

Determination of Stage of Completion in Construction Contracts

The following is the opinion given by the Expert Advisory Committee of the Institute in response to a query sent by a member. This is being published for the information of readers.

A. Facts of the Case

1. A company was incorporated under the Companies Act, 1956 on 24.05.1980. It is a state public sector undertaking (PSU) and is owned by the Government of Odisha. The total paid-up equity capital of the company is ₹5.63 crore, which is entirely held by the Government of Odisha. The company is an unlisted public company.
2. The primary objects of the company are as follows:
 - (i) To undertake construction of buildings for the housing of police personnel of the Government of Odisha.
 - (ii) To formulate and execute housing schemes for the benefit of serving police personnel of the Government of Odisha.
 - (iii) To undertake construction of buildings for residential and non-residential purposes for the police, vigilance, prison and fire service departments of the Government of Odisha.
 - (iv) To undertake construction of buildings necessary for conducting schools, hospitals, clubs and other welfare measures for the benefit of the police personnel of the Government of Odisha.
3. The querist has stated that the head office of the company is located at Bhubaneswar, the state capital of Odisha. There are nine divisions spread all across Odisha to execute the works. Each division is headed by a civil engineer with a rank of executive engineer and designated as Joint Manager/division head. The company executes projects spread all over Odisha through these nine divisions. The average number of projects executed by the company is more than two thousand at any time during a year (emphasis supplied by the querist).
4. The querist has further stated that since the company has been incorporated specifically for execution of projects of Home Department of the Government of Odisha, it does not participate in tender for obtaining orders from various Government departments (called as user departments). The procedures of obtaining

orders from user departments are as follows:

- a. The Government departments, that intend to undertake a project, request the company to submit an estimate for the project as per Odisha Public Works Department (OPWD) Schedule of Rates (SoR).
- b. The company prepares estimates as per OPWD SoR and submits them to the user departments. These estimates include costs of material, labour, other overheads and supervision charges of the company. The amount of supervision charges are calculated at a certain percentage of estimated project cost (presently 10% of estimated cost). The supervision charges are included in the project estimate to meet the salary, administrative and other overheads of the company as it does not get any budgetary support from the Government.
- c. Upon getting the estimates, the user departments accord approval for the project, known as 'Administrative Approval' and release the funds limited to the amount of 'Administrative Approval'.
- d. OPWD SoR are uniform for projects spread all over Odisha, whereas, the market prices of material, labour and other overheads vary from location to location and are generally higher than the OPWD SoR.
- e. Contract value is fixed to the amount of 'Administrative Approval' received. Contract value will not be increased unless otherwise the scope of work increases and the cost overrun, if any, attributable to the user departments.
- f. After receipt of Administrative Approval, the company decides to execute the project either of its own, known as departmental execution (Contract K-2) or through e-tender process (Contract F-2).
 - i. Under K-2, divisional heads of the company procure materials and engage labour contractors for execution of the project. Costs of materials and labour are finalised through yearly tenders.

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- ii. Under F-2, the company invites open tenders and allots the project to eligible contractor on a turnkey basis.
- g. Once it is finalised whether the project is to be executed under K-2 or F-2, work orders are accordingly issued to the respective division head for execution either under K-2 or to the eligible contractor for execution under F-2.
- h. Subsequently, works are executed as per work orders issued under K-2 and F-2 and handed over to the clients / user agencies after completion.
- i. Due to variation in the market price and estimated price of construction cost (material, labour and other overheads) of a project, the outcome of a project cannot be estimated reliably unless and until the project is completed and handed over.
5. *Revenue recognition by the company:*
The contracts executed by the company are in the nature of fixed price contracts. Since the company is executing more than 2000 projects at a time, it is not practically possible for the company to estimate the contract cost to complete the balance work and calculate the stage of contract completion as on the balance sheet date. Further, since there is no correlation between the estimated cost and actual cost of execution, it is not practically feasible to derive the outcome of such huge number of projects unless and until the projects are completed and handed over to the user departments.
6. Due to the aforesaid reasons, the company is recognising its revenue and expenditure in its annual financial accounts as per paragraphs 31(a), 31(b) and 32 of Accounting Standard (AS) 7, 'Construction Contracts', issued by the Institute of Chartered Accountants of India (ICAI) as follows:
- Revenues are recognised only to the extent of contract costs incurred of which recovery is probable.
 - Contract costs are recognised as expenses in the period in which they are incurred.
 - Amount of surplus or deficit in a particular project is not included in the revenue of that project, during a particular year, unless and until the project is completed and handed over to the user departments.
 - As per past records, the actual surplus of projects never matches with the surplus mentioned in the estimate and there are cases where the projects have ended up with losses/deficit inspite of surplus stated in the estimate.
- The following are the few Police Station (PS) buildings executed by the company, where the contract value and estimated cost are same but the outcome of the projects are different:
- | Project Name | Contract Value
(₹) | Estimated Cost (₹) | Actual Cost
(₹) | Outcome Profit/(-)
Loss (₹) |
|-----------------------|-----------------------|--------------------|--------------------|--------------------------------|
| PS at Sheragada | 5,000,000.00 | 4,347,826.00 | 5,078,706.00 | - 78,706.00 |
| PS at Chakapada | 5,000,000.00 | 4,347,826.00 | 5,041,995.00 | - 41,995.00 |
| PS at Jamda | 5,000,000.00 | 4,347,826.00 | 4,793,969.00 | 206,031.00 |
| PS at Rairangpur | 5,000,000.00 | 4,347,826.00 | 4,861,111.00 | 138,889.00 |
| PS at Karanjia | 5,000,000.00 | 4,347,826.00 | 5,125,094.00 | - 125,094.00 |
| PS at Raruan | 5,000,000.00 | 4,347,826.00 | 4,821,682.00 | 178,318.00 |
| PS at Sohel | 5,000,000.00 | 4,347,826.00 | 4,458,177.00 | 541,823.00 |
| PS at Abhayachandapur | 5,000,000.00 | 4,347,826.00 | 6,437,014.00 | - 1,437,014.00 |
| PS at Biswanathpur | 5,000,000.00 | 4,347,826.00 | 5,519,048.00 | - 519,048.00 |
| PS at Jhirpani | 5,000,000.00 | 4,347,826.00 | 5,685,137.00 | - 685,137.00 |
7. *Opinion of statutory auditors:*
- The statutory auditors of the company, appointed by the Comptroller and Auditor General (CAG) of India, are of the opinion that since surplus/margin is not included in the revenue of on-going (non-completed) projects in the annual accounts, the company is failing to comply with Accounting Standard (AS) 7, 'Construction Contracts', issued by the ICAI.
 - The statutory auditors are insisting for:
 - physical measurement of all projects, which are more than 2000 in numbers.
 - valuing the percentage of completion on the basis of original estimate, and

- iii. including estimated surplus in the revenue of non-completed projects, which, as per the querist, is not practically feasible to derive correctly.
8. The querist has also provided an illustrative example of revenue recognition by the company for the perusal of the Committee which is given below:

Example

During the financial year (F.Y.) 2011-12, the company was awarded for construction of four police stations at different locations of the State, by Police Department of Government of Odisha. Estimates for these projects were prepared on the basis of SoR of 2011. Estimated costs of these projects are as follows:

₹ In Lakh

Particulars	Project – A	Project – B	Project – C	Project – D
Material	60.00	60.00	60.00	60.00
Labour	25.00	25.00	25.00	25.00
Other Overheads	15.00	15.00	15.00	15.00

Particulars	Project – A	Project – B	Project – C	Project – D
Total Estimated Cost	100.00	100.00	100.00	100.00
Supervision Charges/ Margin	10.00	10.00	10.00	10.00
Administrative Approval/ Contract Value	110.00	110.00	110.00	110.00

Projects A & B were supposed to be completed and handed over during the F.Y. 2011-12 and Projects C & D were supposed to be completed and handed during the year 2012-13. Actual costs incurred on various projects during the F.Y. 2011-12 & 2012-13 are as follows:

₹ In Lakh

Name of Project	Contract Value	Estimated Cost	Actual Costs Incurred		
			2011-12	2012-13	Total Costs incurred
Project A	110.00	100.00	105.00	-	105.00

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2011-12	2012-13	Total Costs incurred	2011-12	2012-13	Total Costs incurred
Project B	110.00	100.00	106.00	-	106.00
Project C	110.00	100.00	75.00	33.00	108.00
Project D	110.00	100.00	68.00	39.00	107.00

Recognition of revenue and expenditures made by the company in the accounts of F.Y. 2011-12 are as follows :

Statement of Profit and Loss of the company for F.Y. 2011-12

Expenditures	₹ In Lakh	Revenues	₹ In Lakh
Project – A	105.00	Project – A	110.00
Project – B	106.00	Project – B	110.00
Project – C	75.00	Project – C	75.00
Project - D	68.00	Project - D	68.00
Margin/ Earning	9.00		
Total	363.00	Total	363.00

Note:

Since Projects C and D have not been completed it is not practically possible to ascertain whether the projects will have any surplus or not, therefore, contract costs which are recoverable have been taken as revenue.

Recognition of revenue and expenditures made by the company in the accounts of F. Y. 2012-13 are as follows :

Statement of Profit and Loss of the company for F.Y. 2012-13

Expenditures	₹ In Lakh	Revenues	₹ In Lakh
Project – C	33.00	Project – C	35.00
Project - D	39.00	Project - D	42.00
Margin/ Earning	5.00		
Total	77.00	Total	77.00

Note:

- Revenue of Project C is arrived at ₹35.00 lakh after reducing the turnover of Project C taken during the year 2011-12 i.e.,

₹75.00 lakh from the contract value of ₹110.00 lakh.

- Revenue of Project D is arrived at ₹42.00 lakh after reducing the turnover of Project D taken during the year 2011-12 i.e., ₹68.00 lakh from the contract value of ₹110.00 lakh.

B. Query

- On the basis of the above, the querist has sought the opinion of the Expert Advisory Committee as to whether the accounting procedure followed by the company for recognition of revenue and expenditure, which, as per the querist, are as per paragraphs 31(a), 31(b) and 32 of AS 7, is in conformity with AS 7 or not.

C. Points considered by the Committee

- The Committee notes that the basic issue raised by querist relates to whether the accounting procedure currently followed by the company for recognising revenue and costs is in conformity with AS 7 or not. The Committee has, therefore, considered only this issue and has not considered any other issue that may arise from the Facts of the Case. The Committee presumes from the Facts of the Case that the contracts in the extant case are separate and independent fixed price contracts.
- The Committee notes from the Facts of the Case that the company, on the basis of inquiry received from various Government departments, submits estimates for each project separately as per Odisha Public Works Department (OPWD) Schedule of Rates (SoR). The estimates are submitted after including cost of materials, labour, other overheads and supervision charges which includes its profit margin. The Committee further notes that the querist has stated that the company is following paragraphs 31 and 32 of AS 7 as the outcome of the construction contracts in its case cannot be estimated reliably. In this regard, the Committee notes the following paragraphs of AS 7, notified under the Companies (Accounting Standards) Rules, 2006:

"21. When the outcome of a construction contract can be estimated reliably, contract revenue and contract costs associated with the construction contract should be recognised as revenue and expenses respectively by reference to the stage of completion of the contract activity at the reporting date. An expected loss

on the construction contract should be recognised as an expense immediately in accordance with paragraph 35.

22. 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) *it is probable that the economic benefits associated with the contract will flow to the enterprise;*
- (c) *both the contract costs to complete the contract and the stage of contract completion at the reporting date can be measured reliably; and*
- (d) *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.”

“28. An enterprise 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.

It is also usually necessary for the enterprise to have an effective internal financial budgeting and reporting system. The enterprise 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. When the outcome of a construction contract cannot be estimated reliably:

- (a) ***revenue should be recognised only to the extent of contract costs incurred of which recovery is probable; and***
- (b) ***contract costs should be recognised as an expense in the period in which they are incurred.***

An expected loss on the construction contract should be recognised as an expense immediately in accordance with paragraph 35.

32. 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 enterprise will recover the contract costs incurred. Therefore, contract revenue is recognised only to the extent of costs incurred that are expected to be recovered. As the outcome of the contract cannot be estimated reliably, no profit is recognised. However, even though the outcome of the contract cannot be estimated reliably, it may be probable that total contract costs will exceed total contract revenue. In such cases, any expected excess of total contract costs over total contract revenue for the contract is recognised as an expense immediately in accordance with paragraph 35."

"35. When it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognised as an expense immediately."

12. The Committee notes from the Facts of the Case that the querist has stated two reasons for the company not being able to measure the outcome of the project reliably. Firstly, it is stated that the company is executing large number of projects due to which it is not practically possible to estimate the contract cost to complete the balance work and calculate the stage of completion as on the balance sheet date. Secondly, it is stated that since there is no correlation between the estimated cost and actual cost of execution due to estimates being based on SoR, it is not practically feasible to derive the outcome of such huge number of projects unless these are completed and handed over to the user departments.

- 13. As far as the first reason for not measuring the outcome of the project reliably due to practical difficulties of having large number of projects is concerned, the Committee notes that AS 7 identifies certain situations/conditions in paragraphs 22, 28 and 32, where, in fixed price contracts, it can be stated that the outcome of the project cannot be estimated reliably. The Committee notes that as per AS 7 in case of fixed price contracts, ordinarily, the company would be able to estimate the outcome of the contract reliably except in certain situations, for example, in early stages of a contract and, therefore, should recognise contract costs and revenue based on stage of completion of the contract. The Committee also notes that as per the provisions of AS 7, stage of completion of a contract can be determined either by reference to the contract costs incurred or by reference to physical completion of the contract using survey of work performed or completion of a physical proportion of the contract work method. The Committee is of the view that only practical problems due to large number of projects cannot be considered as a ground for not being able to estimate the outcome of the contract reliably as even in large number of projects where the stage of completion is being determined by reference to contract costs incurred, the company, on the basis of estimates of various costs, such as, labour, material, etc. would generally be able to reasonably estimate the outcome of various projects. However, for this purpose, in order to overcome the practical difficulties due to large number of projects, the company should develop an effective reporting system from all the projects to obtain the data required at the head office for determining the stage of completion as per AS 7.
- 14. As far as the second reason of no correlation between the estimated cost and actual cost of execution of the contract, the Committee is of the view that although for submission of an estimate for a project to the Government departments, it might be essential for the company to use the rates given in SoR, for the purposes of implementation of AS 7, estimates should be based on the costs expected to be incurred on the project and should also be revised from time to time depending on the changes in the circumstances. The Committee is of the view that for this purpose, the company should develop

an effective budgeting system so as to have the reliable data available for estimating the outcome of the contracts at any stage and for determining the stage of completion. The Committee is of the view that a proper budgeting and reporting system is not only required from the angle of implementation of AS 7 but is also necessary to effectively manage various contracts.

15. The Committee further notes that the querist has stated that the amount of surplus or deficit in a particular project is not included in the revenue of that project, during a particular year, unless and until the project is completed and handed over to the user departments. As per past records, the actual surplus of projects never matches with the surplus mentioned in the estimate and there are cases where the projects have ended up with losses/deficit inspite of surplus stated in the estimate. Hence, it can be inferred that where there are expected excesses of total contract costs over total contract revenues for the contracts, these have not been recognised immediately as per the above-reproduced paragraphs 31, 32 and 35 of AS 7. In this regard, the Committee wishes to point out that any expected loss on the contract should be recognised immediately as an expense in the statement of profit and loss.

D. Opinion

16. On the basis of the above, the Committee is of the opinion that the accounting procedure followed by the company is not in accordance with the requirements of AS 7, as discussed in paragraphs 12 to 15 above. The Committee is of the view that to overcome the practical difficulties due to large number of projects, the company should develop an effective reporting system from all the projects to obtain the data required at the head office for determining the stage of completion

as per AS 7. With regard to company presently having no correlation between the estimated cost and actual cost of execution of the contract, the Committee is of the view that for the purposes of implementation of AS 7, estimates should be based on the costs expected to be incurred on the project rather than based on the rates given in SoR, and for this purpose, an effective budgeting system should be developed, as discussed in paragraph 14 above.

1	The Opinion is only that of the Expert Advisory Committee and does not necessarily represent the Opinion of the Council of the Institute.
2	The Opinion is based on the facts supplied and in the specific circumstances of the querist. The Committee finalised the Opinion on June 6, 2014. The Opinion must, therefore, be read in the light of any amendments and/or other developments subsequent to the issuance of Opinion by the Committee.
3	The Compendium of Opinions containing the Opinions of Expert Advisory Committee has been published in thirty two volumes. A CD of Compendium of Opinions containing thirty two volumes has also been released by the Committee. These are available for sale at the Institute's office at New Delhi and its regional council offices at Mumbai, Chennai, Kolkata and Kanpur.
4	Recent opinions of the Committee are available on the website of the Institute under the head 'Resources'.
5	Opinions can be obtained from EAC as per its Advisory Service Rules which are available on the website of the ICAI, under the head 'Resources'. For further information, write to eac@icai.in .