



**TERMS OF REFERENCES
for International Consultant**

Smart Transport and Mobility Strategy and Action Plan for Chisinau City

Job title:	International Consultant in Smart Mobility, Intelligent Transport Systems and Smart City
Type of Contract:	Individual Contract (IC)
Assignment type:	International consultant
Section/Unit:	Environment and Energy Cluster
Duty Station:	Homebased with at least four (4) missions to Chisinau (Moldova)
Languages required:	English, working level of Romanian or Russian will be an asset
Starting Date:	March 2020
Duration of Assignment:	140 working days till April 2021
Payment arrangements:	Lump sum contract (payments linked to satisfactory performance and delivery of outputs)
Evaluation method:	Interview of shortlisted candidates (Only the first 5 top ranked candidates shall be invited)

I. BACKGROUND

The Czech-UNDP Partnership for SDGs (hereafter CUP) project *“Transfer of Czech experience in the development and implementation of the Sustainable Urban Mobility Plan of the Chisinau Municipality”* is linked with the UNDP/GEF project *“Moldova Sustainable Green Cities – Catalyzing investment in sustainable green cities in the Republic of Moldova using a holistic integrated urban planning approach”*, to be implemented during 2018–2022 years.

The objective of the project is to activate investments in low carbon green urban development based on integrated urban planning approach by encouraging innovation, participatory planning and partnerships between a variety of public and private sector entities.

As a tool for this, the project will support the design, launching, and establishment of the Green City Lab (hereafter GCL) to become the leading knowledge management and networking platform, clearing house, an inter-mediator of finance and a source of innovations and expertise to catalyze sustainable low carbon green city development in Moldova with a mission to transform Chisinau and other urban centers in Moldova into modern green and smart European cities with improved quality of life for their citizens, while also demonstrating opportunities for sustainable economic growth.

The direct global environment benefits of the project are expected to reach at least 200,000 tons of CO₂, resulting from the concrete pilot/demonstration projects in the building energy efficiency, transport and waste sectors. These are complemented by project's indirect GHG emission reduction impact at the estimated amount of 2.4 million tons of CO₂ by scaling up, replicating and mainstreaming the project results and activities, including those of the Green City Lab.

As several cities from the Czech Republic (e.g. Plzeň/Pilsen, Ostrava, Brno and Prague) have already experience in Sustainable Urban Mobility Planning, the replication of the best practices and lessons learned will be of benefit for both countries.

This CUP project is directly linked with the UNDP/GEF project “Moldova Sustainable Green Cities” activities aiming for elaboration of the Sustainable Urban Mobility Plan (SUMP) leading to improvements in the urban transport network and supporting Green Urban Development. Both developed products will provide data and information for the new General Urban Plan committed for development in the upcoming years. It will also provide a policy basis for decision-making and identification of priority green city development areas within the municipality. Furthermore, the GCL is on one of the strategic goals to be supported in development of Green City Action Plan of the Chisinau Municipality, which is financially supported by the European Bank for Reconstruction and Development (hereafter EBRD).

II. OBJECTIVES

The **Overall Objective** of the tendered services funded by the Czech-UNDP partnership (hereafter CUP) is to strengthen the capacities of the Chisinau municipal public authorities in sustainable mobility planning and traffic management through transfer of the Czech relevant experience and knowledge. The expected result of the project is creation of enabling environment that allows for successful development and approval of **Chisinau Smart Transport and Mobility Strategy** and preparation and implementation of comprehensible **Chisinau Smart Transport and Mobility** Action Plan for Chisinau City.

Specific objective of Chisinau Smart Transport and Mobility Strategy specialist is to create a basic concept for smart cities in the field of transport as a part of future modular solution - the basis of the Smart City Strategy (with other areas such as energy, security, government...).

Document should include main pillars:

- Automotive transport condition description and optimization,
- Parking optimization,

- public transport,
- non-motorized transport.

The goal of the **Chisinau Smart Transport and Mobility Strategy** and Action Plan is to help develop a desirable intelligent transport system for Chisinau city that is practical and cost-effective for an efficient and effective transport management system (using Intelligent Transport Systems) in Chisinau city. An Action Plan will also be developed for Chisinau City with support from this consultancy.

As part of this project, UNDP through its Green City Lab, will support the interconnection of the ongoing SUMP development process with Action Plan.

The funding from the UNDP-Czech Partnership will facilitate expert support in the guidance/mentoring for **Chisinau Smart Transport and Mobility** Action Plan development. Through the technical assistance and expert support for the **Chisinau Smart Transport and Mobility Strategy** and Action Plan, the Chisinau authorities will be able to learn from the Czech and EU experience and approaches in modern practices of mobility planning and traffic management, which will ultimately secure equitable access of all social groups to urban infrastructure and will increase the quality of life in Chisinau.

In parallel, the GCL and Chisinau municipality will support the **Chisinau Smart Transport and Mobility Strategy** and Action Plan development through a fully participatory and consultative process with professional planners, citizens, policy makers and key stakeholders.

In a medium- and a long-term timeframe **Chisinau Smart Transport and Mobility** Action Plan, should change the life in the city as its scope is to:

- Ensure all citizens are offered transport options that enable access to key destinations and services;
- Improve road safety;
- Reduce air and noise pollution, greenhouse gas emissions and energy consumption;
- Improve the efficiency and cost-effectiveness of the city mobility and public transport;
- Contribute to enhancing the attractiveness and quality of the urban environment and urban design for the benefits of citizens, the economy and society as a whole.

At the same time frame **Chisinau Smart Transport and Mobility Strategy** and Action Plan will be a perfect tool for the municipality to ensure a more sustainable transport and mobility development for the entire urban agglomeration, which covers all modes and forms of transport: public and private, passenger and freight, motorised and non- motorised, moving and parking, etc.

In the *short-term horizon implementation* of the **Chisinau Smart Transport and Mobility Strategy** and Action Plan will help municipality to effectively plan its activities and resources required for the implementation of policies and measures set out in the plan. **Chisinau Smart Transport and Mobility Strategy** and Action Plan can be an ideal tool for municipality to mobilize resources from different funds and subvention programmes, being one of the key documents in municipal transport sector. In compliance with elaborated Sustainable Urban Mobility Plan, the UNDP and GCL will further identify the possible investment areas, i.e. procurement of software and hardware for transport monitoring and management and training of the municipal public transport operators in implementation, segregated bus and cycle lane, congestion charge pilot, and different APP for public transport, electronic ticketing, etc.

III. OUTPUTS AND TASKS

The document **Chisinau Smart Transport and Mobility Strategy** will be produced from 03/2020-04/2021 the work will consist of:

1. Getting to know the current state of the environment (legislation, stakeholders, processes, etc.);

2. Analysis of documents and description of the current state according to the pillars;
3. Detection and description of bottlenecks and weaknesses;
4. Strategy and Key objectives;
5. Action Plan including Preliminary Vision of the Implementation Schedule.

After signing the contract, the methodology of the work including the schedule will be compiled. Work contract includes at least 4 site visits (as needed).

The assignment aims to carry out activities, which would be used as inputs and basis for Chisinau to finalize **Chisinau Smart City Strategy**. The activities include:

1. Assessment of City mobility needs based on the current and future transport challenges and identifying key priorities for possible ITS applications and other changes for Chisinau city.
2. Stakeholder consultations concerning the document and action plan and awareness raising, including capacity building.
3. Provide technical description to key stakeholders in planning proposed activities, which would ultimately include creation of an action plan, and recommended assignments of roles and responsibility with a timeline.

An inception report including a clear plan and methodology with a timeline should be submitted 2 months after contract signing.

The Consultant shall transfer knowledge, skills and good practices through provided consultancy services in close collaboration with National consultant for Smart Transportation and Mobility Action Plan for Chisinau development. The Consultant will work under direct supervision of the CUP Programme Specialist and in close collaboration with the Green Cities Project Moldova Manager and UNDP Country Office in Moldova. The office of the consultant will be housed in the Green City Lab office. The consultant will report directly to the project manager on day-to day activities and submit reports as required in the agreed upon plan and time schedule.

A National expert contracted by UNDP Green City Lab during the whole working process will second the international expert, providing assistance, local guidance and necessary support to the consultant.

IV. SCHEDULE AND DELIVERABLES

DATA COLLECTION & ASSESSMENT

1. Gather basic background such as existing and projected collision and traffic statistics etc. (all available data would be shared with the consultant).
2. Review all existing relevant reports including the General Urban Development Plan of Chisinau (2007), Chisinau Public Transport Development Strategy (2014), Concept of Sustainable Transport Development for Chisinau (2019).
3. Consult and interview relevant officials of the Chisinau Municipality, National Transport Authority, National Inspectorate of Police, and other relevant stakeholders
4. Identify relevant technologies that can be realistically implemented under the current technology regime and the agencies budget positions for the immediate and long term.
5. Identify international best practices based on similar traffic.

PLAN DEVELOPMENT AND PLAN IMPLEMENTATION

The **Chisinau Smart Transport and Mobility Strategy** will consist of four basic pillars as stated

in chapter II:

- Automotive transport condition description and optimization,
- Parking optimization,
- public transport,
- non-motorized transport.

Smart City concept aims to maximize utilization of ICT/ITS and propose a solution to the particular city management in such a way that maximum synergy is ensured amongst individual areas of expertise (transportation and mobility, logistics, safety, energy, urbanism, etc.) with regards to energy efficiency and quality of life of the city's citizens. Smart mobility mainly consists of sustainable mobility planning (creation of mobility plans such as SUMP), support of shared mobility (motivational models to make public transport more attractive), clean mobility and city logistics (electric and hybrid mobility systems), integrated multi-modal public transport (optimal connection of individual services of public transport and its integration into smart mobile apps), traffic control (maximum utilization of traffic data to optimize traffic management and control), parking systems (utilization of data for optimization of parking) and many others. These aspects will be considered when creating **Chisinau Smart Transport and Mobility Strategy**.

This division shall be reflected in the entire document. Furthermore, the strategy will consist of five basic phases as mentioned in chapter III.:

- Preparation,
- Analyzes,
- Strengths, weaknesses, opportunities, and threats,
- Strategy and Key objectives,
- Action and implementation plan.

The consultant will ensure a proper utilization of above-mentioned aspects throughout the entire document and use the basic four-pillar division when analysing the cities potential and problems. He will then evaluate what steps need to be taken and what technologies (or rather technological solutions) might be used to improve upon the current situation to create smart and sustainable mobility for the city of Chisinau. The consultant will also provide non technological solutions that might benefit from application of new technologies.

Parts of the assignment can be home-based with a minimum of 4 visits for contract signing stakeholder consultation, data collection and other relevant activities.

The consultant should also make a visit to present the draft report and seek stakeholder's feedback in finalization of the report. The payments will be made as per the deliverables indicated below.

Deliverable/Milestones	Timeline	Payment schedule (%)
Inception report (inc. methodology, stakeholders and exact timeline)	2 months from contract signing	10 %
Analytical part	6 months from contract signing	-
Submission of analytical part	7 months from contract signing	30 %
Draft part	10 months from contract signing	-
Submission of Draft part	11 months from contract signing	30 %
Action and implementation plan	12 months from contract signing	-
Complete work package acceptance	13 months from contract signing	30 %

Note: The dates of the missions will be proposed by Consultant as part of his technical offer and consulted with the Project manager prior to contract signature.

All deliverables will be prepared in English, working language will be English with Romanian and/or Russian interpretation.

V. QUALIFICATION CRITERIA

Academic qualifications:

- At least master's degree in transport engineering, urban development and/or other related fields.

Experience:

- At least three (3) years of experience in proposal of at least two Smart Mobility or Smart City concepts for the region / municipality / city;
- At least five (5) years of experience with leading a team of at least 1 project of national importance;
- Road safety auditor (with a valid authorization issued by the Ministry of Transport of the Czech Republic);
- Previous working experience from the Czech Republic in terms of a specific track record of cooperation with institutions and bodies responsible for public policies in transportation, urban development and mobility would be an asset;
- Ability and demonstrated success of working in a team, effective organizing of work and to motivating of team members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Experience with Eastern European countries will be an asset;
- Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the assignment;
- Excellent communication, facilitation, analytical and presentation skills;
- Excellent computer literacy (Word, Excel, Internet, Power Point).

Language skills

- Proficiency (verbal and written) in English; working level of Romanian and/or Russian will be an asset.

VI. PAYMENT MODALITIES

The consultant will organize and facilitate the implementation of all project advisory activities as described above; his/her payment will be lump sum amount based, disbursed in instalments upon satisfactory performance and approval of deliverables.

VII. APPLICATION PROCESS

Applicants shall submit the following four documents:

Required

- ☒ Offeror's Letter confirming Interest and Availability;
- ☒ CV, including information about past experience in similar assignments and contact details for at least 3 referees;
- ☒ Brief description of approach to work/technical proposal of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment.
- ☒ Financial proposal (in USD, specifying the total lump sum amount as well as the requested amount of the fee per day). Financial proposal template prepared in compliance with the template in Annex 3

Incomplete applications will not be considered.

If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

VII. ANNEXES TO THE TOR

Annex 1- Individual Consultant General Terms and Conditions Annex 2- CV

Annex 3- Financial proposal template