

CLUJ-NAPOCA COMPREHENSIVE TRANSPLANT CENTRE
JUSTIFICATION OF THE INVESTMENT VALUE

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1. JUSTIFICATION OF THE INVESTMENT VALUE FOR THE COMPREHENSIVE TRANSPLANT CENTRE

The estimation of the total investment value was made starting from the cost indicators adopted within the feasibility study carried out by the Ministry of Health for the Cluj Regional Emergency Hospital, by reporting them to an average value/built sqm. The calculation was made by rounding up the estimated built-up area, from 26.570 sqm to **27.000 sqm**. The table below details this approach for the main chapters. The values expressed are in euros, excluding VAT.

1.1. TOTAL INVESTMENT VALUE (ESTIMATED)¹ OF THE BUILDING

Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
CHAP. 1	Expenses for obtaining and arranging the land	15	405.500
1.1	Obtaining the land	0.00	0,00
1.2	Land preparation	3.00	81.000
1.3	Landscaping, environmental protection and restoration to the initial state	8.00	216.000
1.4	Expenses for the relocation/protection of utilities	4.00	108.000
CHAP. 2:	Expenditures for providing the utilities necessary for the objective	50.00	1.350.000
	(water supply, sewerage, natural gas supply, heat agent, electricity, access roads, telecommunications, other utilities)		
CHAP. 3:	Expenses for design and technical assistance	159,00	4.293.000
3.1	Technical reports / Investigations (field investigations, environmental impact report, other specific investigations)	1,50	40.500
3.2	Supporting documentation and expenses for obtaining approvals, agreements and permits	1,50	40.500
3.3	Technical expertise	2,00	54.000
3.4	Certification of energy performance and energy audit of buildings (costs supported by the contracting authority)	4,00	108.000
3.5	Design	80,00	2.160.000

¹ It also includes the design and technical assistance costs.



Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
	(preliminary draft, feasibility study / documentation for approval of intervention works and general estimate, technical documentation required to obtain approvals / agreements / permits, technical verification of the quality of the technical project and execution details, technical project and execution details)		
3.6	Organizing procurement procedures (Provided by the project team of the contracting authority, in-house)	0,00	0,00
3.7	Consultancy	0.00	0.00
	Project management for the investment objective, financial audit/ Provided by the project team of the contracting authority, in-house		
3.8	Technical assistance	70,00	1.890.000
3.8.1	Technical assistance on site, from the design team	20,00	540.000
3.8.2	Construction site management (costs supported by the contracting authority)	50,00	1.350.000
CHAP. 4:	Basic investment expenses	2.220,00	59.940.000
4.1	Constructions and installations	1.550,00	41.850.000
4.2	Assembly of machinery, technological and functional equipment		
4.3	Machinery, technological and functional equipment that requires assembly	50,00	1.350.000
4.4	Machinery, technological and functional equipment that does not require assembly and transport equipment	500,00	13.500.000
4.5	Facilities	90,00	2.430.000
4.6	Intangible assets	30,00	810.000
CHAP. 5:	Other expenses	319,00	8.613.000
5.1	Site organization	45,00	1.215.000
	(construction and installation works related to the site organization; expenses related to the site organization)		
5.2	Commissions, instalments, taxes, cost of credit	20	540.000
5.3	Miscellaneous and unforeseen expenses	250,00	5.400.000
5.4	Information and advertising expenses	4,00	108.000
CHAP. 6:	Expenses for technological tests and trials	75,00	2.025.500



Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
6.1	Training of operating personnel	70,00	1.890.000
6.2	Technological tests and trials	5,00	135.000
GRAND TOTAL		2.838,00	76.626.000
Of which C+M (1.2 + 1.3 + 1.4 + 2 + 4.1 + 4.2 + 5.1.1)		1.660,00	44.820.000

Table 1 Estimated total investment value

1.2. ESTIMATED DESIGN AND TECHNICAL ASSISTANCE COSTS INCLUDED IN THE DESIGN CONTRACT VALUE

Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)	Percentage of the total value ²
CHAP . 3:	Expenses for design and technical assistance	109,00	2.943.000	100%
3.1	Investigations (field investigations, environmental impact report, other specific investigations)	1,50	40.500	1,38%
3.2	Supporting documentation and expenses for obtaining approvals, agreements and permits	1,50	40.500	1,38%
3.3	Technical expertise	2,00	54.000	1,83%
3.4	Certification of energy performance and energy audit of buildings	4,00	108.000	
3.5	Design (preliminary draft, feasibility study / documentation for approval of intervention works and general estimate, technical documentation required to obtain approvals / agreements / permits, technical verification of the quality of the technical project and execution details, technical project and execution details)	80,00	2.160.000	73,39%
3.6	Organization of procurement procedures	Supported by the Contracting Authority		
3.7	Consultancy	0,00	0.00	
3.8	Technical assistance includes:	20.00	540.000	18,35%
3.8.1	Technical assistance on site, from the design team	20,00	540.000	

² The percentage is calculated in relation to the design value covered by the design team.

Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)	Percentage of the total value ²
GRAND TOTAL		109,00	2.943.000	100%

Table 2 Estimated design and technical assistance costs supported by the design team

2. JUSTIFICATION OF THE INVESTMENT VALUE FOR THE UNIVERSITY HOSPITAL COMPLEX

The estimation of the total investment value was made starting from the cost indicators adopted within similar urban design and landscape projects carried out in Cluj-Napoca city, by reporting them to an average value/built sqm. The calculation was made by rounding up the estimated area, from 46.979 sqm to **47.000 sqm**, distributed as follows:

- **39.000 sqm (82,90%) – road surfaces, stairs and pedestrian routes;**
- **8.000 sqm (17,10%) – parks and green spaces;**

2.1. TOTAL INVESTMENT VALUE (ESTIMATED)³ OF THE UNIVERSITY HOSPITAL COMPLEX URBAN DESIGN AND LANDSCAPING INTERVENTION

Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
CHAP. 1	Expenses for obtaining and arranging the land	4,00	188.000
1.1	Obtaining the land	0,00	0,00
1.2	Land preparation	0,00	0,00
1.3	Landscaping, environmental protection and restoration to the initial state	0,00	0,00
1.4	Expenses for the relocation/protection of utilities	4,00	188.000
CHAP. 2:	Expenditures for providing the utilities necessary for the objective	1,00	47.000
	(water supply, sewerage, natural gas supply, heat agent, electricity, access roads, telecommunications, other utilities)		

³ It also includes the design and technical assistance costs.



Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
CHAP. 3:	Expenses for design and technical assistance	9,00	423.000
3.1	Technical reports / Investigations (field investigations, environmental impact report, other specific investigations)	0,50	23.500
3.2	Supporting documentation and expenses for obtaining approvals, agreements and permits	0,10	4.700
3.3	Technical expertise	0,10	4.700
3.4	Certification of energy performance and energy audit of buildings (it is not the case)	0,00	0.000
3.5	Design (preliminary draft, feasibility study / documentation for approval of intervention works and general estimate, technical documentation required to obtain approvals / agreements / permits, technical verification of the quality of the technical project and execution details, technical project and execution details)	3,00	141.000
3.6	Organizing procurement procedures (Provided by the Contracting Authority)	0,00	0,00
3.7	Consultancy, of which:	2,30	108.100
3.7.1	Project management for the investment objective	1,80	84.600
3.7.2	Financial audit	0,50	23.500
3.8	Technical assistance, of which:	3,00	141.000
3.8.1	Technical assistance on site, from the design team	1,00	47.000
3.8.2	Construction site management (costs supported by the contracting authority)	2,00	94.000
CHAP. 4:	Basic investment expenses	156,00	7.412.500
4.1	Constructions and installations	145,00 ⁴	6.895.500
4.2	Assembly of machinery, technological and functional equipment	1,00	47.000
4.3	Machinery, technological and functional equipment that requires assembly	50,00	235.000

⁴ The estimated value represents an wheighted avarage cost between the following two costs: 105 euro/sqm (average cost for green area rehabilitation) and 155 euro/sqm (average cost for roads, pedestrian alleys)



Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)
4.4	Machinery, technological and functional equipment that does not require assembly and transport equipment	0,00	0,00
4.5	Facilities	5,00	235.000
4.6	Intangible assets	0,00	0,00
CHAP. 5:	Other expenses	22,00	1.034.000
5.1	Site organization (construction and installation works related to the site organization, expenses related to the site organization)	10,00	470.000
5.2	Commissions, instalments, taxes, cost of credit	2,00	94.000
5.3	Miscellaneous and unforeseen expenses	10,00	470.000
5.4	Information and advertising expenses	0,00	0,00
CHAP. 6:	Expenses for technological tests and trials	0,00	0,00
6.1	Training of operating personnel	0,00	0,00
6.2	Technological tests and trials	0,00	0,00
	GRAND TOTAL	192,00	9.104.500
	Of which C+M (1.2 + 1.3 + 1.4 + 2 + 4.1 + 4.2 + 5.1.1)	161,00	7.647.500

Table 3 Estimated total investment value

2.2. ESTIMATED DESIGN AND TECHNICAL ASSISTANCE COSTS INCLUDED IN THE DESIGN CONTRACT VALUE

Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)	Percentage of the total values
CHAP. 3:	Expenses for design and technical assistance	6,50	305.500,00	100%
3.1	Investigations (field investigations, environmental impact report, other specific investigations)	0,50	23.500	7,69%
3.2	Supporting documentation and expenses for obtaining approvals, agreements and permits	0,10	4.700	1,54%
3.3	Technical expertise	0,10	4.700	1,54%

⁵ The percentage is calculated in relation to the design value covered by the design team.



Chapter	Name of chapter and subchapters of expenses	Estimated price (euro / sqm)	Total (euro, exclusive of VAT)	Percentage of the total values
3.4	Certification of energy performance and energy audit of buildings	It is not the case.		
3.5	Design (preliminary draft, feasibility study / documentation for approval of intervention works and general estimate, technical documentation required to obtain approvals / agreements / permits, technical verification of the quality of the technical project and execution details, technical project and execution details)	3,00	141.000	46,15%
3.6	Organization of procurement procedures	Supported by the Contracting Authority		
3.7	Consultancy: includes	1,80	84.600	27,69%
3.7.1	Project management for the object of investment	1,80	84.600	
3.8	Technical assistance includes:	1,00	47.000	15,38%
3.8.1	Technical assistance on site, from the design team	1,00	47.000	
GRAND TOTAL		6,50	305.500,00	100%

Table 4 Estimated design and technical assistance costs supported by the design team

3. SUMMARY OF THE COSTS

3.1. TOTAL INVESTMENT COST ESTIMATE

	Estimated price (euro / sqm)	Total (euro, exclusive of TVA)
Total investment Comprehensive Transplant Centre Building	2.838,00	76.626.000
SCD estimate 27.000 sqm		
Total C+M value	1.660	44.820.000
C+M Percentage of the total investment value		58%
Total investment University Hospital Complex Urban Design and Landscape project	192	9.104.500
SD estimate 47.000 sqm		
Total C+M value	161	7.647.500
C+M Percentage of the total investment value		84%
Total investment value	-	85.730.500
Total C+M value	-	52.467.500
C+M Percentage of the total investment value		61%

Tabel 5 Total investment cost estimate

3.2. TOTAL COST ESTIMATE FOR DESIGN SERVICES AND TECHNICAL ASSISTANCE

	Estimated price (euro / sqm)	Total (euro, exclusive of TVA)
Cost estimate for design services and technical assistance for the Comprehensive Transplant Centre Building	159	4.293.000
ScD estimate 27.000 sqm		
of which – costs supported by the design team	109	2.943.000
Percentage of the total investment value		5,75%
Procent din C+M		9,60%
Cost estimate for design services and technical assistance for the University Hospital Complex Urban Design and Landscape Project	9,00	423.000
S _D estimată 47.000 mp		
of which – costs supported by the design team	6,50	305.500
Percentage of the total investment value		4,65%
Procent din C+M		5,55%
Design services and technical assistance total cost estimate	-	4.716.000
of which – costs supported by the design team	-	3.248.500
Percentage of the total investment value		5,65%
Procent din C+M		9,00%

Tabel 6 Cost estimate – design services and technical assistance

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