Provision of Technical Documentation for reconstruction of Vranje Hospital Wards

I. Background:

European PROGRES is a multi-donor Programme, financed by the European Union (EU), the Government of Switzerland and the Government of Serbia, designed to support sustainable development in the South East and South West Serbia. The Programme has been conceptualised jointly with the European Integration Office of the Government of the Republic of Serbia (SEIO), which has responsibility for monitoring implementation and providing assistance and facilitation. The United Nations Office for Project Services (UNOPS) has been granted with an initial budget of 17.46 million Euros and has the overall responsibility for the Programme implementation.

Through a multi-sector approach this Programme will contribute to sustainable development of underdeveloped areas and creation of more favorable environment for infrastructure and business growth by strengthening local governance, improving vertical coordination, planning and management capacities, improving business environment and development, as well as enhancing implementation of social inclusion and employment policies.

The Programme works towards achieving four main results, while good governance principles are interwoven as a cross cutting aspect of the entire intervention:

1. Strengthened local governance, planning and management capacities through introduction of new, or improvement/elimination of existing procedures and processes in line with the principles of good governance
2. Increased competitiveness of local economy through improved business environment and management/organizational capacities of small and medium enterprises/agricultural cooperatives
3. Improved access to employment, offering equal opportunities to both men and women, and social inclusion of most vulnerable and marginalised groups through development and implementation of local policies resulting in reduced migration from South East and South West Serbia
4. Effects of Serbia's European accession communicated to general public.

Final beneficiaries, but also the key stakeholders and financial contributors of this Programme are 34 municipalities from the third and fourth group of development level , which have responsibility of taking ownership of activities implemented in their territory:

- Novi Pazar, Ivanjica, Nova Varoš, Priboj, Prijepolje, Raška, Sjenica and Tutin, in the South West Serbia
- Prokuplje, Blace, Žitorađa, Kuršumlija in the Toplica District
- Leskovac, Bojnik, Vlasotince, Lebane, Medveđa and Crna Trava in the Jablanica District
- Vranje, Bosilegrad, Bujanovac, Vladičin Han, Preševo, Surdulica and Trgovište in the Pčinja District
- Brus in Rasinska District
- Aleksinac, Gadžin Han, Doljevac, Merošina and Svrljig in Niški District
- Babušnica, Bela Palanka in Pirotski District
- Knjaževac in Zaječarski District.

Other beneficiaries include municipality-founded institutions and public utility companies, civil society organisations (CSO) and media in the participating municipalities. It is the inhabitants of the South East and South West Serbia who will feel the biggest benefits of the Programme.

II. Justification

European PROGRES is implementing project Development of technical documentation for the reconstruction of Vranje hospital board based on the approval of programme Steering Committee on the meeting held in Kuršumlija on 16 May 2017.

III. Scope of obligations

The design company will, under the direct supervision of European PROGRES Engineer and overall supervision of European PROGRES Infrastructure Sector Manager, work on the development of the technical documentation for the reconstruction of Vranje Hospital wards functionally connected with the Surgery block that is under construction.

The company selected to develop technical documentation will ensure that all legal and technical aspects required by the Law, relevant Bylaws and Regulations for this type of the buildings are respected.

The Designer will produce:

1. Concept Solution based on the detailed analyses of the existing preliminary solution and functional plan, developed in 2005, as part of the documentation for the total reconstruction of Vranje General Hospital. The Concept Solution must include all necessary changes in the plans from 2005, which the Designer will identify during the inception period.
2. Design for the building permit (all required books)
3. Detailed Design for the execution of works (all required books)

The purpose and the general contents of technical documentation for each of the aforementioned stages is defined by Rulebook on contents, procedure and manner of inspection of technical documentations by class and purpose of facility ("The Official Gazette of the Republic of Serbia", No. 23/2015 published on 2nd March 2015) and Rulebook on amendments and additions to the Rulebook on contents, procedure and manner of inspection of technical documentations by class and purpose of facility (published in "The Official Gazette of the Republic of Serbia", No бр.77/2015 on 9th September 2015, which came into effect on 10th of September2015) – hereinafter the Rulebook.

The location conditions and building permit will be issued by the urban planning department of Vranje local self-government. The Designer will need to prepare and coordinate with Vranje urban department all required documentation for issuing of the planning conditions and permits, as per unified procedure.

The purpose of the preparation of technical documentation is creating technical pre-conditions for issuing the building permit, as well as preparation of all technical documentation that will enable beneficiary – Vranje Health Centre to execute the works in phases upon securing the funds.

Documentation Available to the Designer:

1. Cadastre – topographic plan from 2015
2. Concept Solution of the reconstruction of Vranje General Hospital developed in period between 2004 and 2005.
3. Functional Plan for the reconstruction of Hospital in stages
4. Main design for the construction of the Surgery block

1. Concept Solution based on the detailed analyses of the existing preliminary solution

Vranje General Hospital spatial arrangements and its functioning was analysed in details in the period between 2004 and 2005. The analyses included all aspects of the functioning of the Hospital with special attention on the additional Surgery block that was at that time planned for the construction. The technical documentation for the Surgery block is developed to the level of the Main Design (as envisaged by the Law on planning and construction from that period) and the building permit was issued. The

construction of the Surgery block started in 2006 and stopped in 2012, due to lack of funds. Approximately 65% of the works are finished.

As part of the design for the Surgery block, all other functionally connected hospital wards have been analysed at the time and the preliminary solution with functional plan have been developed. These documents need to be analysed in details and new updated Concept Solution needs to be developed, incorporating all that has changed in the meantime.

The new Concept Solution must be prepared on the level that will enable urban planning department in Vranje City administration to issue the Location conditions.

Draft of the new Concept Solution will be presented by the designer to the client (UNOPS European PROGRES), investor (Vranje Health Centre), Ministry of Health, representatives of the local self-government (urban planning department) prior to finalization.

Final version of the adopted Concept Solution will be submitted for the issuance of the Location conditions.

The Concept design needs to be prepared for the following hospital wards:

a. Gynaecology (built in 1978)
b. Ophthalmology, Urology, Orthopaedics, Physical therapy (built in 1972)
c. Internal, Laboratory and X-ray (built in 1964)
d. Infective, Thorax (built 1975)
e. New entrance in the Hospital defined in the existing preliminary solution

The approximate area of all hospital wards is 8.600m2.

Integral part of the Concept design will be the external landscaping, access roads and utility infrastructure solutions for the new complex, based on earlier developed preliminary solution, including updates according to the current status. The size of the external area is approximately 20,000 m^2 including buildings.

Based on the adopted/agreed Concept Design, Vranje Heath Centre will, as the investor, authorise the designer to submit the request for the issuance the Location conditions electronically, to urban planning department of Vranje City administration, through the unified procedure in accordance with “The Official Gazette of the Republic of Serbia”, No.113 dated on 30 December 2015.

2. Design for the building permit

The design for building permit should be developed to the level of detail and content required for acquiring of the building permit. Designs for building permit should contain appropriate analyses of validity and accuracy of technical and technological solutions for the facility and the construction solution of the facility; stability and safety; rationality of the project materials; effect on the environment and the adjacent facilities.

In accordance with the Law on Planning and Construction, the designs for the building permit are subject to technical control, which will be contracted separately.

3. Design for the execution of works

The design for the execution of works should contain all details and calculations necessary for the execution of works, shop drawings, detailed BoQ and technical specifications for all groups of works as per the Rulebook.

3.1. Plans and Elaborates

a. Updated Cadastre – topographic plan (KTP)

Existing KTP is issued in 2015. New KTP needs to be prepared for the purpose of issuance of the Location conditions and later Building permit

b. Energy Efficiency Elaborate

Elaborate for Energy Efficiency needs to be prepared according to the Bylaw on Energy Efficiency of the buildings (“Official Gazette” of the Republic of Serbia no. 61/2011) for all buildings that will be subject to this design. All energy efficiency aspects need to be incorporated in order to reduce energy consumption. Initially, current status of the buildings

need to be surveyed and existing energy efficiency class to be determined. The Elaborate should identify energy efficiency measures that will be incorporated in other parts of the design – architecture, installations …

3.2. Designs for the execution of works

All designs must contain the following four sections:

1. General documentation
2. Textual documentation
3. Numeric documentation
4. Graphic documentation

Technical documentation must contain the following designs:

1. **Architectural design** with special attention on:
   a. Detailed survey of the existing status of the building including roof and roof elements, facade and internal walls, joinery, toilet blocks, floors
   b. Blueprints of the layouts, cross-sections and facades with demolition-construction plan as the separate drawings
   c. Incorporation of the Energy Efficiency measures in the architectural design – replacement of the joinery, façade insulation, roof insulation …
2. **Construction design with special attention and calculations for the stability of the construction elements**
   a. Detailed survey of the existing status of the building in terms of the stability of the construction
   b. Construction measures to secure future stability of the buildings
   c. Additional construction elements (new roof, additional building elements …) according to the adopted Concept Solution and architectural details
3. **Water and sewerage installations design**
   a. Detailed survey of the existing status of the installations
   b. Design for the reconstruction/potential relocation of the installations according to the new architecture solution
   c. Design for the central hot water installation
   d. Design of the hydrant installations
4. **Electrical design**
   a. Detailed survey of the existing status of the installations
   b. Design for the reconstruction/potential relocation of the installations according to the new architecture solution
5. **Telecommunications and signal installations design**
   a. Detailed design of the installation of the medical sets over the hospital beds according to the layouts defined in the architecture solution and the equipment layouts
   b. Low voltage installation design– Local Area Network (LAN), telephone installation, back-up installation to enable hospital work on power supply cuts (UPS)
   c. Video surveillance with interphones design
   d. Fire signalization installations design
6. **Mechanical installations design**
   a. Detailed survey of the existing status of the installations – heating system and medical gases
   b. Design for the reconstruction/potential relocation of the installations of the heating system- and installation of the medical gases according to the new architecture solution
   e. Design for the reconstruction of the boiler room
   f. Design for the reconstruction/modernisation of 4 (four) elevators in accordance with the regulation for the medical facilities

7. **Design for the equipment and furniture**

a. Detailed analyses of the needs of each of the hospital ward planned for the reconstruction.

b. Definition of the adequate equipment for each ward in close cooperation with the representatives of the user – Vranje General Hospital in accordance with directives from the Ministry of Health of the Republic of Serbia

c. Detailed layouts of the positions of the defined equipment in accordance with the adopted architectural solution and the designs of the installations

d. Detailed description of the defined equipment stating always technical characteristics. The definition of the brands must be avoided and brands can be stated only in exception bases, such as cases of monopoly on the market or synchronisation with the existing equipment, in which case this should be clearly stated and justified in the technical specifications and BoQs.

8. **Marking and labelling design**

a. Detailed analyses of the allocation and purpose of rooms and areas in all wards and adequate marking. The marking must be developed in accordance with the adopted architectural solution. The marking must be self-explanatory, developed by the Hospital standards, enabling efficient usage of the hospital wards for medical staff, general staff and patients.

b. Potential power supply for the marking must be harmonised with the design of the electro installations

9. **Fire protection design**

a. Development of the Main design of fire protection according to adopted architectural solution. The design must be developed to meet all requirement defined in the Law on fire protection. The details must be agreed with Vranje department of the Ministry of interior affairs in-charge for the fire protection. The design must get the approval from the department in-charge

b. All fire protection measures defined in this design must be incorporated in all other designs that are part of the technical documentation – architecture, construction, installations …

10. **Preventive Measures Plan**

Preventive Measures Plan must be developed in accordance with Regulation on safety and health during the work on temporary and moveable construction sites (“Official Gazette” of the Republic of Serbia no. 14/2009 and 95/2010). All preventive measures defined in this plan must be incorporated with all other designs of the technical documentation.

11. **External access roads, parking, landscaping and utility installations design**

a. Detailed survey of the existing status of the area around the hospital buildings including geodetic survey

b. Definition of the current needs of the Heath Centre in the area around the buildings – communication (walk paths), access streets, parking, green area, rain water evacuation from the plateaus

c. Development of detailed design according to the defined needs

IV. Bases for Preparation of Technical Documentation

1. Cadastre – topographic plan issued in 2015
2. Preliminary solution of the reconstruction of Vranje General Hospital developed in period between 2004 and 2005
3. Functional Plan for the reconstruction of the Hospital in stages
4. Full set of the Main design for the construction of new Surgery block developed in 2005

Other requirements:

- Relevant technical documentation should be developed in accordance with the regulations of the Republic of Serbia for these types of buildings as well as prepared well and professionally, in accordance with modern professional achievements and existing national laws that regulate this area.
- In all stages of project design the designer's duty is to cooperate with the Client representative and act according to any comments by the Client representative, as well as to consult with representatives of the Investor, through professional meetings and presentation of solutions and other intermediate results, in order to find optimal project solutions.
- All available details and information necessary for the preparation of project documentation, whose security is the responsibility of the designer, shall be made available for review to client and investor.
- The designer shall assist in the procedure of obtaining location (and other) conditions and building permit in accordance with the legislation, based on the investor's authorisation.
- During the preparation of technical documentation, the designer will be obliged to submit relevant information in order to adequate technical documentation.
- Concept solution should be developed on the basis of existing preliminary solution developed during 2004, incorporating all necessary changes and improvements
- In the event that during the development of technical solutions architect or professional and technical control of the project come to a conclusion / opinion that the existing scope of information is not enough, the designer will consider the need to expand the content and scope of research.
- The designer has an obligation to participate actively in the processes of professional and technical control of technical documentation, including corrections and / or additions to all designs, according to agreed notes and suggestions.
- The design shall be developed and submitted in 4 (four) hard copies and one e-copy on CD in the format ready for printing
- Technical control consultancy will be selected through separate tender procedure and will be available to the designer from the beginning of designing process.
- The Designer shall act as per technical control instructions as well as the instructions of relevant institutions

These services should include but not be limited to the following:

- Site visits, which include meeting with relevant officials, analysis of the relevant technical and planning documents. Prior to starting activities on development of the Technical Documentation, Project work programme needs to be defined by selected Designer and approved by the Client and investor representatives.
- The content of the Technical Documentation must comply in full with the Planning and Building Law as well as with all profession all standards and regulations. In accordance with the ToR (Project work programme), all available facts and information about the locations and the site visit of the facility the designer will prepare detailed Project brief (ToR for the detailed design). The Project work programme and the Project Brief must be approved and signed by the Client and investor representatives.
- The Technical Documentation shall include but not be limited to the Bill of Quantities for entire Construction with accuracy of +/- 3% and with the clear distinction of stages for implementation reflected in the drawings and in the BoQ, Technical Description and specifications including the assessment of the existing state of the buildings and works to be performed and necessary technical drawings.

- Detailed design shall be used for purposes of tendering and subsequent execution of works on construction; therefore it is essential that the Design contains all necessary executive details which will enable smooth construction process, with the clear distinction of stages for implementation reflected in the drawings and in the BoQ,
- The Designer shall ensure that the Design enables the investor to obtain the necessary permits/licenses where necessary for the commencement of works. Given this, Designer shall provide any documentation needed for building permit or commencement of works.

V. Outputs:

- The Outputs shall be delivered in **three phases**, with progress reports for the activities:

The **First Phase -** completion of:

1. Detailed analyses of the existing preliminary solution and functional plan
2. Development and presentation of new Draft Concept Solution to the client and user representative, as well as the representatives of the local urban planning department that will issue the Location conditions
3. Incorporation of the comments from the presentation
4. Adoption of new Concept Solution
5. Submission of the adopted Concept Solution to local urban planning department for the purpose of the issuance of the Location Conditions in unified procedure
6. Issuance of the Location Conditions by the local urban planning department

The **Second Stage** - completion of:

1. Design for the building permit in close cooperation with the Technical control company in all stages of the designing
2. Adoption of the developed Design for the building permit by the Technical control consultant company issuing positive report
3. Submission of the Design for building permit and Technical control report to the local urban planning department for the issuance of the building permit in unified procedure
4. Issuance of the Building Permit by the local urban planning department

The **Third Stage** - completion of:

1. Design for the execution of works in accordance with the issued Building Permit respecting all requirements defined during the adoption of the Concept Design
2. Issuance of the positive report from the Consultant hired to perform the technical control. The report will be issues upon performing that control whether the designer completed technical documentation according to the ToR and Regulations

Work plan for above listed activities to align with time schedule which is part of this ToR.

- Electronic copy of full set of Technical documentation and 4 (four) hard copies.

The Designs will remain the intellectual property of UNOPS.

Activities:

Activities include, but are not necessarily limited to these tasks:

- Desk research and consultations with stakeholders during the initial activities

Inputs:

Contribution of the UNOPS Project Team:

The UNOPS Project Team shall ensure that the selected designer is forwarded all the available documentation, facts and information about the site

Timing:

The consultancy will be conducted over the six month period from August 2017 to end January 2018.

Reporting:

1. Inception Report after 3 weeks of being contracted after issuance of new Concept Solution
2. I Interim Report after issuance of the Location conditions
3. II Interim Report after issuance of the Building permit
4. Final Report upon completion of the full set of the Technical documentation for the execution of works