;

(f) Costs of design and technical assistance that is directly related to the contract;

(g) Estimated costs of rectification, remedying of defects and guarantee work;

(h) Fixing, erecting and installing or placing of materials including goods in position;

(i) Temporary work unless explicitly mentioned elsewhere;

(j) General obligations, liabilities and risk involved in the execution of work;

(k) Comply with quality assurance requirement;

(l) Establishment charge, supervision & overhead;

(m) Taxes, duties & VAT;

(n) Supply of written warranties where applicable; and

(o) Claims from third parties. These costs may be reduced by any incidental income that is not included in contract revenue.

31.6.3 Costs that may be attributable to contract activity in general and can be allocated to specific contracts include:

(a) Insurance;

(b) Costs of design and technical assistance that are not directly related to a specific contract; and

(c) Construction overheads which would be allocated using methods that are systematic and rational and are applied consistently to all costs having similar characteristics. The allocation is based on the normal level of construction activity. Construction overheads include costs such as the preparation and processing of construction personnel payroll, all other facilities of the manpower as per payroll including overtime and other facilities.

31.6.4 Costs that are specifically chargeable to the customer under the terms of the contract may include some general administration costs and development costs for which reimbursement is specified in the terms of the contract.

31.6.5 The details of contract costs should be recorded in 'Bills of Quantity' with as much detail as possible where provisions should be kept for mobilization advance, retention money and reimbursement issues.

31.6.6 A claim for mobilization advance or materials procurement is an amount that the contractor seeks to collect from the customer or authority against Advance Payment Guarantee (APG). Mobilization advance is required for preparation of contractor's site office, laboratory for contractor and consultant, mobilization of heavy equipments and machineries at project site, set up heavy workshop at site etc. It should be adjusted from each bill of the contractor by the employer or customer. These mobilization advance or materials advance should be treated as current liability in contractor's book.

31.6.7 Retention money should be deducted from contractor's bill at the rate mentioned in contract. This retention money should get back to the contractor after completion of maintenance period as mentioned in tender documents / contracts. Retention money should be treated as current asset in contractor's book.

31.6.8 Claims lodged by the contractor as reimbursement of costs should not be included in the contract price. These claims may arise from customer caused delays, errors in specifications or design and disputed variations in contract work. The measurement of the amounts of revenue arising from claims is subject to a high level of uncertainty and often depends on the outcome of negotiations. Therefore, claims are included in contract revenue only when negotiations have reached an advanced stage such that it is probable that the customer will approve the claims and the amount of revenue arising from the claims can be measured reliably.

31.6.9 Costs that cannot be attributed to contract activity or cannot be allocated to a contract are excluded from the costs of a construction contract. Such costs include:

(a) General administration costs for which reimbursement is not specified in the

contract;

(b) Selling costs;

(c) Research and development costs for which reimbursement is not specified in the contract; and

(d) Depreciation of idle plant and equipment that is not used on a particular contract.

Recognition of Contract Revenue and Expenses

31.6.10 An entity is generally able to make reliable estimates after it has agreed to a contract which establishes:

(a) Each party's enforceable rights regarding the asset to be constructed;

(b) The consideration to be exchanged; and

(c) The manner and terms of settlement.

31.6.11 When the outcome of a construction contract can be estimated reliably, contract revenue and contract costs associated with the construction contract shall be recognized as revenue and expenses respectively with reference to the stage of completion of the contract activity at the end of the reporting period. An expected loss on the construction contract shall also be recognized as an expense immediately.

31.6.12 The outcome of a construction contract can only be estimated reliably when it is probable that the economic benefits associated with the contract will flow to the entity. However, when an uncertainty arises about the collectability of an amount already included in contract revenue, and already recognized in Profit and Loss Account, the uncollectible amount or the amount in respect of which recovery has ceased to be probable is recognized as an expense rather than as an adjustment of the amount of contract revenue.

31.6.13 When the outcome of a construction contract cannot be estimated reliably:

(a) Revenue shall be recognized only to the extent of contract costs incurred that it is probable will be recoverable;

(b) Contract costs shall be recognized as an expense in the period in which they are incurred; and

(c) An expected loss on the construction contract shall be recognized as an expense immediately.

31.6.14 During the early stages of a contract it is often the case that the outcome of the contract cannot be estimated reliably. Nevertheless, it may be probable that the entity will recover the contract costs incurred. Therefore, contract revenue is recognized only to the extent of costs incurred that are expected to be recoverable. As the outcome of the contract cannot be estimated reliably, no profit is recognized. However, even though the outcome of the contract cannot be estimated reliably, it may be probable that total contract costs will exceed total contract revenues. In such cases, any expected excess of total contract costs over total contract revenue for the contract is recognized as an expense.

31.6.15 In the case of a fixed price contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

(a) Total contract revenue can be measured reliably;

(b) Both the contract costs to complete the contract and the stage of contract

completion at the end of the reporting period can be measured reliably; and

(c) The contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

31.6.16 In the case of a cost plus contract, the outcome of a construction contract can be estimated reliably when both the following conditions are satisfied:

(a) It is probable that the economic benefits associated with the contract will flow to the entity; and

(b) The contract costs attributable to the contract, whether or not specifically reimbursable, can be clearly identified and measured reliably.

31.6.17 The recognition of revenue and expenses with reference to the stage of completion of a contract is often referred to as the percentage of completion method. Under this method, contract revenue is matched with the contract costs incurred in reaching the stage of completion, resulting in the reporting of revenue, expenses and profit which can be attributed to the proportion of work completed. This method provides useful information on the extent of contract activity and performance during a period.

31.6.18 Under the percentage of completion method, contract revenue is recognized as revenue in Profit and Loss Account in the accounting periods in which the work is performed. Contract costs are usually recognized as an expense in Profit and Loss Account in the accounting periods in which the work is performed.

31.6.19 The stage of completion of a contract may be determined in a variety of ways. The entity uses the method that measures reliably the work performed. Depending on the nature of the contract, the methods may include:

(a) The proportion that contract costs incurred for work performed to date bear to the estimated total contract costs;

(b) Surveys of work performed; or

(c) Completion of a physical proportion of the contract work. Progress payments and advances received from customers often do not reflect the work performed.

31.6.20 When the stage of completion is determined with reference to the contract costs incurred to date, only those contract costs that reflect work performed are included in costs incurred to date. Examples of contract costs which are excluded are:

(a) Contract costs that relate to future activity on the contract, such as costs of materials that have been delivered to a contract site or set aside for use in a contract but not yet installed, used or applied during contract performance, unless the materials have been made especially for the contract; and

(b) Payments made to subcontractors in advance of work performed under the subcontract.

31.6.21 A contractor may have incurred contract costs that relate to future activity on the contract. Such contract costs are recognized as an asset provided it is probable that they will be recovered. Such costs represent an amount due from the customer and are often classified as contract work in progress.

31.6.22 The item descriptions identify the work covered by the respective items, but the exact nature and extend for the work to be performed is to be ascertained with reference to

the drawing, specification and condition of contract. The quantities set out against the various items are approximates only and are not to be taken as warranty of the amount of work. The actual quantity of work carried in accordance with the contract will be measured by the consultant/engineer described in contract. All quantity to be measured for payment shall be the net quantity of the finished works executed in accordance with the contract.

31.6.23 It is also usually necessary for the entity to have an effective internal financial budgeting and reporting system. The entity reviews and, when necessary, revises the estimates of contract revenue and contract costs as the contract progresses. The need for such revisions does not necessarily indicate that the outcome of the contract cannot be estimated reliably.

31.6.24 Contract costs that are not probable of being recovered are recognized as an expense immediately. Examples of circumstances in which the recoverability of contract costs incurred may not be probable and in which contract costs may need to be recognized as an expense immediately include contracts:

(a) That are not fully enforceable, i.e. their validity is seriously in question;

(b) The completion of which is subject to the outcome of pending litigation or legislation;

(c) Relating to properties those are likely to be condemned or expropriated;

(d) Where the customer is unable to meet its obligations; or

(e) Where the contractor is unable to complete the contract or otherwise meet its obligations under the contract.

31.6.25 When the uncertainties that prevented the outcome of the contract being estimated reliably no longer exist, revenue and expenses associated with the construction contract shall be recognized.

Recognition of Expected Losses

31.6.26 When it is probable that total contract costs will exceed total contract revenue, the expected loss shall be recognized as an expense immediately.

31.6.27 The amount of such a loss is determined irrespective of:

(a) Whether work has commenced on the contract;

(b) The stage of completion of contract activity; or

(c) The amount of profits expected to arise on other contracts which are not treated as a single construction contract.

Changes in Estimates

31.6.28 The percentage of completion method is applied on a cumulative basis in each accounting period to the current estimates of contract revenue and contract costs. Therefore, the effect of a change in the estimate of contract revenue or contract costs, or the effect of a change in the estimate of the outcome of a contract, is accounted for as a change in accounting estimate. The changed estimates are used in the determination of the amount of revenue and expenses recognized in profit or loss in the period in which the change is made and in subsequent periods.

Non-Commercial Contracts

31.6.29 The requirements of construction contracts should also be applied to non-commercial construction contracts carried out by construction contractors from non-profit entities. Similar arrangements binding on the parties to the arrangement which do not take the form of a documented contract also remain for non-commercial contracts.

31.6.30 A non-commercial contract or similar arrangement may be a 'fixed price contract' or a 'cost plus contract' (in a non-commercial context may also be referred to as a 'cost based contract'). Contracts and arrangements classified as fixed price contracts may involve the funding of construction activity through indirect means such as through a general appropriation or other allocation of government funds or by general purpose grants or foreign NGO fund. In contrast, contracts and arrangements classified as cost plus (or cost based) contracts may involve full or partial reimbursement of the costs incurred for the construction of the asset from the recipient of the constructed asset and/or from other parties.

31.7 Recording and Reporting

31.7.1 Contract costs data should be reported in detail in Bill of Quantity report.

31.7.2 Recognition and measurement criteria for below items should be disclosed separately-

a) Contract revenue;

b) Contract expenses;

c) Contract losses.

31.7.3 Recognition and measurement criteria should be followed consistently. In case of changes, it should be disclosed with justifications.

31.7.4 Any asset or liability created due to construction contract should be reported with particular mention.

31.7.5 Any significant risk factor which may result contingent liability should be disclosed in the notes to the accounts.

31.7.6 For every completed contract, a performance report should be produced including data like contract revenue, contract costs, other provisions, profit or loss etc. Such report prepared for non-commercial contracts may not include profit/loss data.

31.8 Effective Date

This standard will be effective from December 1, 2019.

Appendix 31A

Nature of Construction Industry

Construction industry is much wider ranging from a simple real estate development to special purpose built state of the art facility design and development. The whole industry may be categorized into three groups as real estate and property development, construction involving civil and heavy engineering and construction of projects involving specialty trades. Different types of project carried out under these three groups may be –

Groups	Types of Projects
1. Real Estate and Property Development	✓ Commercial real estate ✓ Housing, schools, hospitals, Land and Township Infrastructure Development etc.
2. Construction involving Civil and Heavy Engineering	✓ Industrial and mining infrastructure ✓ Highways, roads, ports, railways, airports etc. ✓ Rapid Mass Transport System ✓ Bridge, Culvert, Flyover, Underpass, Tunnel ✓ Water Supply System ✓ Bulk Material Handling System ✓ River protection ✓ River Linking Projects ✓ Sewerage System ✓ Solid Waste Management ✓ Power systems ✓ Irrigation and agriculture system ✓ Telecommunication system
3. Construction projects involving specialty trades	✓ Refineries, Chemical plants, Fertilizer plants including complex and heavy process plant equipment ✓ Oil and Gas projects including fabrication of Process Platforms, construction of sub-sea and other pipelines ✓ Floating systems ✓ Power projects ✓ Nuclear Power Plant Construction ✓ Transmission and distribution lines ✓ Electrical construction

Every individual assignment is considered as separate contract or project having following features:

a) Project needs to be executed by a contractor, sub-contractors or a developer;

b) Project involves stages like design, detailed engineering, procurement, manufacturing /fabrication, installation, commissioning, etc;

c) The contracts / projects are finalized normally through a bidding process and the projects are executed as per client's requirements at client's site;

d) The client normally makes payment based on the progress of work as per the terms of contract;

e) Contracts also normally stipulate work/quality certification by a client nominated third party consultant;

f) Contracts also lay down performance guarantee conditions, warranty / defect liability period, liquidated damages for schedule delay, price variation clause if any, client's obligations during construction period, method to be followed for any change in scope of work, claim management, force-majeure clause, arbitration, etc; and

g) The duration of a project may vary from project to project for different industries. Normally the projects are of long duration (more than 12 months).

Appendix 31B

Transparency and Accountability in Procurement and Order System

Process starts through tender or purchase without tender or private work offer. Through tender it may be funded by 100% GOB or Foreign aided + GOB participation. After qualifying the technical and financial proposal (2 Envelop System) the lowest bidder gets awarded by "letter of acceptance". Then lowest bidder submits Performance Guarantee & Advance Payment Guarantee to the authority (if there is provision for materials/mobilization advance). Then authority invites for signing of agreement/contract for work with contract document. This procedure may not be followed by private work offered. But in case of private work, both the parties make a mutual understanding and finally go through an agreement/contract. Agreement/contract will prevail over all other contract documents.

a) The Letter of Acceptance;

b) The Letter of Technical Bid;

c) The Letter of Price Bid;

d) Minutes of the pre-bid meeting;

e) The Particular Conditions;

f) The General Conditions;

g) The specifications - Technical Specifications (Particular);

h) The Standard specifications- Technical Specifications (General);

i) The Drawings;

j) The Priced Bill of Quantities; and

k) The schedules and any other documents from the tender forming part of contract.

In connection with the invitation for bids specified in Bid Data Sheets (BDS), the employer issues the bidding documents for the procurement of works as specified in contract. Documents for the procurement of works as specified in work requirements, name, identification and number of the lot of contract are specified in BDS. The sources of fund are also specified in BDS with the number & amount.

In consideration of the payments to be made by the employer to the contractor as indicated in the contract/agreement, the contractor covenants with the employer to execute the works and to remedy defects therein in conformity with all respects with the provisions of the contract.

Besides that the employer covenants to pay the contractor in consideration of the execution and completion of the works and the remedying of defects. The contract price or such other sum as may become payable under the provisions of the contract/agreement at the times and in the manner prescribed by the contract. After getting "Notice of Comments" from authority then work should be started.

Model Projects under PPP arrangement: Projects like development, financing, constructing, maintenance and operation are implemented for the project term by a Private / Public Sector Company to be selected by the Government or a statutory entity. The PPP Projects are usually awarded in sectors like roads and bridges, railways, seaports, airports, inland waterways, hotels, power generation & transmission, urban transport, water supply, sewerage, river protection and guidance, solid waste management and other physical infrastructure in urban areas, infrastructure projects in special economic zones, etc.

PPP Projects normally operate on the following basis:

- BOO - Build Own Operate.
- BOLT - Build Own Lease Transfer.
- BOOST - Build Own Operate Share Transfer.
- BOT- Build, Operate and Transfer.
- BOOT- Build, Own, Operate and Transfer.
- BOLT - Build Own Lease Transfer.
- BLOT- Build, Lease, Operate and Transfer.
- DBFO - Design Build Finance Operate.
- DBFOT- Design, Build, Finance, Operate and Transfer.
- EPC- Engineering Procurement and Construction.
- OMT - Operate Maintain Transfer.

Appendix 31C

BOQ in Tender/Bid Documents

BOQ is an important document relating to particular construction contract which gives the details of cost breakdown structure for the selected project. This specimen is given as an example. The grand summary statement gives the summary report on total bill.

Bill of Quantity
Grand Summary
Road and Selected Bridge End Facilities

Bill #	Description	Amount (BDT)
	Final Collection of Bill	
1	Preliminary & General	380,534,613.00
2	Road Works	4,323,924,367.00
3	Box Culvert & Underpass	540,484,530.00
4	Bridge	3,155,486,150.00
5	Service Area	433,767,982.00
6	Toll Plaza	292,899,728.00
	Sub Total of Bills	9,127,097,370.00
7	Day works	17,891,178.00
Sub-Total of Bills plus Day works and Provisional Sum (B)		9,144,988,548.00
Provisional Sum for Physical Contingency (C)-5% of (C)		457,249,427.40
Provisional Sum for Price Contingency (D)-15% of (D)		1,371,748,282.20
Bid Price (=B + C + D)		10,973,986,257.60
Total Bangladesh Taka Ten Thousand Nine Hundred Seventy Three Million Nine Hundred Eighty Six Thousand Two Hundred Fifty Seven and Paisa Sixty Only		

This summary data needs to be elaborated will reference to each line item as shown below for first two items:

BOQ #	Item of Work	Unit	Qty	Rate	Price Escalation
1.0	Preliminary & General				
1.1	Specified Requirements				
1.1.1	Surveys and setting out	LS	1		
1.1.2	Sign boards	Nr	100		
1.1.3	Progress Photographs and Video Record	Month	36		
1.1.4	Establish meteorological station	Nr	1		
1.1.5	Operate and maintain meteorological station	Nr	36		
2.0	Road Work				
2.2	Earth Work				
2.2.1	Excavate unsuitable material from beneath embankments, below existing ground level and below formation level in cuttings and dispose off site	Cum	850,00		
2.2.2	Construction of sand pile up to 20 meter length	Meter	28,000		
2.2.3	Excavate in existing embankment and place in the works	Cum	1,400		
2.2.4	Removing existing road pavement including soling, herring bone bond brick layer if any, and dispose off site.	Cum	300		
2.2.5	Provide, place and compact fill material in approach embankment and guide bund	Cum	5,000,000		

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ICMAB

THE INSTITUTE OF COST AND MANAGEMENT
ACCOUNTANTS OF BANGLADESH

ICMA Bhaban, Nilkhet, Dhaka-1205, Bangladesh
Tel: 9615460, 9611799, 9615477, Fax: 88-02-58615703
E-mail: info@icmab.org.bd, Web : www.icmab.org.bd