

Section II  
**FINANCIAL AND ACCOUNTING POLICIES AND CORPORATE  
GOVERNANCE**

**ACCOUNT OPTIONS ON THE DISTRIBUTION CORRESPONDING  
RESULT COMMERCIAL BUILDING CONTRACTS FROM PUBLIC  
INSTITUTIONS IN ROMANIA**

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**Abstract:**

*Primary issue in accounting for construction contracts is the recognition of revenue and contract costs of those reporting periods in which the work was performed, hence the outcome of the contract for construction. Date, or where completion of a construction contract can be found in different reporting periods. The question concerns the date on which the recognized result. Option appears to recognize the result as a sum of partial results for each of the years covered by the contract duration or it will recognize the completion of the construction contract.*

**Key words:** *construction contracts, work method or percentage completion method of advancement*

**JEL classification:** M41

### **1. Introduction**

This paper is intended as an analysis of the accounting options on the recognition and accounting operations relating to construction contracts, without forgetting the study elements of convergence and harmonization of Romanian national accounting standards with international accounting standards for the public sector IPSAS 11 "construction contracts".

Accounting treatment of revenue and costs of construction contracts subject to international accounting standard IPSAS 11 "Construction contracts". Standard, IPSAS 11 "Construction contracts" defined in section 4 construction contract as "a contract or other irrevocable commitment specifically negotiated for the construction of an asset or a combination of assets that are closely interconnection or interdependent in terms of their design, technology and function or their ultimate purpose or use".

Construction contracts shall be considered as contracts for services that are directly related to the construction of assets, contracts for the destruction or restoration of assets, and the restoration of the environment following the demolition of assets.

### **2. Options in the distribution of earnings per period of the commercial construction industry contracts**

Allocating a construction contract outcome may take place by using two methods: the percentage of advancement involves method and the stage of completion method

Method percentage of advancement involves:

1. Progress determining the closure of each exercise;
2. Distribution revenue and contract costs to the percentage calculated to advance the work during each exercise.

This method provides useful information on the extent of contract activity and performance during a period.

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A public institution as an entrepreneur ends with the main credit authorization, a commercial contract with fixed price of 900,000 lei order to achieve a kindergarten the following conditions:

- The initial value of the contractually agreed income is 900,000 lei, and the estimated initial costs are 800,000 lei;
- Duration of the contract for completion of construction is three years;
- At the end of the first year estimated costs grew by 5,000 lei, contract costs to date being 241,500 lei;
- For the second year, the recipient accepts the contract revenue increased by 20,000 lei and an increase in related costs 15,000 lei, contract costs to date being 656,000 lei.

**Table 1. Calculation of contract elements for the commercial contract concluded by public entity "X" – the percentage of completion method**

Calculation elements	Year	Year I	Year II	Year III
Initial amount of revenue agreed in contract		900,000	900,000	900,000
Variation of contract revenue		-	20,000	20,000
Total contract revenue		900,000	920,000	920,000
Contract costs incurred to date		241,500	656,000	820,000
Contract costs to complete		805,000- 241,500=563,500	820,000- 656,000=164,000	-
Total estimated contract costs		805,000	805,000+15,000=820,000	805,000 +15,000=820,000
Estimated surplus		95,000	100,000	100,000
Stage of completion		240,000 / 805,000=30%	656,000 / 820,000=80%	820,000 / 820,000=100%

**Table 2. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the percentage of completion method for the Year I**

Calculation elements	Revenue	Year I Expenses	Surplus
Revenue / Costs recognized To date	30% x 900,000 = 270,000	30% x 805,000 = 241,500	28,500
Revenue / Costs recognized in prior years	-	-	-
Revenue / Costs recognized in current year	270,000	241,500	28,500

**Table 3. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the percentage of completion method for the Year II**

Calculation elements	Revenue	Year II Expenses	Surplus
Revenue / Costs recognized To date	80% x 920,000 = 736,000	80% x 820,000 = 656,000	80,000
Revenue / Costs recognized in prior years	270,000	241,500	28,500
Revenue / Costs recognized in current year	466,000	414,500	51,500

**Table 4. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the percentage of completion method for the Year III**

Calculation elements	Year III		
	Revenue	Expenses	Surplus
Revenue / Costs recognized To date	100% x 920,000 = 920,000	100% x 820,000 = 820,000	100,000
Revenue / Costs recognized in prior years	736,000	656,000	80,000
Revenue / Costs recognized in current year	184,000	164,000	20,000

In the accounting records of the institution in year I are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

$$\begin{array}{rcl} \text{Class 6 – "Expense Accounts"} & = & \% \\ & & \text{Class 3 – "Inventories"} \\ & & \text{Class 4 – "Third Party Accounts"} \\ & & \text{Class 5 – "Pecuniary Resources Accounts"} \end{array} \quad \underline{241,500}$$

b. in the end of the tax year, the work performed is entered:

$$\begin{array}{rcl} 332 & = & 709 \\ \text{"Work and Services in Progress"} & & \text{"Inventory Variation"} \end{array} \quad 270,000$$

Incidence of accounting disclosure upon the statement of financial performance in Year I:

revenue from work performed:	270,000
contract costs incurred to date:	241,500
surplus:	28,500

In the accounting records of the institution in year II are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

$$\begin{array}{rcl} \text{Class 6 – "Expense Accounts"} & = & \% \\ & & \text{Class 3 – "Inventories"} \\ & & \text{Class 4 – "Third Party Accounts"} \\ & & \text{Class 5 – "Pecuniary Resources Accounts"} \end{array} \quad 414,500$$

b. in the end of the tax year, the work performed is entered:

$$\begin{array}{rcl} 332 & = & 709 \\ \text{"Work and Services in Progress"} & & \text{"Inventory Variation"} \end{array} \quad 466,000$$

Incidence of accounting disclosure upon the statement of financial performance in Year II:

revenue from work performed:	466,000
contract costs incurred to date:	414,500
surplus:	51,500

In the accounting records of the institution in year III are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

$$\begin{array}{rcl} \text{Class 6 – "Expense Accounts"} & = & \% \\ & & \text{Class 3 – "Inventories"} \\ & & \text{Class 4 – "Third Party Accounts"} \\ & & \text{Class 5 – "Pecuniary Resources Accounts"} \end{array} \quad 164,000$$

b. in the end of the tax year, the work performed is entered:

$$\begin{array}{rcl} 332 & = & 709 \\ \text{"Work and Services in Progress"} & & \text{"Inventory Variation"} \end{array} \quad 184,000$$

c. contract billing for the recipient:

$$\begin{array}{rcl} 4111 & = & \% \\ \text{"Customers with less than one year maturity"} & & \\ & & 704 \\ & & \text{"Revenue from services rendered and work performed"} \\ & & 4427 \\ & & \text{"Output VAT"} \end{array} \quad \underline{1,140,800}$$

d. accounting disclosure:

709 = 332 920,000

"Inventory Variation" = "Work and Services in Progress"

Incidence of accounting disclosure upon the statement of financial performance in Year III:

sales revenue	920,000
revenue from work performed (b and d):	184,000 -920,000=736,000
total contract revenue:	184,000
contract costs incurred to date:	164,000
surplus:	20,000

**The stage of completion method** is used by an entity to determine the contract outcome but only when the contract has completed. Revenue shall be recognized only to the extent of contract costs incurred that are probable to be recoverable from the recipient. During the stages of the contract, there is no surplus recognized which shall however be recognized during the tax year when construction works come to an end. The application of the method shall be done for the same type of commercial contract as shown above.

**Table 5. Calculation of contract elements for the commercial contract concluded by public entity "X" – the stage of completion method**

Year	Year I	Year II	Year III
Calculation elements			
Initial amount of revenue agreed in contract	900,000	900,000	900,000
Variation of contract revenue	0	20,000	20,000
Total contract revenue	900,000	920,000	920,000
Contract costs incurred to date and likely to be recovered from recipient	241,500	656,000	820,000
Revenue to be recognized in accounting as the stage of completion method	241,500	656,000	820,000
Estimated surplus	0	0	100,000

**Table 6. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the stage of completion method for the Year I**

Calculation elements	Year I		
	Revenue	Expenses	Surplus
Revenue / Costs recognized To date	241,500	241,500	0
Revenue / Costs recognized in prior years	0	0	0
Revenue / Costs recognized in current year	241,500	241,500	0

**Table 7. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the stage of completion method for the Year II**

Calculation elements	Year II		
	Revenue	Expenses	Surplus
Revenue / Costs recognized To date	656,000	656,000	0
Revenue / Costs recognized in prior years	241,500	241,500	0
Revenue / Costs recognized in current year	414,500	414,500	0

**Table 8. Recognized revenue and costs in the statement of financial performance in terms of the commercial contract – the stage of completion method for the Year III**

Calculation elements	Year III		
	Revenue	Expenses	Surplus
Revenue / Costs recognized To date	920,000	820,000	100,000
Revenue / Costs recognized in prior years	656,000	656,000	0
Revenue / Costs recognized in current year	264,000	164,000	100,000

In the accounting records of the institution in year I are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

Class 6 – "Expense Accounts"	=	%	<u>241,500</u>
		Class 3 – "Inventories"	
		Class 4 – "Third Party Accounts"	
		Class 5 – "Pecuniary Resources Accounts"	

b. in the end of the tax year, the work performed is entered:

332	=	709	241,500
"Work and Services in Progress"		"Inventory Variation"	

Incidence of accounting disclosure upon the statement of financial performance in Year I:

revenue from work performed	241,500
contract costs incurred to date:	241,500
surplus:	<u>0</u>

In the accounting records of the institution in year II are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

Class 6 – "Expense Accounts"	=	%	<u>414,500</u>
		Class 3 – "Inventories"	
		Class 4 – "Third Party Accounts"	
		Class 5 – "Pecuniary Resources Accounts"	

b. in the end of the tax year, the work performed is entered:

332	=	709	414,500
"Work and Services in Progress"		"Inventory Variation"	

Incidence of accounting disclosure upon the statement of financial performance in Year II:

revenue from work performed:	414,500
contract costs incurred to date:	414,500
surplus:	<u>0</u>

In the accounting records of the institution in year III are:

a. accounting disclosure of expenses due to completion of works according to their nature (generic formula):

Class 6 – "Expense Accounts"	=	%	<u>164,000</u>
		Class 3 – "Inventories"	
		Class 4 – "Third Party Accounts"	
		Class 5 – "Pecuniary Resources Accounts"	

b. in the end of the tax year, the work performed is entered:

332	=	709	164,000
"Work and Services in Progress"		"Inventory Variation"	

c. contract billing for the recipient:

4111	=	%	<u>1,140,800</u>
"Customers with less than one year maturity"			
		704	920,000
		"Revenue from services rendered and work performed"	
		4427	220,800
		"Output VAT"	

d. year-end inventory:			
709	=	332	164,000
"Inventory Variation"		"Work and Services in Progress"	
Incidence of accounting disclosure upon the statement of financial performance in Year III:			
sales revenue			920,000
revenue from work performed (b and d):		164,000 – 820,000=	656,000
total contract revenue:			264,000
contract costs incurred to date:			164,000
surplus:			100,000

### 3. Conclusions

Although both methods lead to an identical contract outcome, the essential difference between them is the time of outcome recognition.

**Table 9. Comparison of outcomes reached while using the percentage of completion method and the stage of completion method**

	Method	Percentage of completion method	Stage of completion method
Calculation elements			
Surplus	Year I	28,500	0
	Year II	51,500	0
	Year III	20,000	100,000
Contract outcome		100,000	100,000

Therefore, public entities should choose the outcome allocation method that best allows them to estimate outcomes reliably, taking into account both the advantages and the disadvantages that ensue from the use of either methods.

Thus public sector entities need to opt for the method of distribution of the result which allows to estimate reliably the best result, taking into account both strengths and weaknesses arising from the use of a method or another. These can be summarized as follows:

#### Strengths

- Easy to implement because the surplus determination construction contract is at its completion;

#### The stage of completion method

- The method does not truly reflect economic reality since a contract is performed during several tax years and their surplus is recognized only upon contract completion;
- Delaying the surplus recognition is not a proof of accounting prudence as it generates high fluctuation when recognizing contract surplus from one tax year to another with surplus being recognized during the tax year when construction work is completed;
- The significant increase of surplus during the tax year with construction work being performed provides an optimistic view upon financial performance although during its progress the surplus is null which can be regarded as a risk to the users of financial statement information.

#### The percentage of completion method

- It allows the good connection of expenses to contract revenue, and outcomes are recognized during each tax year in proportion with the percentage of contract completion;
- Outcome recognition is reduced
- Public entities should have their own estimation and financial reporting system;
- The review of contract revenue and costs should be done for each reporting period and the effects of financial performance changes must be specified;

## Strengths

from one tax year to another;  
- It truly reflects economic reality as a contract takes place during several tax years and surplus is recognized during each tax year all throughout contract performance.

## Weaknesses

The stage of completion method

- The unrealistic determination of the completion percentage (artificial underestimation or overestimation) leads to the distortion of construction contract outcomes.

Thus, either of the two methods should be chosen carefully in order to avoid the tendency to manipulate information on the financial statements of public entities.

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