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# BACKGROUND INFORMATION

## Partner country

Republic of North Macedonia

## Contracting authority

Municipality of Bitola

Boulevard 1-st of May 61

7000 Bitola

## Country background

The cross-border cooperation programme Greece – North Macedonia supports regional cooperation between Greece and North Macedonia. The Programme's overall objective is to enhance territorial cohesion by improving living standards and employment opportunities holding respect to the environment and by using the natural resources for the upgrading of the tourism products.

The Pelagonia Region is among eligible Programme regions, where the Contracting Authority, Municipality of Bitola is located and carries out the regular activities.

The project „Integration of Green Transport in Cities - Green Inter-e-Mobility “ is supported by the cross-border programme “Interreg IPA Cross-border Cooperation Programme Greece- Republic of North Macedonia 2014-2020".

Pelagonia Region offer a great number of touristic attractions and major inland and water tourist destinations due to its high-value natural resources. The solar availability in the region is indicated for high performance of energy supply through PV panels. Also, residents, especially disabled or elderly ones, face difficulties in their daily transport, while students have to use conventional public transport or taxis for their transport to school.

The overall project’s objective is to design and apply an energy-efficient, regional intelligent transportation system with innovative solar-energy charging-stations for e-vehicles in all four Municipalities.

The main project outputs include the promotion of the environmental conservation of the area (through an integrated solution for reducing the carbon footprint of road facilities and transport) and the protection of its natural beauty, the enhancement of the tourist stream towards the cross-border area and of the cross-border cultural and sports relations, through the establishment of the transnational Bitola-Florina tourist route, and the facilitation of sportsmen and students in their daily transport and residents (elderly, disabled, distant-residents) in their daily on-demand transport in all four Municipalities, while the optimal route scheduling and realization of their transport by e-vehicles will greatly decrease their transportation expenses through a 20-year horizon.

Through the Cross-Border approach, including the partner’s cooperation during the development and operation phases, the Municipalities will benefit by the mutual exchange of know-how and experiences among the cross-border actors and end-users of the e-vehicles. Moreover, the public, through the partners’ joint awareness initiatives for green mobility, and by making use of this new innovative technology, will come closer to environmental actions and ideas. Also, the establishment of the cross-border electric minibus route between Florina and Bitola will be combined with other sport and tourist activities and strengthen the relations between the two countries’ population.

The project’s added value is the environmental conservation of the cross-border area, the region’s touristic promotion through transnational actions, the enhancement of the cross-border relations and the facilitation of the area’s residents in their daily transport, through the use of innovative technologies towards green transportation.

EE is a key priority within the EU Strategy, and this translates into common EU policies for the Member States, including those addressing energy-efficiency. To accelerate the achievement of strategic targets, an integrated approach is needed with coordination between EU/national/regional/local energy policies.

There is a strong background in the cooperation between all the partners, since they have all signed Memorandum of Understanding during previous projects. Therefore, the Green Inter-e-mobility project is the implementation of their commitment to cooperate and apply synergetic actions.. Also there is existing experience of successful cooperation between all the partners in the energy efficiency and transportation fields. The region offer a great number of touristic attractions and therefore, an intelligent network of electric mini-buses will bring added-value to these attractions. Additionally, the cross-border interconnection of these touristic sites will be enhanced by a regular cross-border route of a “touristic electric mini-bus”. Such an electric mini-bus interconnection can facilitate tourists sportsmen and the local population to identify many common characteristics between the two regions. Replacing the current transport modes with more energy-efficient ones, within a regional intelligent transportation system, will support the efficient realization of both the tourist promotion of the area, the sportsmen and student’s daily transportation. The new system will also promote the environmental conservation of the area and the protection of its natural beauty. Moreover, due to the heavy winter periods, residents in this region, and especially elderly, disabled, distant-residents, face great difficulties in their daily transport. This project faces this challenge and facilitates residents in these Municipalities (MUNIs) with the on-demand use of utility electric vehicles (e-vehicles). Furthermore, the solar availability in the region, which is indicated for high performance of energy supply through photovoltaic (PV) panels, could be exploited for replacing the conventional energy used by current transport, with renewable energy. The project is compatible with the broad EU energy policy context such as Climate-Energy packages, Energy Union and decarbonisation of transport, since it creates synergies between Renewable Energy Sources and transport users.

## Current situation in the sector

Municipality of Bitola is responsible for developing/implementing energy-efficiency (EE) policies and action plans and have capacities to influence public policies in their area of activity directly. Overall all governance levels are represented (local/regional/national) ensuring wide applicability of project outcomes and uptake at all policy levels. The responsibility of the municipality is to increase the insufficient capacities of public administrations to develop reliable, cost-effective EE action plans.

The Municipality of Bitola is a local public authority with the capacity to influence local/regional/national policies. It has 140 staff, 10 of which dedicated to national/EU projects implementation. There is a Low for Energy efficiency from 5 th of February 2020

With this project Municipality of Bitola will influence in development of the infrastructure for using solar energy for charging e- vehicles, also with promotional activities and the pilot installations there will be development of the market for e vehicles and solar charging stations

Policy uptake and community engagement. The direct involvement of partners in the project who have a multiplier role will ensure wide dissemination-awareness raising of the relevant target groups.

## Related programmes and other donor activities

N/A

# OBJECTIVE, PURPOSE & EXPECTED RESULTS

## Overall objective

The overall objective of the project of which this contract will be a part is as follows:

The main project's objective is to design and apply an energy-efficient, regional intelligent transportation system-ITS which will support the efficient realization of both the tourist promotion of the cross-border area, the student’s daily transport and the facilitation of residents in their daily transport. Specific objectives are:

(a)The added value of the area's touristic sites through the e-minibuses routes.

(b)The enhancement of the cross-border cultural relations through the route connecting Bitola-Florina.

(c)An optimal route scheduling in coordination with the design & implementation of PV charging stations for minibuses.-Programme’s object. : Improving cross-border road access & mobility with targeted interventions of small scale infrastructure

(d)The realization of the ITS that will facilitate both tourists, residents’ (elderly, disabled, distant-residents) and students’ daily transportation. Especially for accessibility of disabled people, a utility e-vehicle and a relative smart phone application is predicted.-Progr.obj. : ICT systems & equipment to improve check point services & facilities

(e)The decarbonisation of transport and the support to the electricity grid.-Progr.obj.: Integrated solutions for reducing the carbon footprint of road facilities & transport in cross-border area

(f)Cooperation between partners during the optimal route studies, development & operation phases.

(g)Public awareness about the integration of e-vehicles fuelled by the sun in cities, and communication & dissemination of the project results to national, regional & local authorities to promote green transport.-Progr.obj.: Small scale investments in energy efficiency, in check point facilities & public buildings of cross-border area, including joint awareness initiatives for energy efficiency

## Purpose

## The purposes of this contract are as follows:

For Lot 1 is Determination of specifications for the electric vehicles (1 minibus, 1 utility vehicle) & Tender Preparation for their procurement.

The expert will use the study from UoWM and adjust according market in our country, the expert will translate this study in our language and will investigate our market including sales after sales services and support, the expert will translate this study in our language and also will give assistance for preparation of the tender.

For Lot 2 Studies for the autonomous photovoltaic charging-station (external parking-lot) for the e-vehicles & Tender Preparation for the procurement of the equipment for their construction and for the configuration of the bus stops.

The expert will assist for conduction of the study for the autonomous photovoltaic charging-station prepared by UoWM with implementation the local legislation, also the expert will give assistance for preparation of the tender for construction of photovoltaic charging-station, external parking lot and configuration of the bus stops. The contractor will help to Municipality of Bitola for appointing appropriate revision for the project design prepared by appropriate company and will provide Supervision to the construction of photovoltaic charging-station, external parking lot and configuration of the bus stops.

For Lot 3

* Expertise related to the route schedule, technical or scientific expert will provide (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation.

The expert will provide expertise related to the route schedule through a 20 year horizon (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation.

## Results to be achieved by the contractor

The expected results by the contractor are

For Lot 1

The results from Determination of specifications for the electric vehicles (1 minibus, 1 utility vehicle) & Tender Preparation for their procurement will be successfully prepared technical specification and support of the preparation of tender documents that will result with successfully procurement of electric vehicles.

For Lot 2

The results from Studies for the autonomous photovoltaic charging-station (external parking-lot) for the e-vehicles & Tender Preparation for the procurement of the equipment for their construction and for the configuration of the bus stops will be quality construction of the charging station and parking lots and configuration of the bus stops.

For Lot 3

The results from the Expertise related to the route schedule will be determination of quality route scheduling through a 20 year horizon

# ASSUMPTIONS & RISKS

## Assumptions underlying the project

• Good cooperation between all parties involved in the project

• Constant and timely support from the Project team;

## Risks

• Low level of communication among the project stakeholders

• Failure to comply with the respective deadlines for completion and launching of the tender procedures;

# SCOPE OF THE WORK

## General

### Description of the assignment

**Lot 1**

Determination of specifications for the electric vehicles (1 minibus, 1 utility vehicle) & Tender Preparation for their procurement.

The expert will use the study from UoWM and adjust according market in our country and will investigate our market including sales after sales services and support, the expert will translate this study in our language and also will give assistance for preparation of the tender.

**Lot 2**

* Studies for the autonomous photovoltaic charging-station (external parking-lot) for the e-vehicles & Tender Preparation for the procurement of the equipment for their construction and for the configuration of the bus stops.

The expert will assist for conduction of the study for the autonomous photovoltaic charging-station prepared by UoWM with implementation the local legislation, also the expert will give assistance for preparation of the tender for construction of photovoltaic charging-station, external parking lot and configuration of the bus stops. The contractor will help to Municipality of Bitola for appointing appropriate revision for the project design prepared by appropriate company and will provide Supervision to the construction of photovoltaic charging-station, external parking lot and configuration of the bus stops.

**Lot 3**

* Expertise related to the route schedule, technical or scientific expert will provide (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation.

The expert will provide expertise related to the route schedule through a 20 year horizon (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation.

### Geographical area to be covered

Bitola Pelagonia region

### Target groups

Local citizens, sportsmen, students, tourist’s elderly, disabled and distant-residents etc.

## Specific work

**For Lot 1**

**Determination of specifications for the electric vehicles** (1 minibus, 1 utility vehicle) & Tender Preparation for their procurement. The expert will use the study from UoWM and adjust according market in our country and will investigate our market including sales after sales services and support, the expert will translate this study in our language and also will give assistance for preparation of the tender.

**For Lot 2**

**Studies for the autonomous photovoltaic charging-station** (external parking-lot) for the e-vehicles & Tender Preparation for the procurement of the equipment for their construction and for the configuration of the bus stops. The expert will assist for conduction of the study for the autonomous photovoltaic charging-station prepared by UoWM with implementation the local legislation, also the expert will give assistance for preparation of the tender for construction of photovoltaic charging-station, external parking lot and configuration of the bus stops. The contractor will help to Municipality of Bitola for appointing appropriate revision for the project design prepared by appropriate company and will provide Supervision to the construction of photovoltaic charging-station, external parking lot and configuration of the bus stops.

**For Lot 3**

**Expertise related to the route schedule**, technical or scientific expert will provide (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation. the expert will provide expertise related to the route schedule through a 20-year horizon (related to the e vehicles, charging station, bus stops etc.) on local level according to the local legislation. There will be 3 routes per municipality of average 10 km each on daily base serving on average 25 citizens daily, social groups that are sensitive, such as children, elderly people and disabled people can be facilitated for their everyday needs and increase their quality of life.

## Project management

### Responsible body

The Contracting Authority for the contract is Municipality of Bitola

### Management structure

The Contracting Authority is Municipality of Bitola, the Republic of North Macedonia and in that capacity, it is responsible for launching the service tender procedure, sign the service contract, authorize payments to the contractor and handle the financial management and control during project implementation.

The project management structure is consisting of a project manager and two project assistants from the Municipality of Bitola

### Facilities to be provided by the contracting authority and/or other parties

The contracting authority has no obligations to provide any facilities

# LOGISTICS AND TIMING

## Location

Pelagonia Region, Programme region.

## Start date & period of implementation of tasks

The intended start date is the date when the contract will be signed and the period of implementation will be:

For Lot 1 from the date when the contract will be signed up to 30 days the contractor has to finish specification and will help the municipality for the tender for e vehicles to be completed. After that period the expert will advise Municipality of Bitola for the questions related to e vehicles until the e vehicles will be delivered to Municipality of Bitola..

For Lot 2 from the date when the contract will be signed until complete finishing the construction of photovoltaic charging-station, external parking lot and configuration of the bus stops related to implementation of the project Green Inter e Mobility 01.07.2021 if the project will be extended also the contract will be extended for the same period.

For Lot 3 from the date when the contract will be signed until 45 days after signing the contract.

Please see Articles 19.1 and 19.2 of the special conditions for the actual start date and period of implementation.

# REQUIREMENTS

## Staff

Note that civil servants and other staff of the public administration of the partner country, or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

### Key experts

**Lot 1**

**Key expert 1**

**Qualifications and skills**

University degree (bachelor, master or Ph.D.) related to engineering

In the case of absence of degree as required in previous paragraph, the expert should prove that has competence in the field related with this activity on the basis of previous similar assignments for at least 3 years.

**General professional experience**

Minimum of three years of professional experience in fields related to these activities.

**Specific professional experience**

Experience with vehicles or traffic issues.

**Lot 2**

**Key expert 1**

**Qualifications and skills**

University degree (bachelor, master or Ph.D.) related to electro engineering

In the case of absence of degree as required in previous paragraph, the expert should prove that has competence in the field related with this activity on the basis of previous similar assignments for at least 3 years.

**General professional experience**

Minimum of three years of professional experience in fields related to these activities.

**Specific professional experience**

Experience with photovoltaic or electrical installations

At least Authorization B for supervision

**Key expert 2**

**Qualifications and skills**

University degree (bachelor, master or Ph.D.) civil engineering or architecture

In the case of absence of degree as required in previous paragraph, the expert should prove that has competence in the field related with this activity on the basis of previous similar assignments for at least 3 years.

**General professional experience**

Minimum of three years of professional experience in fields related to these activities.

**Specific professional experience**

Experience with supervision

At least Authorization B for supervision

**Lot 3**

**Key expert 1**

**Qualifications and skills**

University degree (bachelor, master or Ph.D.) related to traffic engineering sciences

In the case of absence of degree as required in previous paragraph, the expert should prove that has competence in the field related with this activity on the basis of previous similar assignments for at least 3 years.

**General professional experience**

Minimum of three years of professional experience in fields related to these activities.

**Specific professional experience**

Experience with traffic studies or traffic project designs

Authorization A for traffic engineering

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

### Other experts, support staff & backstopping

CVs for experts other than the key experts should not be submitted in the tender but the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles. The contractor shall select and hire other experts as required according to the needs. The selection procedures used by the contractor to select these other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience.

The costs for backstopping and support staff, as needed, are considered to be included in the tenderer's financial offer.

## Office accommodation

Office accommodation for each expert working on the contract is to be provided by the contractor.

## Facilities to be provided by the contractor

The contractor shall ensure that experts are adequately supported and equipped. In particular it must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion

## Equipment

**No** equipment is to be purchased on behalf of the contracting authority / partner country as part of this service contract or transferred to the contracting authority / partner country at the end of this contract. Any equipment related to this contract which is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

# REPORTS

## Reporting requirements

The contractor will submit the following reports in English in one original and two copies:

**Lot 1 For Determination of specifications for the electric vehicles**

One Interim report for Determination of specifications for the electric vehicles (after translation of the study documents related to e vehicles prepared by UoWM, investigation of our market including sales and after sales services support after determination of the specification for e vehicles and conducting the tender for procurement of e vehicles) provided along with the corresponding invoice.

Final report for Determination of specifications for the electric vehicles (after delivering the e vehicles to municipality of Bitola) provided along with the corresponding invoice.

**Lot 2 For Studies for the autonomous photovoltaic charging-station**

One Interim report for External expertise and services – Studies for the autonomous photovoltaic charging-station (after assistance for conduction of the study for the autonomous photovoltaic charging-station prepared by UoWM with implementation the local legislation, and assistance for preparation of the tender for construction of photovoltaic charging-station, external parking lot and configuration of the bus stops) provided along with the corresponding invoice

One final report for External expertise and services – Studies for the autonomous photovoltaic charging-station (after completion the supervising for construction of photovoltaic charging-station, external parking lot and configuration of the bus stops) provided along with the corresponding invoice.

**Lot 3 For Expertise related to the route schedule**,

One final report provided along with the corresponding invoice

## Submission and approval of reports

The report referred to above must be submitted to the project manager identified in the contract. The project manager is responsible for approving the reports.

# MONITORING AND EVALUATION

## Definition of indicators

All activities for monitoring and evaluation, which will be a part of this Contract will be realized according to the planned time and measures of progress towards expected results.

## Special requirements

N/A