**TERMS OF REFERENCE**

**Preparation of main project designs for kindergartens in Gostivar, Karposh 1, Karposh 2 and Probishtip**

1. **BACKGROUND**

The Government of the Republic of North Macedonia (GOM) and the International Bank for Reconstruction and Development signed a loan for implementing the Macedonia Social Services Improvement Project (SSIP).

The SSIP development objective is to expand access to and improve the quality of social services, including preschool services, for vulnerable groups.

The [Social Services Improvement Project](http://projects.worldbank.org/P162246?lang=en) will help address the challenges that are particularly associated with social exclusion of vulnerable groups and the low quality and fragmentation of Early Childhood Education and Care (ECEC) and social services.

The project will contribute to the GoM’s ultimate objectives of alleviating poverty and enhancing human capital by strengthening the overall social protection delivery system and access to services by existing social assistance recipients and other vulnerable groups. Also the Project shall help alleviating poverty and enhancing human capital by investing in quality early learning for preschool children and their families and by supporting the transition into primary education.

1. **GENERAL OBJECTIVE**

The objective of this assignment is to design contemporary kindergartens efficient on all levels from pedagogy to energy use, cost efficiency, optimized and effective space that will incorporate contemporary elements and introduce a new model of kindergartens in the Republic of North Macedonia. The main focus shall be on the good design, since the design is essential, as the better the design is, the better are the living, working and learning conditions in the kindergarten. Good design does not only support but also boosts the education and children’s development providing a spatial frame for their new life experiences and skills.

The new kindergartens will focus on kids’ areas and active spaces. 80% of the kindergarten space will consist of areas that kids can use freely without physical barriers. With increased playroom surfaces, as that is the immediate space the kids use, the communication areas should be optimized and the shape of the building should be compact and kept as simple as possible in order to reduce the surface of the façade. The design is encouraged to include the corridors and common spaces into the learning and playing activities of the children, especially to be designed in a way that the kids can use them for physical activities and encourage the children to walk or run a bigger distance during the day.

The building itself should be energy efficient and make use of the newest technology and materials that enable a friendly environment for children, are natural and healthy and diminish the loss of energy and cost expenses.

1. **SCOPE OF WORK**

Preparation of four main project designs for additional capacities (extensions) in the existing kindergartens of the municipalities of Gostivar, Karposh (two projects) and Probishtip

The project designs that shall be prepared under this assignment are for building additional capacities in existing kindergartens. The Consultant shall be given detailed program design for each kindergarten that will define the content, the structure, the capacity and the location.

1. Kindergarten extension in the municipality of Gostivar:

The extension of the kindergarten is planned to be on one level (ground level) with the capacity of minimum 4 playrooms, communications, shared spaces, administrative, technical and utility premises with the maximum building surface of 500m2. The total surface of the plot is 4543m2. The capacity of the kindergarten should be for minimum 60 children.

1. Kindergarten in the municipality of Karposh (project 1):

The addition of the existing kindergarten is planned to be a second floor to the existing building.

The addition should be with the capacity of minimum two playrooms, communications, with the minimum building surface of 200m2 according to the legislation. The total surface of the plot is 3429 m2. The capacity of the kindergarten should be for minimum 40 children.

1. Kindergarten in the municipality of Karposh (project 2):

The kindergarten is planned to be an extension on one level (ground level) with the capacity of minimum 2 playrooms, communications, with the maximum building surface 300m2 according to the legislation. The total surface of the plot is 8000m2. The capacity of the kindergarten should be for minimum 40 children.

1. Kindergarten in the municipality of Probishtip:

The extension of the kindergarten is planned to be on one level (ground level) with the capacity of minimum 6 playrooms, communications, sensory room, minimal administrative, technical and utility premises with the maximum building surface 600m2. The total surface of the plot is 8022m2. The capacity of the kindergarten should be for minimum 80 children. Additionally to the new extension, a project for renovation of the existing kitchen and dining room should be included with the total of 100m2.

1. The main project shall contain the following project phases:
2. Main project for architecture
3. Main project for structure (including Geo-mechanical report and Report on seismic parameters and for the Project –Karposh 1 all required pre-analysis for the additional structure)
4. Main project for sewage and plumbing
5. Main project electrical installations
6. Main project mechanical installations
7. Project for protection during work
8. Fire protection project
9. Project for energy efficiency
10. Project for landscape design
11. Bill of quantities for construction works (all project phases)
12. Expert opinion on design degree of mechanical resistance, stability and seismic protection
13. Each project phase shall include the following project parts:
* Technical description
* Situation
* Floor plans
* Roof plan
* Playground plan
* Sections
* Elevations
* Façade details
* Roof details
* Scheme of carpentry
* Bill of quantities with estimated cost

The company that will be assigned for this project shall initiate and complete the procedure for obtaining a Expert opinion on design degree of mechanical resistance, stability and seismic protection from the Institute of earthquake engineering and engineering seismology.

The design of extensions, upgrades and reconstructions in Republic of North Macedonia is defined by the law for Construction (article 2, section 7, article 4 and article 63, Official Gazette of N. Macedonia 70/13) and the Rulebook for technical regulations for the construction of buildings in seismic areas (PIOVS, Official Gazette of N. Macedonia 31/81, defined in the article 115a Official Gazette of N. Macedonia 21/88)Prior to the start of the design process, the designer is obliged to determine if with the planned upgrade, extension or reconstruction there will be significant changes in terms of the regulations in article 115a, which implies that the following activities must be taken:

* Visual examination and getting to know the basic data of the building (period of construction, availability of existing technical documentation from the initial design, construction and the additional interventions on the building, identification of the main structure system
* inspection of the constructive elements in terms of possible structural damages
* Estimated load analyses and estimation of the mass and surface of the existing building
* Estimated load analyses and estimation of the mass and surface of the planned building (extension, upgrade or reconstruction)

if during the process the designer determines that there are not going to be significant structural changes in terms of article 115a, the subject of the structural and seismic analyses will be only the new planned building (extension, upgrade), but with the entry seismic force counted for the new planned state of the building (with the additional number of floors and mass). The designer needs to plan the solution for the connecting parts of the new building with the existing one, implementing the results of the above mentioned analyses. The Consultant is supposed to inform the investor and the future users of the building that with these interventions the current seismic stability shall not be jeopardized. If the designer reaches the conclusion that changes in terms of article 115a are inevitable, the current building shall be taken into consideration for the structural and seismic analyses which implies:

* Detailed documenting of the existing building with making of a technical documentation if the original one is not available
* Identification of the main structural system with all the required dimensions of the structural elements
* Analyses and estimation of the characteristics (quality and quantity) of the built in materials.
* Analyses of the construction of the existing building with the new plannes section as an integral whole for gravitational and seismic influences.

If the above mentioned analyses doesn’t prove that the building can meet the criteria for a seismic resistant structure, the new planned building (extensions, upgrade), should be planned with a structural reinforcement of the existing structure of the building, so that the building as a whole will meet the criteria according to the PIOVS and the Regulations for sanation and reinforcement of buildings (Official Gazette of N. Macedonia n. 52/85). The designer is obliged to design and control the solution for implementation of the structural elements for reinforcement and their connection with the elements of the existing building, incorporated the assumptions made in the analyses.

When submitting the technical documentation to the Institute of Earthquake Engineering and Engineering Seismology the designer should submit all of the above mentioned analyses, proofs and technical documentation in order for the building to obtain an Expert opinion on design degree of mechanical resistance, stability and seismic protection.

1. The complete project design should focus on the following:
2. Spaces for children by age group:

- playrooms

- wardrobes

- toilets

- open area playroom – balconies for each playroom

The playrooms in the kindergarten should be grouped and aligned next to each other with the best possible orientation on the plot. For optimization of the space, the toilets can be shared between two playrooms. The playrooms should be designed in a way that they can be connected with the use of sliding doors that can form a bigger space that can be used as a multifunctional space.

The playrooms for children for ages 0-2 years must contain a wardrobe space for changing of clothes that will be used as a filter space from the clean playroom floor to the hallway for visitors. The balconies are envisioned as an extension of the playroom towards the outside of the yard.

1. Spaces for communication

The communication spaces (hallways and corridors that the children are using) should be an extension of the playrooms and also made suitable for children’s play. They should be optimized and without any physical barriers that obstruct the movement.

1. Administrative premises and staff rooms

The administrative premises are defined by the type of the kindergarten, they should be multiuse and located in the part of the building where they won’t take out of the luminous sides of the building that are best for the playroom orientation. The administrative premises should have a separate entrance for the staff. Since there already are existing kindergartens, the administrative premises shall be designed only in the case if the existing facility has a lack of the premises or the existing ones don’t have the capacity to serve the extension.

1. Economic-technical premises

Similar to the administrative premises, the economic and technical premises depend on the type of the kindergarten and should be placed in the basement level if any, combined by similarity and usage and with a separate entrance for the staff. Since there already are existing kindergartens, the economic - technical premises shall be designed only in the case if the existing facility has a lack of the premises or the existing ones don’t have the capacity to serve the extension.

1. Active façade elements:

The active facade should encourage physical activities and creative learning made out of natural materials that are intuitive and tactile, suitable for encouraging well as group activities. The activities considered should be ropes for climbing, hiding places, climbing walls (integrated on the façade or elements of the building), drawing boards (integrated on the façade of the building).

1. **REQUIRED QUALIFICATIONS**
2. **The consultant firm shall posses the following relevant qualification (short listing qualifications)**
3. License B for preparation of designs in accordance with the Construction Law of the Republic of North Macedonia. In a case of Joint Venture this qualification criteria must be met by all partners of the Joint Venture
4. ISO 9001 Certification. In a case of Joint Venture this qualification criteria must be met by the Leading partner of the Joint Venture
5. ISO 14001 Certification. In a case of Joint Venture this qualification criteria must be met by the Leading partner of the Joint Venture
6. The consultant should have performed at least three assignments in the past five years, similar to the one described in the specific request for expression of interest (name of the assignment, description, duration, contract amount, reference). The list shall be supported with certificates on fulfilled contract obligations. In a case of Joint Venture (JV) the qualifications of the JV partners will be cumulated, and the fulfilment of this criteria will be determined if the Leading partner has successfully completed at least one (1) similar contract
7. The Consultant company must provide documentary evidence that has been in its current form of business, for at least three years prior the date of issuing of this invitation for expression of interest. In a case of Joint Venture this qualification criteria must be met by all partners of the Joint Venture
8. **The Consultant company shall be excluded from the contract award procedure, provided that (the selected consultant shall provide relevant evidence for this requirements):**
	* is a under a bankruptcy or liquidation procedure;
	* has unpaid taxes, contributions or other public duties, unless has received approval for delayed payment of taxes, contributions or other public duties, in accordance with the special regulations and pays them on regular basis;
	* has been imposed a secondary sentence prohibition on participation in open call procedures, awarding public procurement contracts and contracts for public private partnership;
	* has been imposed a secondary sentence temporary or permanent prohibition on performing a certain activity;
	* is being pronounced a misdemeanor sanction prohibition on practicing profession, performing activity or duty, i.e. temporary prohibition for performing a particular activity, or
* it has been announced, in the last 5 years, effective court decision for participation in criminal organization, corruption, fraud or money laundering;

In a case of Joint Venture this qualification criteria must be met by all partners of the Joint Venture

1. **The Consultant must provide at least the following technical expert staff for completing the assignment:**

To have employed (formally full time employed) for at least 6 months prior to the publishing the Invitation for expression of interest for the services to be done, at least 4 employees/technical expert staff, i.e. minimum 1 for each of the following positions

1. Civil engineer (minimum qualifications):
* Bachelors Degree in Civil engineering;
* At least 5 years of professional experience in preparation of designs;
* Valid Authorization B for preparation of designs issued by the Chamber of authorized architects and authorized civil engineers of the Republic of North Macedonia;
1. Architect (minimum qualifications):
* Bachelors Degree in Architecture;
* At least 5 years of professional experience in preparation of designs
* Valid Authorization B for preparation of designs issued by the Chamber of authorized architects and authorized civil engineers of the Republic of North Macedonia;
1. Mechanical Engineer (minimum qualifications):
* Bachelors Degree in Mechanical engineering;
* At least 5 years of professional experience in preparation of designs
* Valid Authorization B for preparation of designs issued by the Chamber of authorized architects and authorized civil engineers of the Republic of Macedonia;
1. Electrical Engineer (minimum qualifications):
* Bachelors Degree in Electrical engineering;,
* At least 5 years of professional experience in preparation of designs
* Valid Authorization B for preparation of designs issued by the Chamber of authorized architects and authorized civil engineers of the Republic of North Macedonia;

in addition to the above listed key experts the company must have employed or contracted at least 1 Environmental engineer with the following qualifications

1. Environmental Engineer
* Bachelors Degree in technical sciences,
* At least 5 years of professional experience in the environmental protection area
* Valid Certificate for environmental impact assessment expert issued by the Ministry of environment and physical planning or Authorization B (or A) for environmental aspects issued by the Chamber of authorized architects and authorized civil engineers of the Republic of North Macedonia;

 At least one of the 5 key experts listed above must have valid Authorization B for preparation of energy efficient designs issued by the Chamber of authorized architects and authorized civil engineers of the Republic of Macedonia;

In a case of Joint Venture (JV) the qualifications of the JV partners will be cumulated.

1. **REPORTING OBLIGATIONS**

The Consultant must prepare and deliver the following outputs in Macedonian language:

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| --- | --- | --- |
| ***No*** | ***Name of the report*** | ***Deadline for submission*** |
| 1 | Main project design for kindergarten in Gostivar . 1. Main project for architecture
2. Main project for structure (including Geo-mechanical report and Report on seismic parameters)
3. Main project for sewage and plumbing
4. Main project electrical installations
5. Main project mechanical installations
6. Project for protection during work
7. Fire protection project
8. Project for energy efficiency
9. Project for landscape design
10. Bill of quantities for construction works (all project phases)
11. Expert opinion on design degree of mechanical resistance, stability and seismic protection
 | 40 calendar days from the date of the delivery of the detailed program design specification |
| 2 | Main project designs for kindergarten in Karposh (project 1). 1. Main project for architecture
2. Main project for structure (including Geo-mechanical report, Report on seismic parameters and all required pre-analysis for the additional structure )
3. Main project for sewage and plumbing
4. Main project electrical installations
5. Main project mechanical installations
6. Project for protection during work
7. Fire protection project
8. Project for energy efficiency
9. Project for landscape design
10. Bill of quantities for construction works (all project phases)
11. Expert opinion on design degree of mechanical resistance, stability and seismic protection
 | 50 calendar days from the date of the delivery of the detailed program design specification |
| 3 | Main project design for kindergarten in Karposh (project 2). 1. Main project for architecture
2. Main project for structure (including Geo-mechanical report and Report on seismic parameters)
3. Main project for sewage and plumbing
4. Main project electrical installations
5. Main project mechanical installations
6. Project for protection during work
7. Fire protection project
8. Project for energy efficiency
9. Project for landscape design
10. Bill of quantities for construction works (all project phases)
11. Expert opinion on design degree of mechanical resistance, stability and seismic protection
 | 60 calendar days from the date of the delivery of the detailed program design specification |
| 4 | Main project design for kindergarten Probishtip . 1. Main project for architecture
2. Main project for structure (including Geo-mechanical report and Report on seismic parameters)
3. Main project for sewage and plumbing
4. Main project electrical installations
5. Main project mechanical installations
6. Project for protection during work
7. Fire protection project
8. Project for energy efficiency
9. Project for landscape design
10. Bill of quantities for construction works (all project phases)
11. Expert opinion on design degree of mechanical resistance, stability and seismic protection
 | 50 calendar days from the date of the delivery of the detailed program design specification |

All drawings necessary for structures of such kind, as prescribed by the law of the Republic of Macedonia need to be prepared. During the preparation of the main project it is necessary for the designer to apply all the applicable regulations and standards for phase architecture, statics, plumbing and sewerage, electricity and phase thermo mechanics and necessary elaborates according to the law of the Republic of Macedonia

The consultant shall consult the SSIP Project Architects during the entire process of project preparation, and after each phase shall request approval for continuing with the design process

All the outputs prepared must be in accordance to the:

* Rulebook on the content of the project, marking the project, the method of verification of the project by responsible persons and how to use electronic records (Official Gazette of the Republic of Macedonia, No. 24, published 25.02.2011)
* Law for construction (Official Gazette of the Republic of Macedonia, No. 130/09, published 28.10.2009)
* Rulebook for standards and norms regarding the functioning of kindergartens/preschool centers (Official Gazette of the Republic of Macedonia, No. 28, published 06.02.2014)
* *”*Design Guidelines “Design guidelines for new kindergartens” and “Reconstruction and renovation guidelines” by Architect Dr. Jure Kotnik (Shall be given to the selected Constant)
* All other relevant Law regulations
1. **DURATION OF THE ASSIGNMENT**

The expected duration of the assignment is 3 months. The planned commencement of the assignment is August 2019 and  the planned completion is November 2019.

1. **SELECTION METHOD AND CONTRACT**

The selection method is “Consultant’s Qualifications Based Selection” and the contract shall be Time Based according to the World Bank Procurement Regulations for Investment Project Financing (IPF) Borrowers – Procurement in IPF of Goods, Works, Non‐Consulting and Consulting Services, (Regulations) issued in July 2016, revised November 2017., [www.worldbank.org](http://www.worldbank.org/).