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Invitation to Bid ITB18/01717

Amendment No. 1

Ref. no. **ITB18/01717**

Date: **26 April 2018**

Subject: **MIA/Reconstruction works for the modernization of the swimming pool within the "Dinamo Central Sport Club"**

Dear Sir/Madam,

1. Pursuant to Clause 19 of the *Section 2: Instruction to Bidders*, UNDP Moldova is hereby amending the solicitation document.
2. Due to the need to adjust some tender requirements, entry "Certificates and Licenses" of the Section 4. Evaluation Criteria is hereby amended to read as follows (changes are marked in red):

Certificates and Licenses	<ul style="list-style-type: none"> ▪ Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation; Valid License for construction works (for local companies) or another legal document confirming the authorization for execution of civil works on the territory of the Republic of Moldova¹ (for international companies) included but not limited to the following type of works: construction, territory and land arrangement, mechanical, electrical, heating and ventilation, automation, water and sewage. International companies interested in providing such works may use one of the following modalities to operate in Moldova: <ul style="list-style-type: none"> ○ register/hold a legal representation/branch in the country; ○ subcontract a local company; ○ availability of a locally certified key specialists (contracts shall be submitted as prove) as required under <i>Form E: Format of Technical Bid</i>, 	Form B: Bidder Information Form
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¹ ~~Construction companies which do not hold license for provision of construction services in the Republic of Moldova, must obtain a such license or subcontract a local company which holds the license for provision of the constructions services in the Republic of Moldova.~~

	<i>Section 3.</i>	
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3. Due to the need to simply and avoid overlapping, some of the technical requirements towards the swimming pool were adjusted, so the *Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities* is hereby amended to read as follows (changes are marked in red, those marked in red and highlighted in green are added):

Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities

A. Background Information

1. General Overview:

The **Objective** of the UNDP/MIA Project is to contribute to the enhancement of the operational and functional framework of MIA for the efficient, transparent and inclusive implementation of the sector reform agenda in the areas of public order, civil protection, border security, migration and asylum in compliance with the national priorities and international commitments improving the effectiveness in designing and implementation of sectoral policies and services addressing the needs of men and women in Moldova. The actions of the project will facilitate the creation of the viable gender sensitive nationwide mechanism ensuring an appropriate preparedness of state authorities to respond to events that pose a direct threat to public order and national security through a coordinated interaction.

The expected **outcome** of the Project is to enhance the MIA and its sub-divisions capacities, equip them with instruments and tools to implement the sector reform agenda in line with the national priorities and international commitments improving the effectiveness in designing and implementation of policies addressing the needs of men and women in the Republic of Moldova.

2. Specific Context:

An analysis of the Ministry of Internal Affairs of the Republic of Moldova (MIA) over the past years showed an alarming situation especially regarding death rates among youth, caused by drowning in the aquatic areas of the country. According to the statistical data provided by MIA, the average trend on the annual number of drownings keeps rising during the last years.

A detailed analysis of drowning cases disaggregated by gender and age, shows that during the past two years, along with the overall ascending trend in the total number of drownings, a dramatical increase of drownings among females and minors was recorded. Thus, in **2015** there have been registered 144 cases, including 4 females and 14 minors, while in **2016** – their number increased to 185 cases, including 29 females and 23 minors. During the first six months of the **2017**, there drowned 8 females and 12 minors. According to recent global studies, Moldova ranks 44th out of 172 globally evaluated countries on cases of drowning.²

The situation is partially **affected** due to the **lack of an adequate policy and normative framework** on preventing drowning, of the preventive mechanisms, such as teaching swimming at schools or comprehensive awareness raising, and also there is no appropriate training facilities for rescuers and divers.

To address the issue of human security in general and of high incidence of human drownings, UNDP in partnership with the MIA, launched the project “**Strengthening capacities of the Ministry of Internal Affairs and its subdivisions for the effective implementation of the sector reform agenda**”. One of the components of the project aims at the establishment of a Training facility for rescues and divers by the refurbishment of the existing swimming training facility “Central Dinamo Sport Club” that belongs to the Ministry of Internal Affairs. The immediate task of the project is to reconstruct the MIA Dinamo Swimming Centre designated for life skills training for Specialized Public Institutions’ staff, as well as for the population in the vicinity. Additionally, the reconstructed swimming infrastructure must be able to host national swimming competition, accordingly to the International Swimming Federation (FINA) standards. The upgraded facility will offer better conditions for effective training courses and drowning cases simulation: first aid and rescue. It also will promote the swimming related sport activities. Besides enhancing MIA’s capacity, this activity will include clear benefits for youth, men and women belonging to vulnerable groups.

The modernization of the Dinamo Swimming Centre includes the reconstruction with the application of modern

² <http://www.worldlifeexpectancy.com/cause-of-death/drownings/by-country/>

technologies including the change of the filtration and treatment system. According to the modernization concept, it is proposed to repair the swimming pool using modern materials - stainless steel alloys (with the application of a waterproofing membrane), placed on a structure of metallic shells on the reinforced concrete walls of the pool. At the same time according to the conclusions and recommendations of the Technical Expert Report nr. 297-07-17/T of 22.08.2017, it is necessary to carry out some reinforcement of the technical basement. Along with the mentioned technical expertise, the UNDP Project has developed the detailed technical documentation and BoQ for the reconstruction of the Dinamo Swimming infrastructure (Annex 1 ~~and 2~~).

B. Scope of Works

UNDP seeks companies or a consortium of companies which have proven experience in carrying out construction/reconstruction works of swimming pool according to the FINA requirements and standards. The scope of works is to carry out dismantling works, reinforcement works, internal finishing works, installation of electrical systems, ventilation system, water treatment and distribution systems, stainless steel plating of existing concrete pool, land improvement, preliminary and final commissioning of one (1) infrastructural project situated in Chisinau, 23 Gheorghe Asachi Str.

Transportation of materials shall be the responsibility of Contractor. Residues formed as a result of civil works undertaken will be evacuated by the Contractor to authorized dumps.

Detailed technical specifications and BoQ for required works are described in Annexes 1-2 to the present Invitation to Bid. The Contractor shall furnish all labor, materials, equipment, supplies, transportation, machinery, tools and travel necessary to perform this contract and execute all the works in accordance with local and international standards and requirements in constructions.

It is envisaged that the works include the following activities:

- **Reconstruction works and installation of required equipment:** dismantling works, reinforcement works, internal finishing works, installation of electrical systems, ventilation system, water treatment and distribution systems, stainless steel plating of existing concrete pool, land improvement etc.
- **Commissioning** of all supplied systems, equipment, materials and construction works including making required training and performance test measurements.

The Contractor shall ensure that all construction and installation activities are implemented in accordance with the Bill of Quantities, FINA standards related to swimming infrastructure and local quality standards and requirements in constructions and are properly coordinated with representatives of building owners, local municipality, company which developed the Bill of Quantities exercising technical supervision role, and with UNDP Moldova representatives. Local authorities will assist the Contractor in obtaining and requesting approvals, as necessary.

• Sites

Item No.	Project's Name	Location	Contact Person
1	Reconstruction of Dinamo Swimming Centre	"Dinamo Central Sport Club", 23 Gh. Asachi., Chisinau, Moldova	Viorel Albu, Project Manager, viorel.albu@undp.org

Site visits: Bidders are recommended to visit and examine the Site and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract. Bidders should arrange site visits at their own cost and shall coordinate the site visits with the following contact person from UNDP: Viorel Albu, Project MIA Project Manager ().

C. Main Technical Requirements for Works and Specialized Equipment

General preparatory and reconstruction works

Under the current tender the following reconstruction works are proposed to be undertaken:

- Reconstruction and reinforcement works of the technical room for water treatment system (BoQ 2-2);
- Reinforcement works of swimming pool (BoQ 2-3);
- Ventilation System (BoQ 2-4);
- Internal Power Supply System (BoQ 4-1);
- External power supply and lighting system (4-2);
- Land Improvement Works (BoQ 7-1), as well as
- Water Treatment and Distribution Systems and stainless steel plating of existing concrete pool (BoQ 2-1).

The detailed Bill of Quantities and Technical drawings are attached as separate files to the tender announcement.

All technical solutions and works will be performed in line with the technical documentation no. RFQ17-01598, developed by „APCAN Project“ S.R.L. Company, License A MMII 037397 of 25.05.2011; the Technical Specifications announced for this tender, as well as local normative documents: NCM G.03.02:2015 "External sewerage networks and installations"; СНиП 3.02.01-87 "Constructions in the ground, foundations and basement "; СНиП II-89-80 "General plans for industrial enterprises "; СНиП III-4-80 "Labor security in constructions ".

Pool technology requirements

1.1. Pool walls and overflow gutters

Modular panels (max. width 900 mm) made of stainless steel AISI 441 (1.4509; X2CrTiNb18) laminated with hard PVC. In-factory lamination and prefabrication process accordingly to EN 1993 Eurocode 3, EN ISO 9227, EN 15836. Lamination of steel panels on site not allowed.

~~Construction is bolted, self-supporting and complete with~~ All necessary support and reinforcement profiles, made of AISI 470 (1.4613; X2CrTi24). Steel welding on site not allowed.

~~Pool access ladders and safety step shall be integrated into the wall steel panels and be compliant to EN-13451 standard. Protruding steps and/or ladders not allowed.~~

Track Start starting blocks: EN 13451-1:2016, EN 13451-04:2014, FINA Handbook 2013-2017 FR 2.7.

Octagonal starting blocks in AISI 316 L stainless steel with blue antislip treatment

~~Finnish type overflow gutter on 100% of pool perimeter, max. 3 rows of ceramic tiles on top, the first tile with integrated handgrip, tiles slope 5°. Gutter walk-on grid, 25 cm wide, easily detachable for gutter inspection and cleaning. Gutter grid upper surface rated non-slip Class 'C'.~~

All fixing devices, such as anchors for equipment, handgrips, etc. anchored inside the overflow gutter. Anchoring into concrete pool deck not allowed.

~~All hydraulic devices (water inlets and dropouts) installed within the modular wall and gutter system. Floor inlets not allowed.~~

Gutter drains installed within the gutter system. Water inlets installed on the pool floor

~~Pool construction shall provide a system to allow connection of pool deck waterproofing layer.~~

1.2. Pool floor

Concrete floor built by main construction company, according to geometrical and tolerance indications of pool supplier. Waterproofing by special, double layer, reinforced PVC membrane **of minimum 2 mm thick** with a special surface coating preserving the original colour for at least 5 years, installed and connected to pool walls

and bottom drains by pool supplier. **Compliant to EN 15836**

~~Pool construction technology and relevant accessories have to be compliant to FINA and European standards EN 15836.~~

Pool colour has to be light blue for **wall stainless steel panels and floor reinforced PVC membrane** ~~all-steel (walls and gutter) and concrete (floor) surfaces, except those covered by tiles (if any).~~ The ~~cooler~~ **colour** of the pool must be additionally coordinated with the beneficiary prior installation.

Water distribution system technology requirements

All items of the water distribution system in contact with the pool tank (walls, floor, gutters) described below shall be compliant to European Union standards EN 13451-1 to 11 (Swimming pool equipment. General safety requirements and test methods) norm.

1.3. Inlet system

Floor Inlets with Radial Distribution accordingly to EN 13451-1:2011 paragraphs 4.4.1, 4.5, 4.6, 4.7, 4.9, 4.11, 6.1, 6.2, EN 13451-3:2013 paragraphs 4.3, 4.6.1. Supplied inlet system has to be implemented in a way to fulfil simultaneously both of the following conditions:

- ~~a) —Pass the dye test according to EN 15288 —part 2 (Safety requirements for operation);~~
- b) Avoid formation of streams or currents inside each lane, which exceed the limit values allowed by FINA FR 2.12 at latest revision at order date.

On request, supplier has to prove correct the system according to points 3.1a and 3.1b by means of an appropriate simulation program (3D computational fluid dynamics).

1.4. Outlet system

~~Water collection from pool has to be done exclusively by means of overflow gutters. Gutter shape has to provide an inclined (min. 12° to the vertical) water flowing surface, in order to reduce turbulences and related release of trichloramines into the air.~~ **Outlet system shall be integrated into the overflow gutter of the pool** Dropouts shall be implemented in suitable number and size, in order to prevent overflow gutters to fill up more than 75 % of their depth. ~~Dropouts shall be equipped with special silencers, in order to reduce water flow noise below 60 dB(A) when measured according to ISO 3744 at 0.5 m of distance from the noise source [with class 1 measurement devices, according to EN 60651 and EN 60804].~~

1.5. Drainage system

Bottom Drain system has to be compliant to EN 13451-1 paragraphs 4.4.1, 4.5, 4.6, 4.7, 4.8.3, 4.9, 4.11, 6.1, 6.2, EN 13451-3 2001 paragraph 4.3, EN 13451-3-2012 paragraph 4.6.2;

Water treatment system requirements:

1.6. Filtration system

Sand or regenerated media filtration systems, manual or automatic, are accepted as long as the min. recirculation times foreseen by national rules are respected and volumetric water flow on each inlet nozzle is perfectly balanced.

1.7. Disinfection system

The system shall be suitable to allow the measurement of chemical parameters of pool water (pH and free chlorine) and automatic dosing of chemicals (acid and chlorine). It shall be completely pre-mounted on a panel and include:

- A controller indicating values on an alphanumeric backlit LCD display in the pre-set operating language to

facilitate the use during both operating and programming. Keyboard easy to use, the controller shall be connectable via modem to a dedicated web site to display the operating parameters of the pool.

- A pH sensor, gel filled, non-rechargeable, with glass shaft and ceramic diaphragm; 120 mm installation length, with SN6 plug-in head and internal thread PG 13.5; Measuring range: 2...12. Temperature range: 0 ... 60 ° C. Working pressure up to 3 bars.
- An amperometric sensor for selective measurement of free chlorine in water. The sensor allows the measuring of organic chlorine-based disinfectants, e.g. cyanuric acid derivatives. The sensor shall be equipped with automatic temperature compensation.
- An in-line probe housing in transparent PVC with Viton® seals and fittings, or equal, for 8 x 5 pipe, wall mounting, flow control sensor included.
- No. 1 solenoid diaphragm chlorine dosing pump, controlled by a microprocessor. Warning lights for operation and empty/fault signal. Complete with suction lance with one-stage level switch and dosing valve; bleed valve. Flow rate 8 l/h, max backpressure 3 bar.
- No. 1 solenoid diaphragm acid dosing pump, with the same characteristics as above. Flow rate 4 l/h, maximum backpressure 7 bar.
- Power supply: 230V AC, 50 Hz.
- Min. set of accessories should include:
 - 2 dosing valves in PVC/Viton® thread ½", or equal.
 - 10 mt. of discharge pipe with special connector 10x4 in PVC.
 - 10 mt. pipe 8x5 in PE for sample water connection.
 - 2 suction lances 8x5 PVC suitable for the tanks of 100 – 500 Lt.
 - 2 buffer solution (pH4, pH7) for calibrating of the pH sensor.
 - electrolyte gel for chlorine sensor.
 - wall plugs.

1.8. Pumping system

Pumps and pre-filters shall be suitable to operate with chlorinated pool water. At least one spare pump shall be provided in addition to the operating pumps.

D. Management arrangements

Each construction project will be monitored by the designated UNDP Engineer, who will carry out systematic monitoring site visits. Additionally, UNDP has contracted a Company which will undertake technical supervision to monitor daily construction activities.

E. Training

The Contractor will be in charge of line testing and demonstration of equipment performance indicated in the bid. The Contractor should plan and deliver, at his own cost, an on-site training for the staff (maximum 5 persons). It will also provide phone consultations for 30 calendar days from the final receipt date. During this period, at the request of the beneficiary, the contractor will, if necessary, ensure at least 2 on-site visits to provide the necessary consultations. The training should be provided in Romanian (or Russian where required) language or with interpretation in Romanian, if applicable. The training should include a maximum of 8 hours of basic training regarding the overall functionality, key system controls, maintenance requirements, safety standards, etc.

I. Implementation Timeframe and Required Deliverables

The overall term of execution of works in the Contract is spread over **100 calendar days**, effective from Contract signature date. The Contractor shall have all required tasks completed and approved by Engineer before/ by the last

calendar day of the contract period. The following is the list of required key deliverables:

	Deliverables	Timeframe
1	Accomplishment all preparatory equipment's pre-installation reconstruction works included in (BoQ chapters nr. 2-2; 2-3; 2-4; 4-1; 4-3).	within 40 calendar days from contract signature.
2	Accomplishment of all equipment installation and testing works included in BoQ chapter nr. 2-1: Pool technology, water treatment and distribution systems.	within 70 calendar days from contract signature.
3	Accomplishment of land improvement works, and external power supply and external lighting system, accordingly to the BoQ chapter nr. 4-2 and 7-1.	within 85 calendar days from contract signature.
4	Preliminary Commissioning at the stage of works finishing.	within 90 calendar days from contract signature.
5	Final Commissioning of construction works, including training of end users.	within 100 calendar days from contract signature.

F. Commissioning works

After all construction works are finished, the equipment is properly installed and tested, the preliminary and final commissioning committee shall be convened. The responsibility for the organization of commissioning committees belongs to beneficiary institution and designated technical supervisor. The responsibility of the contracted company is to provide all necessary documentation.

G. Warranty Period

The Warranty period on works shall commence upon the Take Over and last minimum 36 (thirty-six) month.

The equipment shall be covered by at least 60 (sixty) months warranty. In the event that any part is repaired and/or replaced within warranty period, for that single part new 36-month warranty period starts from the date of repair/replacement. However, the overall duration of warranty shall be limited to maximum 60 months in total for parts that are being replaced or repaired, counted from date of the Take Over. The required warranty on stainless steel alloys is minimum 10 years.

4. All other terms and conditions of the solicitation documents, except as amended herein, shall remain unchanged and shall continue in full force and effect.