UKRAINE

DNIPROPETROVSK METRO CONSTRUCTION COMPLETION PROJECT:
LENDERS’ TECHNICAL SUPERVISOR

TERMS OF REFERENCE

1. BACKGROUND

The City of Dnipropetrovsk (the “City”), with the support of the Government of Ukraine (the “Government”), have received joint loan co-financing from the European Bank for Reconstruction and Development (the “EBRD” or the “Bank”) and the European Investment Bank (“EIB”) (together, the “Banks”) to improve urban transport in Dnipropetrovsk by expanding the current metro system (the “Project”). The project Feasibility Study (“FS”) was prepared during 2011; EBRD and EIB financing was approved in 2012.

The Project will finance the construction of three new stations and a 4 kilometre extension of the existing line to the City centre to effectively complete the first line, in the corridor of Karla Marx, one of the main streets of the City. Implementation of the Project is expected to increase significantly the annual passenger volumes as the extension will bring the metro service into the City centre, a densely populated area with high economic activity. While the existing ridership is 13 million annually, the FS estimated an annual ridership of 26 million passengers in the first year that Line 1 metro would be fully operational.

In addition to the limited metro service (currently a single line of 7 kilometres in length), the public transport system in Dnipropetrovsk includes tram and trolleybus services. There are 276 tramway wagons with an average age of 23 years and 150 trolleybuses with an average age of 14 years. Trolleybuses serve 17 routes with a length from 9 to 25 kilometres and tramways serve 13 routes with a length from 8 to 29 kilometres. Apart from the City-owned trolleybuses and tramways, the City is served by ca. 2,000 private minibuses.

The initial section of the first line of the metro was put into operation in 1995. This section has 6 stations and links the main railway station (station “Vokzalna”) with a residential and industrial region in the eastern part of the City (station “Komunarivska”). However, the first line was never fully completed, due to lack of financing.

The objective of the metro expansion project is to improve the provision of mass transit in Dnipropetrovsk as part of an overall strategy to achieve sustainable urban transport in the city. With a population of one million registered in the city and a significant number of temporary employees and students, the current transport system based primarily on buses and minibuses no longer enables efficient urban mobility, especially in the face of rising car ownership, leading to congestion.

The restructuring required by the Bank to transfer the metro system to the City (achieved by national decree in late 2011) will ensure that the City develops the project
as part of a comprehensive public transport strategy, including the introduction of a Public Service Contract (“PSC”) and a single electronic ticketing system for trams, trolleybuses and the extended metro.

To implement the Project, a Project Implementation Unit (“PIU”) is being established to operate with the City, Dnipropetrovskiy Metropoliten (Dnipropetrovsk metro company – “the Company”), which will be staffed by qualified local personnel. The PIU will co-ordinate all activities under the Project.

The proposed Project structure is as follows:

In light of the complexity of the metro construction contract, the Bank is seeking to contract a Lenders’ Technical Supervisor (“LTS”) to assist it in monitoring project implementation in light of its proposed loan (the “Assignment”). The Bank has mobilised technical co-operation funding to assist the City with project preparation, including a Technical Feasibility Study, Environmental Impact Assessment, and Economic Analysis and Cost Recovery Study. The findings of these studies will be made available to the Consultant selected for the Assignment.

The Bank also requires that one nominated member of the LTS acts a sole member Dispute Adjudication Board (“DAB”) as defined in the FIDIC Conditions of Contract for Design-Build (First Edition 1999) (“Additional Services”).

As the Project is co-financed with EIB the EBRD will allow the Consultants reports under this assignment to be shared with EIB, subject to the appropriate waivers being obtained.

2. CURRENT STATUS

Following a competitive two-stage tender with prequalification, the Construction (Design-Build) contract was awarded and signed with Limak Insaat Sanayi ve Ticaret A.S., Turkey, in July 2016. The Time for Completion is October 2023.
The contract for the role of a FIDIC Engineer was signed with ILF Consulting Engineers Polska SP Z.o.o., Poland, in December 2016. The services of the previous LTS were not extended upon contract expiry.

3. OBJECTIVES

The Consultant’s overall responsibility will be to assist the Bank in implementing their loans so as to ensure that the Project’s construction and operation are carried out according to the implementation, investment and financing plans as well as envisaged standards and applicable laws and regulations and in accordance with the loan agreements and other related project documents.

This assignment will include the following key objectives:

- To monitor and audit the performance of the City, the Company, PIU, the PIU support consultant and the Project Manager (works supervisor) during Project construction and start-up;
- To monitor the implementation of the civil works contracts on behalf of the Bank, including the compliance with Project’s Environmental and Social Action Plan and Performance Requirements\(^1\) and impact on achievement of physical completion;
- To identify any key problems which may jeopardise implementation and advise the Bank on remedial measures so that corrective action can be taken; and
- To carry out the Additional Services, namely, to act as a sole member DAB in the Works contract.

The Lenders’ Supervisor shall acquire hands-on knowledge of the construction process through regular visits to the Project and shall regularly report to the Bank on the progress of the site as required.

4. SCOPE OF WORK

The Consultant will visit the construction site in Dnipropetrovsk as necessary to discharge the duty and participate in key meetings. The scope of these monitoring visits will cover the items listed below and such other items as the Bank and Consultant may from time to time agree.

- Review the implementation arrangements in place to ensure that they are sufficient to support project implementation.
  
  Observe, assess and review the performance of the City, the Company and the Project management, including implementation arrangements and the effectiveness of co-ordination between the PIU and the Project Manager. Review the performance of the Project management team and the site staff, and audit reports, certificates and other documentation prepared under the terms of their contracts. Comment and provide recommendations for any potential problem areas.

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\(^1\) Performance Requirements as defined in the EBRD Environmental and Social Policy.
• **Review progress reports received from the PIU and all other technical and relevant material during the Project’s implementation.**

Review, evaluate and comment on progress reports provided by the PIU as well as other relevant technical material. The Consultant will also compare the progress reports with the actual progress as well as project implementation plan.

• **Review project documentation and the civil works.**

Review, on a randomly selected basis, payment certificates, test results, and other relevant project documentation. The Consultant will compare the project documentation with the actual works carried out on site.

• **Visit project site; review site and construction/installation procedures. Conduct site inspections and witness tests.**

Monitor and report on construction and installation in respect of the physical progress of the Project including installation works, construction works and, eventually, commissioning of the new metro line. Monitor the construction of the metro line in order to ensure that it is being implemented in accordance with the investment and implementation plans, as well as international and local standards and codes as envisaged for the Project, and immediately report on material deviations from any of these criteria. Review the adherence to the Environmental, Social and Health and Safety (“ESHS”) requirements and compliance with the Environmental and Social Action Plan (“ESAP”) as defined in the loan agreements. Witness all performance tests for the major parts of the works prepared for commissioning.

• **Advise the Bank on remedial measures to be undertaken in case any problems of contractual, technical (including non-compliance with ESAP) or financial character arise during Project Implementation.**

• **Advise the Bank on Project completion.**

Countersign the Borrower’s notice to the Bank that the Project completion as stipulated in the loan agreements has been met, thereby certifying that all performance tests have been completed and passed successfully. Monitor the operations of the metro line during the start-up period and advise the Bank on remedial measures to be undertaken in case any problems of contractual, technical or financial character arise.

• **Act as a sole member DAB (Additional Services).**

Upon signature of the Dispute Adjudication Agreement with the Parties of the Works contract, perform the role of the DAB as defined in the FIDIC General Conditions of Contract for Design-Build (First Edition 1999) and the Dispute Adjudication Agreement.

During the entire assignment, the Consultant will pay special attention and report on the following criteria:

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2 Dispute Adjudication Agreement is contained in the Appendix to the General Conditions of Contract.
• **Risks**
  Evaluate whether the project risks are being properly identified and managed.

• **Critical Issues**
  Alert the Bank to any emerging problems of a contractual, technical, ESHS or financial nature, which have the potential to jeopardise the achievement of the project objectives and advise the Bank on timely appropriate corrective action.

• **Performance of Project Parties**
  Monitor the performance of the PIU, consultants, contractors, suppliers and other parties involved in the implementation of the investments and comment on compliance with their respective obligations and duties.

• **Project Implementation Arrangements**
  Monitor and report on the functioning of the project implementation arrangements including the project organisation, staffing and project management systems. Comment on construction arrangements and if they are being appropriately planned.

• **Quality Control**
  Monitor and confirm that adequate quality control/assurance systems are in place and functioning properly. Confirm that there is no evidence of any material problems with current or expected future quality and that the investments are likely to meet the specified technical performance requirements at the date of operation.

• **Progress Control**
  Monitor and report on project progress including progress in design, procurement and construction. Verify and confirm that an adequate progress control system is in place and functioning properly. Report on actual progress versus the original plan. Highlight the implications for meeting the overall target completion dates and confirm whether or not dates and deadlines are likely to be achieved. Where possible, provide quantitative measurements (e.g. “per cent complete”) and use appropriate presentation formats (e.g. tables, Gantt charts, S-curves, etc.).

• **Cost Control**
  Monitor and report on project cost. Confirm that adequate cost control systems are in place and working properly. Present a cost report showing the original budget, revised outcome estimate and variance for each budget item, highlight any actual or expected variance in the overall Project cost and confirm whether or not the Project is likely to become operational within the given budget. An appropriate presentation would be a table format with columns for: i) item; ii) budget; iii) estimated final cost; and iv) variance.

• **Intervention**
  If required, assist the Bank in negotiations with the PIU, or other Project parties, to achieve the required corrective action.
• **Disbursements and Cash Flow**
  Review payment certificates and disbursements and confirm that they are in compliance with the loan agreements (e.g. used for the purposes for which they were intended). Present a report showing disbursements and overall project cash flow.

• **Completion**
  Advise the Bank on whether the completion and acceptance procedures have been appropriately carried out and whether the project completion criteria specified in the loan agreements have been met.

• **Project Documentation**
  Confirm that all relevant Project documents, including “as built” drawings, manuals, etc., have been properly assembled, collated, indexed and handed over to the PIU.

• **Covenant Compliance**
  Report on compliance with the relevant covenants in the loan agreements, relating to the civil works, during the construction phase.

• **Environment**
  Report on compliance of construction with the Environmental and Social Action Plan. It would also be necessary for the Consultant to monitor potential groundwater level alteration, the stability of soil and nearby buildings’ foundations, and to analyse and track disposal of generated blasting and drilling spoil.

5. **IMPLEMENTATION ARRANGEMENTS AND DELIVERABLES**

**Implementation Arrangements**

The Consultant will report to EBRD Operation Leader.

It is envisaged that the Consultant will visit the Project site every quarter during the implementation period, and there will be a final visit to confirm project completion. The Consultant should also make provisions for at least 3 additional visits for troubleshooting. The overall timeframe is expected to be four years.

The City and the PIU will make all relevant information available for the Consultant and facilitate visits, tests and other necessary requirements at the Project. The Consultant will be expected to critically assess the information provided and the work performed by the City and the PIU, and give an independent and professional opinion to the Bank.

The Consultant is responsible for making all travel arrangements. The Consultant is also responsible for all equipment necessary to perform the assignment (such as interpreters, computers, copy-machine etc.). During the implementation period, office space at the site will be provided for use by the Consultant during site visits.
Deliverables

The Consultant shall submit quarterly confidential progress reports in English to the Bank no later than two weeks after the site visit. The exact contents and structure of these reports shall be agreed between the Consultant and the Bank prior to submission of the first report. The reports shall present a comprehensive overview of the Project in a concise and accurate manner, with the aim of highlighting problems and exceptions. Where possible the Consultant shall use formats which present the “overview at a glance”, with the appropriate backup material following. As a minimum the Consultant’s progress report shall include:

- Executive summary, conclusions and recommendations, addressing Project progress as well as budget
- Critical issues that could have an adverse impact on Project implementation
- Brief description of the Project and work performed during the reporting period
- Project quality and any potential issues
- Project progress and any potential issues
- Project Cost, including costs spent relative to budget and deviations from the budget, including use of contingencies
- Environmental and safety compliance report
- Disbursement and cashflow report
- Covenant compliance report

The Consultant shall prepare a Draft Final Report after the implementation of the investments is completed. After submission of the Draft Final Report, the Consultant will be available to the Bank to discuss the findings and recommendations. Afterwards, the Consultant will prepare and submit the Final Report.

Reports shall be submitted in electronic format.

6. CONSULTANT’S PROFILE

The Consultant will provide:

- one international expert as the lead consultant and DAB member for this assignment with deep knowledge and extensive practical experience of FIDIC Conditions of Contract, in particular, Conditions of Contract for Plant and Design Build (FIDIC Yellow Book, First Edition 1999); and
- one ESHS specialist.

In addition, this expert should be able to draw on a range of multi-disciplinary experts to respond to project issues as they arise.

The Consultant is required to provide the EBRD with independent, impartial advice, and as such will not be permitted to have a commercial interest in any other contracts or agreements for the Project.