

PRELIMINARY COST ESTIMATE FORM

EC# 9129	MPA: <input checked="" type="checkbox"/>	MC: <input type="checkbox"/>	REV. 0	BSI:	SYSTEM: Full-Scope Simulator		
UNIT: <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2		EC TITLE: Purchase and installation of a simulator with virtual panels					
Chapter	Name of expenditure chapters and subchapters					Value excluding VAT ¹⁾	
							Internal
1	Expenses for obtaining and developing land						
1.	Land acquisition						
1.	Land development						
1.	Arrangements for environmental protection and restoration to original condition						
1.	Expenses for relocation/protection of utilities (diversion of utility networks from the site).						
TOTAL Chapter 1						0	0
2	Expenses for providing the utilities necessary for the project						
TOTAL Chapter 2						0.00	0.00
3	Expenses for design and technical assistance						
3.1	Studies					0	
	3.1.1 Field studies						
	3.1.2 Environmental impact report						
	3.1.3 Specialised studies required depending on the specific nature of the investment						
3.	Supporting documentation and expenses for obtaining permits, agreements and authorisations						58,498.56
3.	Technical assessment of existing buildings, structures and/or technical projects						14,624.64
3.	Energy performance certification and energy audit of buildings						
3.	Design and engineering					133,246.72	1,451,309.92
	3.5.1. Design theme					89,372.80	
	3.5.2. Pre-feasibility study						
	3.5.3. Feasibility study/documentation for approval of intervention works and general estimate						
	3.5.4. Technical documentation required to obtain approvals/agreements/authorisations						
	3.5.5. Technical quality verification of the technical design and execution details					25,999.36	
	3.5.6. Technical project and execution details					17,874.56	
3.6	Organisation of procurement procedures					6,093.60	
3.7	Consultancy					0	0
	3.7.1. Project management for the investment objective						
	3.7.2. Financial audit						

PRELIMINARY COST ESTIMATE FORM

Chapter	Name of chapters and subchapters of expenditure	Value excluding VAT ¹⁾ Lei	
		Internal	External
3.8	Technical assistance	10,359.12	21,936.96
	3.8.1. Technical assistance from the designer	0	21,936.96
	3.8.1.1. During the execution of the works		21,936.96
	3.8.1.2. For the designer's participation in the phases included in the execution works control programme		
	3.8.2. Site management	10,359.12	0
	TOTAL Chapter 3⁰⁾	149,699.44	1,546,370.08
4	Basic investment expenses		
4.1	Construction and installations	62,154.72	0
4.2	Installation of machinery, technological and functional equipment	58,701.68	5,044,758.40
4.3	Machinery, technological and functional equipment requiring installation	30,000	2,522,379.20
4	Machinery, technological and functional equipment that does not require assembly and transport equipment		
4.	Facilities		101,560.00
4.	Intangible assets		2,522,379.20
	TOTAL Chapter 4⁰⁾	150,856.40	10,191,076.80
5	Other expenses		
5	Site organisation	0	0
	5.1.1 Construction works		
	5.1.2 Related expenses		
5.	Commissions, fees, taxes, credit costs	0	0
	5.2.1. Fees and interest related to the financing bank's loan		
	5.2.2. ISC fee for quality control of construction works		
	5.2.3. ISC fee for authorising construction works		
	5.2.4. Share related to the Social House of Builders - CSC		
	5.2.5. Fees for agreements, compliance notices and authorisation for construction/demolition		
5.3	Miscellaneous and unforeseen expenses Lucrari de interventie la constructii existente	2,391,757.18	
5.	Information and advertising expenses		
	TOTAL Chapter 5	0	0
6	Expenses for technological trials, tests and training at the beneficiary's premises		
6.	Training of operating personnel	0.00	0.00
6.2	Technological samples and tests	13,812	1,261,190
	TOTAL Chapter 6⁰⁾	13,812	1,261,190
COST INTERNAL RESOURCES CNE		lei	314,368
		euro	61,907.84
EXTERNAL CONTACT COSTS		lei	12,998,636
		euro	2,559,795
TOTAL ESTIMATED COST		lei	19,658,231
		euro	3,871,255
Of which Construction-Installation (C+I)⁰⁾		120,856.40	5,044,758.40

Clarifications regarding cost distribution⁸

Considering Article 10, paragraph (2') of Section 5 and Chapter 7 of the General Estimate "Expenses related to the budget margin and for the establishment of the implementation reserve for price adjustment" of Government Decision 907/2016 on the stages of preparation and framework content of technical and economic documentation related to investment objectives/projects financed from public funds, the total estimated cost also includes:

- expenses related to the 25% budget margin (1.2 + 1.3 + 1.4 + 2 + 3.1 + 3.2 + 3.3 + 3.5 + 3.7 + 3.8 + 4 + 5.1.1);
- expenses for setting up the implementation reserve for price adjustment of 10% from chapter 4;

Thus, the total estimated cost is 19,658,231 lei (€3,871,255), of which:

- internal CNE resource costs 314,368 lei (€61,908);
- externally contracted costs 12,998,636 lei (€2,559,795);
- miscellaneous and unforeseen expenses 2,391,757 lei (€471,004);
- costs related to the 25% budget margin 2,934,362 lei (577,858 €);
- costs for setting up the implementation reserve for price adjustment 1,019,108 lei (200,691 €). (13)

		Name	Signature	Date
Prepared by:	RSE/RCE	C. Popescu		
Verified by:	Eng. Sp. RSE/RCE	A. Stoica		
	Head of DIR Section	N/A		
	Head of SIPR²⁾	C. Popa		
Approved by:	Head of SCPI²⁾ (budget holder)	L. Anca		
	Head of Technical Service³⁾	I. Stefan		
	Head of Service within DPST	M. Barbu		

NOTES

- 1) Prices as of: 27.06.2025 1 euro = **5.078** lei
- 2) Signatures/approvals required in the case of project modifications financed from the investment budget (D-MM/D-PR).
- 3) Head of RSE/RCE, including Radiation Protection, Heads of Chemical, MID, SEIA, SIT, PF, SSIR-BTR Sections.
- 4) They will also include the values obtained from the Annex "Partial breakdown of the estimated cost (chapters 3, 4, 6)".
- 5) The estimated cost for chapters 3, 4, 6 is detailed with the support of the departments/services involved;
- 6) The value of construction and installation works (C+M) includes the expenses provided for in chapters/subchapters 1.2, 1.3, 1.4, 2, 4.1, 4.2, 5.1.1 of the general estimate.
- 7) ISC - State Construction Inspectorate.
- 8) To be completed when there are mixed expenses (from the investment budget and from CNE internal resources).
- 9) This form complies with Government Decision 907/2016.
- 10) In the "TOTAL Chapter X" sections, if there are no expenses, enter the value 0.
- 11) The calculated costs will be added to the other chapters and will form CNE INTERNAL RESOURCE COSTS and EXTERNALLY CONTRACTED COSTS, respectively, which will be transferred to FPC-0502 (MPA) / FPC-0800 (MC) in Euro.

12) 10% in the case of the execution of a new investment objective/object; 20% in the case of the execution of intervention works on existing constructions.

13) 0% of Chapter 4 (external) of this Form – for the duration of the objective's execution of 0 to 12 months; 10% of Chapter 4 (external) of this Form – for the duration of the objective's execution of 12 to 24 months; 15% of Chapter 4 (external) of this Form – for the duration of the objective's execution of more than 24 months;

Please note!

The preliminary estimated cost assessment for the MPA/MC will only be made upon completion of the solution, using updated market costs.

PRELIMINARY COST ESTIMATE SHEET

PARTIAL DETAIL OF THE ESTIMATED COST FOR CHAPTERS 3, 4, 6

EC# 912	MPA: <input checked="" type="checkbox"/>	MC: <input type="checkbox"/>	REV. 0	BSI:	SYSTEM: Full-Scope Simulator						
UNIT:	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2			EC TITLE: Purchase and installation of a simulator with virtual panels							
Chapter	Name of expenditure chapters and subchapters			Value excluding VAT¹⁾ Lei							
				<i>Internal</i>	<i>External</i>						
3	Expenses for design and technical assistance										
	Design and engineering										
	Design and engineering with internal resources CNE Calculation method (Subtotal a-c = No. of hours * 20 euro/h * No. of persons)										
	3.5.1. Design theme (conceptual solution MPA/MC)										
	a) System/Component Engineer (DSP, DIC, SEIA, etc.)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. of hours</td><td style="width: 70%;"></td></tr> <tr><td>No. of persons</td><td></td></tr> </table>			No. of hours		No. of persons		0.			
No. of hours											
No. of persons											
	b) Electrical I&C Design (SPEA)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%; text-align: center;">40</td></tr> <tr><td>No. of persons</td><td>2</td></tr> </table>			No. Hours	40	No. of persons	2	8,124.80			
No. Hours	40										
No. of persons	2										
	c) Mechanical/Piping Design (SPMC)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%;"></td></tr> <tr><td>No. of persons</td><td></td></tr> </table>			No. Hours		No. of persons		0.00			
No. Hours											
No. of persons											
	d) Construction Engineering (BIC)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%; text-align: center;">40</td></tr> <tr><td>No. of persons</td><td>2</td></tr> </table>			No. Hours	40	No. of persons	2	8,124.80			
No. Hours	40										
No. of persons	2										
	e) Digital Process Systems and Special Instrumentation Service (SSDPIS)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%;"></td></tr> <tr><td>No. of persons</td><td></td></tr> </table>			No. Hours		No. of persons		0.			
No. Hours											
No. of persons											
	f) Simulator (SS)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%; text-align: center;">240</td></tr> <tr><td>No. of persons</td><td>3</td></tr> </table>			No. Hours	240	No. of persons	3	73.123.20			
No. Hours	240										
No. of persons	3										
	g) Security analyses/calculations (DSN-AIP)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%;"></td></tr> <tr><td>No. of persons</td><td></td></tr> </table>			No. Hours		No. of persons		0.			
No. Hours											
No. of persons											
	Internal Subtotal 3.5.1. = Subtotal a) + Subtotal b).....Subtotal g)			89,372.80							
	3.5.5. Technical quality verification of the technical design and execution details (external approval)										
	a) Electrical I&C design (SPEA)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%; text-align: center;">24</td></tr> <tr><td>No. of persons</td><td>2</td></tr> </table>			No. Hours	24	No. of persons	2	4,874.88			
No. Hours	24										
No. of persons	2										
	b) Mechanical/Piping Design (SPMC)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. hours</td><td style="width: 70%;"></td></tr> <tr><td>No. of persons</td><td></td></tr> </table>			No. hours		No. of persons		0.00			
No. hours											
No. of persons											
	c) Construction Engineering (BIC)										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">No. Hours</td><td style="width: 70%; text-align: center;">24</td></tr> <tr><td>No. of persons</td><td>2</td></tr> </table>			No. Hours	24	No. of persons	2	4,874.88			
No. Hours	24										
No. of persons	2										

d) Digital Process Systems and Special Instrumentation Service (SSDPIS)		0.	
	No. Hours		
	No. of persons		
e) Simulator (SS)			
	No. Hours	80	
	No. of persons	2	
Internal subtotal 3.5.5. = Subtotal a) + Subtotal b).....	Subtotal e)	25,999.36	

PRELIMINARY COST ESTIMATE SHEET
PARTIAL DETAIL OF THE ESTIMATED COST FOR CHAPTERS 3, 4, 6

Chapter	Name of expenditure chapters and subchapters	Value excluding VAT ¹⁾ Lei	
		Internal	External
3.5.6. Technical design and execution details (DRP/MC detail solution)			
a) System/Component Engineer (DSP, DIC, SEIA, etc.)		0.	
	No. Hours		
	No. of persons		
b) Electrical I&C Design (SPEA)			
	No. Hours	24	
	No. of persons	2	
c) Mechanical/Piping Design (SPMC)			
	No. Hours		
	No. of persons		
d) Construction Engineering (BIC)			
	No. Hours	24	
	No. of persons	2	
e) Digital Process Systems and Special Instrumentation Service (SSDPIS)			
	No. Hours		
	No. of persons		
f) Simulator (SS)			
	No. Hours	40	
	No. of persons	2	
Subtotal Internal 3.5.6 = Subtotal a) + Subtotal b).....	Subtotal f)	17,874.56	
External Design and Engineering			
External Services (Design, Independent Verification, Seismic Analysis, Stress Analysis, etc.)			
Calculation method (External subtotal) = according to External Services offer)			1,451,309.92
Internal subtotal 3.5. = Internal subtotal 3.5.1 + 3.5.5 + 3.5.6		133,246.72	
Subtotal 3.5 = Internal Subtotal 3.5 + External Subtotal)			1,584,556.64
3.6. Organisation of procurement procedures with internal resources CNE			
3.	Calculation method (Subtotal chapter 3.6 = No. of hours * 15 euros/hour * No. of persons)	6,093.60	
3.7	No. of hours	80	
	No. of persons	1	
3.7. Consultancy			
3.7	Calculation method (Subtotal 3.7 = according to external services offer)		
3.8.2. Site management			
3.8.2	a) CNE site management (DIR, SEIA, DDI)	10,359.12	
	Calculation method (Subtotal chapter 3.8 a) = No. of hours * 17 euro/h * No. of persons)		
3.8.2			
3.8.2	No. of hours	12	
	No. of persons	1	
b) External site management			
Calculation method (Subtotal 3.8 b) = according to the External Services offer)			
Subtotal 3.8 = Subtotal 3.8 a) + Subtotal 3.8 b)			10,359.12
TOTAL Chapter 3 = Subtotal 3.5 + Subtotal 3.6 + Subtotal 3.7 + Subtotal 3.8			1,601,009.36

PRELIMINARY COST ESTIMATE SHEET
PARTIAL DETAIL OF THE ESTIMATED COST FOR CHAPTERS 3, 4, 6

Chapter	Name of expenditure chapters and subchapters	Value excluding VAT ¹⁾ Lei		
		Internal	External	
4	Basic investment expenses			
Construction and installations				
Execution/evaluation with CNE resources				
Calculation method (Subtotal a-e = No. of hours * 17 euro/h * No. of persons)				
4.	a) SIREA	20,718.24		
	No. of hours		8	
	No. Persons		3	
	b) SIRM	0.00		
	No. Hours			
	No. of persons			
	c) SSG	31,077.36		
	No. Hours		120	
	No. of persons		3	
	d) CNE assessment (DIR SEIA, DDI)	3,453.04		
	No. Hours		4	
	No. of persons		1	
	e) CNE supervision (DIR, SEIA, DDI)	6,906.08		
	No. Hours		8	
	No. of persons		1	
Subtotal Internal 4.1 = Subtotal a) + Subtotal b) +Subtotal e)			62,154.72	
Execution with Contractor				
f) External services (Installation)				
4.2	Calculation method (Subtotal 4.1f) = according to External Services offer)			
	Subtotal 4.1 = Internal Subtotal 4.1 + Subtotal 4.1f)		62,154.72	
Installation of machinery, technological and functional equipment, components/materials				
Execution/evaluation with CNE resources				
Calculation method (Subtotal a-e = No. of hours * 17 euro/hour * No. of persons)				
a) SIREA, SS	31,077.36			
No. of hours		12		
No. of persons		3		
b) SIRM	10,359.12			
No. Hours		40		
No. of persons		3		
c) SSG	6,906.08			
No. Hours		40		
No. of persons		2		
d) CNE assessment	3,453.04			
No. Hours		4		
No. of persons		1		
e) CNE supervision (DIR, SEIA, DDI)	6,906.08			
No. Hours		80		
No. Persons		1		
Subtotal Internal 4.2 = Subtotal a) + Subtotal b) +Subtotal e)			58,701.68	
Execution with Contractor				
f) External services (Installation)				
	Calculation method (Subtotal 4.2f) = according to External Services offer)			
	Subtotal 4.2 = Internal Subtotal 4.2 + Subtotal 4.2f)		5,103,460.08	

PRELIMINARY COST ESTIMATE SHEET
PARTIAL DETAIL OF THE ESTIMATED COST FOR CHAPTERS 3, 4, 6