

Terms of Reference

For the services to create virtual tours for 5 pilot Protected Areas

Title and number of project:	The “Conservation and sustainable management of key globally significant ecosystems to achieve various benefits” UNDP-GEF project, 00101043
Contract type:	Contract for services (UNDP template)
Duty station:	Kazakhstan, with trips to pilot PAs
Duration:	5 months from the date of signing the contract (July – November 2021)

Project description

The “Conservation and sustainable management of key globally significant ecosystems to achieve various benefits” UNDP-GEF project (hereinafter referred to as the Project) targets to introduce integrated solution to the conservation and sustainable use of forest ecosystems in Kazakhstan by improving management approaches both within the system of protected areas (PAs) and in surrounding landscapes for the sustainable use of forests of high conservation value.

The objective of the project is to improve the conservation and management of forest resources and surrounding grassland, floodplain and desert ecosystems important for the conservation of biodiversity, land resources and local community welfare.

In accordance with the annual work plan of the Project for 2021, the activities to develop virtual tours of tourist routes of the 5 pilot PAs have been planned:

- 1) Sayram-Ugam: 15 land panoramic shots/10 air panoramic shots;
- 2) Kolsay Koldery: 10 land panoramic shots/5 air panoramic shots;
- 3) Tarbagatay State National Natural Park: 12 land panoramic shots/5 air panoramic shots;
- 4) Katon-Karagai: 15 land panoramic shots/10 air panoramic shots;
- 5) West-Altai State Nature Reserve: 32 land panoramic shots/15 air panoramic shots.

The purpose of developing virtual tours is to obtain photographic materials on the state of ecosystems and tourist routes of pilot PAs to promote eco-tourism with the use of modern information technology.

Work objective

Creation of virtual tours for 5 pilot PAs.

Scope of work

A contractor shall carry out required services under the direct supervision of an environmental monitoring expert and in coordination with the UNDP Biodiversity Portfolio Manager, as well as, when needed, in cooperation with other partners of the Project to ensure that the following tasks are implemented:

1. Preliminary study of the territory of 5 pilot PAs with the use of maps and satellite images (Google Earth, SasPlanet, Yandex map etc.) as well as places where 3D panoramic shots and air panoramic shots have been taken.

2. Collection of additional materials (photos and descriptions) of tourist destinations to develop pop-up information for 3D and air panoramic shots of the virtual tour.

3. Studying the technical characteristics and capabilities of the websites of the pilot PAs to place virtual tours on the home page as a separate viewing window:

- Kolsay-Koldery state national natural park (SNNP): <http://kolsai-koldery.kz/ru/o-nas.html>
- Sairam-Ugam SNNP: <https://www.sugnpp.kz/index.php/ru/>
- Katon-Karagai SNNP: <http://www.br.katonkaragai.kz/ru/onem-i-i/fauna.html>
- Tarbagatay SNNP: <http://tarbagatai-park.kz/ru/o-nas.html>
- West-Altai State Nature Reserve (SNR): <http://www.zagpz.kz/ru/>

4. Development and approval of the virtual tour design:

1) virtual tour has to be composed of 3D (360°), air panoramic shots (360°) from remotely piloted

aircraft and common images with details;

2) the service provider has to present at least 3 options of virtual tours design to choose from.

5. Development and approval of the trip plan and camerawork with the UNDP Project staff and Pas;

6. Performance of air survey and photoshoot on the territory of PAs according to the schedule of trips attached in the annex herein:

1) the survey has to be undertaken on clear days and during the daylight hours with cloud cover not exceeding 50%;

2) the image size of the equidistant projection of each panoramic shot:

– for land shots: 10240x5120 px;

– for air shot: 15360x7680 px.

7. Processing of obtained images, creation of equidistant images - high quality spherical panoramic shots with 360° angle and minimal distortions, preparation of 3D and aerial panoramic shots.

8. Creation of virtual tours for each PA. Virtual tours must have the following functionality:

1) Main menu for tour management:

- previous and next panoramic shot;
- zoom in and out of the panoramic shot;
- look up and down, left and right;
- minimized panoramic shot preview;
- launching and stopping auto-rotation;
- opening full screen menu, minimizing menu.

2) Interactive navigation map of PAs based on Google map/Open street map/Yandex map). The boundaries of PAs in vector format (KML or Shp.) are to be provided by UNDP.

3) The list of panoramic shots with their thumbnails:

• horizontal or vertical gallery - the list of 3D panoramic shots from which the 3D tour consists;

4) Skipping between previous and next panoramic shots:

• arrows or other pulsating icons to switch between the nearest panoramic shots in the virtual tour.

5) Additional features and elements of virtual tour:

• icons, pulsating buttons or widgets for additional information on tourist attractions. On a PC the icons have to be able to be activated by pointing or left-clicking the mouse, and on mobile devices by a single tap;

• pop-up windows with text, graphics and photos of additional information on tourist attractions. They have to appear when clicking on the icon with the left mouse button and single tap on mobile devices;

• icons or pulsing buttons to move to websites.

6) A hint with the outline of the tourist object:

• contour of the object along the whole perimeter is marked with a line;

• the following elements must be available when hovering/clicking on the highlighted object:

– text hints - appear above the tourist object when the mouse cursor is put over it;

– pop-up windows with text - appear when clicking on object with the left mouse button (single tap when viewing on mobile devices);

– pop-up windows with a photo and caption - appear when left-clicking on the object (single tap when viewing on mobile devices);

7) Logos have to be shown on the home page of the virtual tour in accordance with UNDP branding guidelines. The design of the main page has to be approved by UNDP Communications Specialist:

- UNDP in Kazakhstan;
- Global Environmental Facility
- Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan;
- PAs.

8) Music and background sound:

- Music has to be integrated into the 3D panoramic shots of the virtual tours (options to be proposed by the contractor). The service provider must have to obtain all copyright for the music to be used in the virtual tours.

9) *Interface of virtual tour has to be made up in 3 languages: Kazakh, Russian and English. The translation of the texts must be endorsed by UNDP.*

10) *Virtual tours must be optimized for Android, IOS and other mobile devices.*

9. Virtual tours have to be uploaded on the websites of PAs.

10. Testing the functionality of virtual tours placed on the websites of 5 Pas should be implemented in accordance with the ToR with the participation of UNDP, Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, as well as the PAs. Testing of virtual tours is to be conducted online.

11. Transfer of the materials of the work performed to the UNDP Project:

- virtual tours;
- 3D and air panoramic shots;
- source codes of the virtual tours;
- texts to accompany the virtual tours on the websites.

12. Quality assurance of the virtual tour functioning for 6 months after placing on the websites of PAs.

Expected results and payment

Item No.	Results	Works completion date	Amount of payments
1.	<p>A preliminary study of the territory of 5 pilot PAs, as well as the locations of 3D panoramic shots and air panoramic shots from remotely piloted aircraft has been carried out with the use of maps and satellite images.</p> <p>The materials on the objects of tourist routes for the development of pop-up information for 3D and air panoramic shots of the virtual tour have been collected.</p> <p>Technical characteristics and capabilities of the websites of pilot PAs to place virtual tours on the home page as a separate viewing window were studied.</p> <p>Design of virtual tour is developed and approved.</p> <p>Trip plan and camerawork are developed and approved with the UNDP Project and PAs.</p> <p>Interim work completion report has been submitted.</p>	3 weeks from the date of signing of the contract	20%
2.	<p>Photographic and air surveys were conducted on the territories of pilot PAs.</p> <p>Interim work completion report has been submitted.</p>	13 weeks from the date of signing of the contract	40%

3.	<p>Obtained images have been processed, equidistant images were created, 3D and air panoramic shots were prepared.</p> <p>Virtual tours for each PA have been created providing functionality according to the requirements of the TOR.</p> <p>Virtual tours uploaded on websites and social media of PAs.</p> <p>Testing of virtual tours functionality has been conducted in accordance with the ToR.</p> <p>The materials of the completed work: virtual tours, 3D and air panoramic shots, source codes of the virtual tour and scripts for placing on the websites of PAs were handed over to the UNDP Project.</p> <p>Final work completion report has been provided.</p>	21 weeks from the date of signing of the contract	40%
	Total:		100%

Institutional Arrangement

- Above-mentioned reports must be submitted in Russian in MS Word format for Windows files, font: Arial 12 within the established timeframe.
- UNDP Biodiversity Portfolio Manager will directly supervise the contractor and the contractor will be directly responsible to Portfolio Manager.
- 3D panoramas, air panoramic shots and virtual tours, as well as completed work reports must be approved by the UNDP Biodiversity Portfolio Manager and will be used as the basis for payment.

Payment Terms

This contract is concluded with a fixed amount in KZT, which includes all costs of the contractor for the development of virtual tours of the objects of tourist routes of the 5 pilot PAs.

Payment is to be made in three tranches upon the satisfactory completion of each item of the Scope of Work and authorization of the results by the UNDP Biodiversity Portfolio Manager in the field of biodiversity conservation upon submission of the Work Completion Certificate and Invoice.

Responsibility and coordination

The contractor is fully responsible for the accuracy and validity of the information provided and for the timely provision of the results of the work and reports.

All actions related to the implementation of this work must be agreed with the specified employees of the Project.

The contractor provides the materials of the completed work to the UNDP project (to the project manager) for comment and approval.

Work must be done in a high-quality and timely manner, in accordance with requirements of the ToR and the Contract.

In case of poor quality of the work performed by the contractor, UNDP reserves the right to terminate the contract unilaterally.

UNDP Project reserves the right to make amendments to the Terms of Reference which do not affect the overall nature of the work.

Law of copyright

Upon the completion of the work UNDP will receive all direct and related copyrights for the use of products that will be produced within the framework of the ToR.

Organizational measures

List of organizations with which the service provider is expected to jointly work/interact/colaborate/meet in the course of the work:

- 1) Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan.
- 2) Kolsay-Koldery SNNP
- 3) Sairam-Ugam SNNP
- 4) Katon-Karagai SNNP
- 5) Tarbagatay SNNP
- 6) West-Altai SNR

Duty station

Contractor's duty station/location: at the location of the contractor with trips to the regions of Kazakhstan for field works.

Location of field works:

- 1) Urdzhar village, East-Kazakhstan region, Urdzhar district – territory of Tarbagatay SNNP;
- 2) Ridder city – territory of West-Altai SNR;
- 3) Katon-Karagai village, East-Kazakhstan region, Katon-Karagai district, territory of Katon-Karagai SNNP;
- 4) Saty village, Almaty region, Kegen district – territory of “Kolsay Koldery” SNNP;
- 5) Shymkent city – territory of Sairam-Ugam SNNP.

Important: In connection with the COVID-19 pandemic, the Contractor shall provide all necessary protective equipment to its employees and comply with all WHO regulations and recommendations for work during the epidemic. The Contractor shall be responsible for the proper and timely provision of all the necessary personal protective equipment to its employees involved in this Terms of Reference in accordance with the current WHO recommendations (masks, gloves, sanitizers, COVID-19 test (if necessary)), for the duration of the contract.

Required skills and work experience of the company

A service provider can be a company/organization properly registered in the Republic of Kazakhstan and meeting the following requirements:

1. Have solvency, not to be subject to liquidation, the property should not be seized, financial and economic activities should not be suspended in accordance with legislation (Certificates confirming the absence of debts in the banks and tax authorities; financial reports).
2. Have at least 3 years of experience in developing virtual tours; the Supplier should provide the list of similar services performed over the last 2 years (projects), indicating the Customer, description of services/works, period of service provision, and contacts (e-mail and phone number) of the customer.
3. Availability of following key personnel with at least 3 years of experience in similar projects: a) a professional photographer; b) a remotely piloted aircraft operator and c) a web programmer. It is necessary to provide a list of personnel proposed for the work with the indication of: 1) full name, 2) education, 3) work experience and qualification skills 4) documents confirming qualification (diplomas, certificates, etc.).
4. Availability of material and technical basis for the work performance: software for processing photographs and air images, as well as for the development of a virtual tour; SLR camera, quadcopter and computer. The list of equipment with technical specifications should be submitted as part of the bidding proposal.

Recommended Presentation of Proposal

The following documents are to be submitted only in PDF:

- 1) Completed and signed Form for Submission of Proposal (Annex 2);
- 2) Legal documents for the conduct of activities - state registration certificate and VAT certificate if applicable;
- 3) Financial reports for 2019-2020;
- 4) Certificate on the absence of debts in tax authorities;
- 5) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List;
- 6) The links to the company's portfolio of the previous projects (experience in similar successful projects implemented over the last 2 years);

7) A work plan with a proposed work schedule indicating the persons responsible for each area of activity;

8) Detailed CVs of required key personnel;

9) At least 2 (two) recommendation letters from the previous Customer/Partner related to required services;

10) Confirmation that the company will accept payment terms that will be in accordance of the agreed payment schedule as described in TOR and Contract for services.

Offer validity period

Offers shall remain valid for 60 days from the deadline for the offer submission.

Evaluation method

The Contract will be awarded to the lowest price substantially compliant offer.

Evaluation criteria

- Full compliance with all qualification requirements to the Supplier as specified above;
- Full acceptance of the General Conditions of Contract.

ANNEXES

Annex 1 – Schedule of /trips/field trips

Chart of Accounts (TO BE SPECIFIED IN NUMBERS)						
ID of the Project	Measure	Account	Fund	ID of the Dept.	Implementing Agency	Donor
00101043	Activity 1	72100	62000	55205	001981	10003
Total:						

Approved

Talgat Kerteshev

Talgat Kerteshev
Project Manager
Date: 30-Jun-2021

Nuri Ozbagdatly

Nuri Ozbagdatly
Projects Portfolio Manager
Date: 01-Jul-2021

Schedule of /trips/field trips

Item No.	Direction of train	Purpose of trip	Time and supposed amount of days of trip*
1.	Urdzhar village, East-Kazakhstan region, Urdzhar district – territory of Tarbagatay SNNP.	Carrying out of photo and air surveys for development of virtual tour	
2.	Ridder city – territory of West-Altai SNR		
3.	Katon-Karagai village, East-Kazakhstan region, Katon-Karagai district, territory of Katon-Karagai SNNP		
4.	Saty village, Almaty region, Kegen district – territory of “Kolsay Koldery” SNNP		
5.	Shymkent city – territory of Sairam-Ugam SNNP		

***Remarks:** The number of days for field work to be indicated by the Contractor in his application. Dates and dates of departures will be specified after signing the contract. The planned number of days must include days spent on travel as well.