

Annex 1a. Technical specifications and requirements

Development of detailed execution design for major repairs for Sports School No.1 from Cahul municipality.

A. Context

The EU4Moldova: Focal Regions Programme supports the strengthening of economic, territorial and social cohesion in the Republic of Moldova by facilitating sustainable and inclusive local social-economic growth and improving the standards of living of the citizens from the two focal regions: Ungheni and Cahul municipalities and the neighboring localities. The Programme will support the two regions through: making governance more efficient – improving quality of services and necessary infrastructure; incentivizing private sector – increasing investments, improving local economy and creating new jobs; encouraging participatory democracy – involving citizens in democratic governance processes and enhancing their capacities to claim their rights.

The Programme aims to achieve the following objectives:

1. To strengthen transparency, accountability of local public authorities and people's participation in local governance processes in the focal regions.
2. To improve citizens' access to quality public services and utilities in the pilot focal regions.
3. To create employment opportunities for men and women in the focal regions and improve the attractiveness of the pilot regions for investors and entrepreneurs.
4. To promote the smart specialization of the economy of the focal regions through the development of the clustering and value chain approach in key economic sectors.

As a result of Programme implementation, the institutional capacities of local public authorities will increase and get consolidated to support the fulfilment of the integrated and environmentally-mainstreamed local social-economic development strategy (e.g.: CSOs, private sector, etc.), and the planning and monitoring of the social-economic development strategy's implementation will become wider. Citizens will benefit from increased quality, availability and performance of local public services and utilities, including the ones meant for women. Favorable conditions will be created for attracting investments, creating working places and fostering local and social entrepreneurship. The economic performance will also increase in the focal regions as a result of clusters' and specialized zones' creation, according to the smart specialization of the economy.

The Programme has the following partners: EU Delegation in Moldova, UNICEF, Ministry of Agriculture, Regional Development and Environment, State Chancellery, Ministry of Finance, Ministry of Economy and Infrastructure, central and local public authorities from Ungheni and Cahul focal regions, civil society groups and organizations, private sector and business associations, Public Services Agency, E-Governance Agency, Center and South Regional Development Agencies, Congress of Local Authorities in Moldova, Organization for Development of Small and Medium Enterprises Sector, citizens.

Citizens and communities from Ungheni and Cahul regions, local public authorities and civil society organizations will be the final beneficiaries of this Programme.

B. Contract goal:

The general goal of the contract is to carry out professional works for developing, endorsing and approving the execution design “Major repairs of the Sports School No. 1 in Cahul mun.”, with focus on developing the complete design documentation and estimating the costs, as well as developing the tender/construction documentation necessary for implementing this project. The design works will be carried out in 2 stages:

Stage 1 – Developing and approving design sketch with participation of the Beneficiary and Investor.

The design sketch shall include:

1. General Plan, Sc 1:500
2. Basement plan, Sc 1:100
3. Ground floor plan, Sc 1:100
4. Floor plan, Sc 1:100
4. Facades, Sc 1:100

Stage 2 – Developing the execution design, which will cover all the compartments envisaged in the standard NCM A. 07.02-2012 “Procedure for developing, endorsing, approving and frame-content of the design documentation for constructions project. Main requirements and provisions”. The project for major repairs for the Sports School No. 1 of Cahul mun. shall cover the following compartments:

- General plan
- General explicative memo;
- Architectural-construction solutions;
- Technological solutions;
- Technical installations, networks and systems;
- Energy efficiency of project solutions;
- Organization of construction works;
- Environment protection;
- Anti-fire safety measures;
- Basic requirements for operation;
- Estimate documentation.

The respective project provides for major repairs to be carried out in the Sports School – sports complex, including swimming pools, with partial re-planning of premises, heating insulation and finishing of facades and building an annex block attached to the existing construction, to organize a separate entry to the big swimming pool (level 2), ensuring all the premises necessary for the technological process (changing rooms, sanitary blocks, etc.). The Contractor shall develop the design documentation applying the most efficient technical solutions for the suggested major repairs of the Sports School No. 1, based on technical characteristics and specifications for the engineering system equipment and installations and requested volume of reconstruction works.

The design services will identify and offer the best opportunities/options for use, operation and sustainable functioning of the rehabilitated building, suggesting modern, sustainable and environmentally friendly materials, energy efficient equipment and technology, according to national and international standards in the respective area.

C. Design requirements:

The content of the design documentation shall be established in line with the national standards for constructions: NCM A.07.02-2012 “Procedure for developing, endorsing, approving and frame-content of the design documentation for constructions project. Main requirements and provisions”. The selected Contractor shall provide services for developing a clear and complete project, including, but without limiting itself the following:

1. General explicative memo:

The compartment should include the following sub-compartments:

- general data for the project;
- design solutions for energy efficiency;

- investment efficiency.

The chapter on general data for the project should include:

- basis for design building;
- initial data for design;
- characteristics of the construction plot;
- information regarding the design capacity of the site (number of places, etc.);
- calculations regarding the number workers and their qualification, number of jobs;
- necessary volume of fuel, water, electricity;
- working conditions for persons with locomotory disabilities;
- information regarding the endorsement of design solutions;
- main technical-economic indicators of the project;

Chapter on Design solutions for energy efficiency should include calculations related to the possibility of using renewable energy sources (photovoltaic panels for producing electricity, panels with vacuum tubes for producing domestic hot water, heating insulation of facades' external surfaces, heating insulation of heating distribution networks).

Chapter on Investments' efficiency should include calculations of the site capacity after the reconstruction, number of employees to be recruited (men/women) after its launch into operation, specific consumption of energy and fuel.

2. Architectural –building solutions: This compartment should cover:

- data on technical surveying, geological prospecting, hydrological conditions (including information on field seismicity);
- solutions and basic indicators regarding the general plan, territory technical preparing works, security against subsidence and landslides, landscaping works;
- reasoning the architectural-urbanistic solutions, their compliance with the architectural intentions and functional destination depending on urbanistic requirements;
- solutions for protecting architectural, historical and cultural monuments;
- provisions for planimetric, volumetric and building solutions' compliance with the technical requirements and terms set by the Beneficiary;
- solutions for protection of building elements against corrosion;;
- data on ensuring comfort requested for premises;
- measures for seismic protection and against landslips;
- measures for personnel health protection and ensuring vital activity for people with disability;
- solutions for finishing internal surfaces in colors (as needed);
- reasoning the nomenclature, developing the premises with basic, auxiliary, serving and technical areas.

3. Technological solutions: This compartment should cover:

- data on functional destination of the site;
- brief characteristics and reasoning of technological solutions, mechanization, automation of technological processes and their compliance with exigencies conditioned by the beneficiary, as well as normative documents regarding the security and comfort of activity;
- measures ensuring the observance of labor protection requirements.

4. Solutions for technical installations, networks and systems: This compartment should cover:

- reasoning the main solutions for technical equipment – for heating, ventilation, air-conditioning, electricity supply, gas supply, water and sewerage supply;
- solutions for dispatching, automation and management of technical systems;
- basic solutions for electricity equipment and electrical lighting devices, communication and warning systems;
- protection measures for technical networks and technical equipment against corrosion and leakage currents;
- solution regarding signaling, telecommunication, radio and television means;
- equipment for creating good working conditions;
- solutions for protection against lightning.

5. Energy efficiency of design solutions: The compartment should be developed in line with the provisions of NCM E 04.01 and should cover:

- solutions for ensuring efficient thermal protection of buildings and constructions;
- solutions for increasing efficiency of technical equipment, data on reducing heating energy consumption and electricity for other purposes;
- data about energy sources, measures to ensure observance of set energy efficiency requirements;
- reasoning the choice of optimal requirements of architectural, technological, construction and technical solutions, and their fulfilment for major repairs of buildings and constructions.

6. Organization of construction works: Composition, volume and content of design documentation of this compartment shall be established in line with the provisions СНиП 3.01.01-85 "Organization of construction works", taking into account the conditions and requirements set in the Urbanism Certificate and technical design theme.

7. Environment protection: This compartment should be developed in line with the exigencies of state standards, as well as the normative documents approved by the central specialized body of the environment administration.

8. Measures for ensuring anti-fire safety: This compartment should cover:

- measures to prevent fires;
- protection and safety of people in case of fire;
- anti-fire security of material assets.

9. Basic requirements for operation: This compartment should be developed in line with the requirements set in the urbanism certificate and design theme.

10. Estimate documentation: should be concluded in line with the provisions set in NCM L 01.01-2012 "Rules for determining the value of construction sites" and CP L 01.01 – 2012 "Instructions for concluding the estimates for building-assembling works based on the resources method". The estimate documentation shall contain the complete list for all the works with adequate description of every item. The quantities for all the works shall be based on real calculations and not on estimations. All the lists with quantities of works and estimates shall be presented in worksheet format (Form No.1, Form No.3, Form No.5 and Form No.7). The cost estimates should consider the real cost of labor force, the current costs for necessary materials and costs for operation of machines and mechanisms, based on current prices available on the local market, which will not be under the minimum set in the national legislation.

The entire set of design documentation shall be developed in 5 copies, including 4 hardcopies.

Requirements for drawn items: complete and detailed construction drawings (graphic form) for all the works with sufficient details to organize the tender, for contractual and building purposes. All the drawings shall be submitted in electronic format (PDF) and corresponding paper format. All the drawings presenting adjusted technical solutions (technical drawings, schemes, plans and other graphic documentation) should be clear, correct and exact. Symbols and abbreviations shall be defined in the legend.

Requirements for technical specifications: complete and present-day technical specifications in line with the best current practices. The general and specific technical specifications for all materials, devices and equipment will be concluded based on some standards accepted at the national and international levels and sufficient for procurement, installation and construction works.

Important: Documents, drawings and specifications shall be sufficiently detailed to facilitate the initiation of works without the need of some on-site instructions, selection of materials, assembling of constructions, placement or localization of elements or characteristics.

The designs shall comply with the provisions of the RM Law 721 of 02.02.1996 on quality in constructions, norms and regulations, state standards and specifications in the area of constructions, local regulations in constructions and shall ensure:

1. Construction resistance and stability;
2. Safety in operation;
3. Anti-fire safety;
4. Hygiene, people health, environment recovery and protection;
5. Thermal insulation and waterproof, and energy saving;
6. Protection against noise;

D. Key tasks and expected results:

All over the period of contract execution, the Contractor shall be responsible for carrying out all the activities necessary for delivery of complete project execution designs and tender documents for **“Major repairs of the Sports School No. 1 from Cahul mun.”**, including the development of the work plan and coordination of the respective plan with the Beneficiary and Investor.

1. To provide for development of the design and estimate documentation with the possibility of implementing and carrying the works by stages.

The engineers from the **EU4Moldova: Focal Regions Programme** will provide assistance to the Contractor to arrange and coordinate field visits, together with local public authorities and public institutions responsible for project implementation.

The Contractor will coordinate correspondingly the design and engineering processes with the local planning authorities, community representatives and those from the **EU4Moldova: Focal Regions Programme**. The Contractor will obtain the endorsement and approval of the project from all the relevant authorities.

The Contractor will provide assistance to owners of public infrastructure in preparing the necessary support documentation for obtaining the construction authorization from behalf the local authorities.

All the detailed documentation of the project will be subject to binding verification from the State Service for Verification and Expertise of Projects and Constructions or independent project verifiers with appropriate authorization in these areas. If needed, project documentation will be subject to an additional examination from behalf of experts in the area.

The design company commits itself to come up with necessary changes and technical adjustments in project documentation, which would emerge in the process of verification or construction. These changes and adjustments will be made within 5 working days since the official request from the engineer of the **EU4Moldova: Focal Regions Programme**.

During the implementation of major repairs for the Sports School No.1 from Cahul mun. and when finishing the construction and assembly works, the Contractor shall participate in the activities of the Commission for reception of works upon their end and the Commission for final reception, and will issue an endorsement certifying the compliance of works with the execution design provisions.

E. Deadlines for drafting project documentation:

The Contractor shall carry out all the investigations and will submit full documentation for project execution, including all the written and drawn components, technical specifications and lists of works, which would be verified as established in the constructions regulatory documents, including the tender documentation in maximum 180 calendar days since the contract signature.

F. Deliverables:

The Contractor shall submit project documentation for **“Major repairs of the Sports School No. 1 from Cahul mun.”** in line with the following deliverables and set deadlines:

F1. Location: Cahul mun. “Reconstruction of Sport School No. 1 from Cahul mun.”

Item no.	Description/Specification of services	Deadline
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1.	Stage 1- Development and approval of project sketch with the participation of the Beneficiary and Investor.	20 calendar days since the date the contract is signed
	Stage 2- Development of the project execution design, which will contain all the compartments envisaged in NCM A. 07.02-2012 “Procedure for drafting, endorsing, approving and the frame-content of construction project documentation”.	160 calendar days since the date the contract is signed
	Stage 2 will cover the following deliverables	
2.	General Plan. Results of on-site measurements.	30 calendar days since the date the contract is signed
3.	Explicative memo, including technical specifications	120 calendar days since the date the contract is signed
4.	Drawings for execution of architectural-urbanist solutions (SAC, IA)	120 calendar days since the date the contract is signed
5.	Drawings for executing construction elements (C, PAC, PACT)	150 calendar days since the date the contract is signed
6.	Drawings for executing technological solutions, automation	150 calendar days since the date the contract is signed
7.	Technical installations, networks and systems, installations. Drawings for executing the networks and systems.	150 calendar days since the date the contract is signed
8.	Construction works’ organization project (POC)	160 calendar days since the date the contract is signed
9.	Environment protection	160 calendar days since the date the contract is signed
10.	Ant-fire safety measures	160 calendar days since the date the contract is signed
11.	Basic requirements for operation	160 calendar days since the date the contract is signed
12.	Estimate documentation, including the lists of quantities of works, filled in for all the items with detailed description per each item (F 7,F3,F5,F1). All the documentation will be developed in 4 copies. It should be envisaged the development of the project design and estimate documentation per zones of the municipality with the possibility of stage-based implementation	180 calendar days since the date the contract is signed
13.	Verification of the design by the State Service for Verification and Expertise of Projects and Constructions.	200 calendar days since the date the contract is signed
14.	Supervision from design author during the construction period;	It is necessary

G. Information/requirements of general organization

Development of design documentation is initiated based on the Concept Note “**Reconstruction of Sports School No. 1 from Cahul mun. Design works**”.

Connection notices/Technical conditions for connecting the newly designed infrastructure to the existing utilities shall be obtained from the respective institutions by the Mayoralty of Cahul upon contractors’ initiative.

The following special regional climate conditions and technical characteristics shall be taken into consideration during the design period:

Climate zone of the site - III B

Snow load - 500 Па/м²;

Wind pressure - 350 Па/м²;

Seismic level - 8 degrees;

Average outdoor temperature - +17°C;

Duration of the heating season - 166 days;

Average outdoor temperature during winter - +0,6°C;

Data on soil structure – according to geologic surveys (as appropriate).