

REQUEST FOR PROPOSAL (RFP)

All interested

DATE: December 30, 2013

REFERENCE: RFP UKR/2014/01

Dear Sir / Madam:

We kindly request you to submit your Proposal to conduct **Development of Carbon stocks and** fluxes assessment methodology for organic (peat) soils to be used by the National GHG inventory system of Ukraine for estimating and reporting of greenhouse gas (CO2, CH4, N2O) emissions and removals from organic (peat) soils (tier 2 or higher approach)

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before **23:59 (Kyiv time) Thursday, January 30, 2014** and via email to the address below:

United Nations Development Programme tenders.ua@undp.org Procurement Unit

Your Proposal must be expressed in the **English or Ukrainian**, and valid for a minimum period of **90 days.**

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

NB. The Offeror shall create 2 archive files (*.zip format only!): one should include *technical proposal*, another one should include *financial proposal* and be encrypted with password. Both files should be attached to the email letter.

During evaluation process only technically compliant companies will be officially asked by UNDP procurement unit via email to provide password to archive with financial proposal. Please do not include the password either to email letter or technical proposal and disclose before official request.

Messages should **not exceed 5 MB in size**. Offers larger than 5 MB should be split into several messages and each message subject should indicate "part x of y" besides the marking mentioned in the announcement and the solicitation documents. Messages larger than 5 Mb will not be delivered. *All electronic submissions are confirmed by an automatic reply*.

The Offeror shall mark the email letter/s:

Subject of the message should include: "RFP UKR/2014/01" and the name of tender: "Development of Carbon stocks and fluxes assessment methodology for organic (peat) soils"

Body of the message should include: Name of the offeror

Archive files should be marked as: Technical proposal and Financial proposal

<u>Note</u>: if the email letters or achieve files are not marked as per the instructions in this clause, the procuring UNDP entity will not assume responsibility for the Proposal's misplacement or premature opening.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that

you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link : <u>http://www.un.org/depts/ptd/pdf/conduct_english.pdf</u>

Thank you and we look forward to receiving your Proposal.

Sincerely yours, Ms. Ricarda Rieger

Ms. Ricarda Riege Country Director 12/30/2013

Annex 1

Description of Requirements

Context of the Requirement.	Clima East: Conservation and sustainable use of peatlands
Project name:	
Brief Description of the	Development of Carbon stocks and fluxes assessment methodology for
Required Services	organic (peat) soils to be used by the National GHG inventory system of
	Ukraine for estimating and reporting of greenhouse gas (CO2, CH4,
	N2O) emissions and removals from organic (peat) soils (tier 2 or higher
	approach)
List and Description of	Task I. Review existing methodologies (Tier 1, preferably Tier 2 and
Expected Outputs to be	higher, if available) for estimation and reporting of GHG emissions and
Delivered	removals from organic (peat) soils in National Inventories
	Task II: Development of methodology for estimating and reporting
	greenhouse emissions and removals from organic (peat) soils for the
	purposes of National GHG inventory of Ukraine considering current
	practice and experience in Ukraine and best practices available in other
	countries
	Task III: Development of a relevant dataset (including database concept
	and structure, and GIS-based thematic layer digital map "Organogenic
	soils of Ukraine") to support the methodology, for the purposes of
	National GHG inventory of Ukraine.
Person to Supervise the	
Work/Performance of the	UNDP Project Manager
Service Provider	According to TOD attached
Progress Reporting	According to TOR attached
Progress Reporting Boguiromonts	
Requirements	
Location of work	\square Exact Address
Eveneted duration of work	At contractor's Eocation
Target start date	
Latest completion date	November 2014
Travels Expected	
Special Security Requirements	
Eacilities to be Provided by	The Project will not provide any facilities equipment support
UNDP (i.e., must be excluded	nersonnel support services or logistic
from Price Proposal)	
Implementation Schedule	
indicating breakdown and	🖾 Reguired
timing of activities/sub-	□ Not Required
activities	

Names and curriculum vitae		
of individuals who will be	🖾 Required	
involved in completing the	🗆 Not Required	
services		
	☑ United States Dollars	
Currency of Proposal	🗆 Euro	
	🖾 Local Currency – UAH	
	In case both currencies are provided in the finar	ncial proposal, UNDP
	will use USD as per January 2014 official UNORE	for the evaluation
	purposes.	
Value Added Tax on Price	$oxed{\boxtimes}$ must be inclusive of VAT and other applicable	e indirect taxes (VAT
Proposal	should be clearly indicated in separate line)	
	\Box must be exclusive of VAT and other applicabl	e indirect taxes
	🗆 60 days	
Validity Period of Proposals	⊠ 90 days	
(Counting for the last day of	\Box 120 days	
submission of quotes)	In exceptional circumstances, UNDP may re	quest the Proposer to
	extend the validity of the Proposal beyond	what has been initially
	indicated in this RFP. The Proposal shall then o	, confirm the extension in
	writing, without any modification whatsoever o	on the Proposal.
Partial Quotes	Not permitted	•
	□ Permitted	
Payment Terms ¹	Outputs/Percentage/Timing	Condition for Payment
		Release
	10% - after submission of Analytical document	Within thirty (30) days from
	(Deliverable 1), with a review of current/existing	the date of meeting the
	approaches (Tier 1, preferably Tier 2 and higher, if	following conditions:
	available), both in Ukraine and at least 5 other countries	a) UNDP's written
	reporting of greenhouse gas emissions and removals	mere receipt) of the
	from organic (peat) soils for the purposes of national	quality of the outputs;
	GHG inventory	and
	30% - after submission of Consolidated methodology	b) Receipt of invoice
	for estimation of greenhouse gas emissions and	Provider
	removals (CO2, CH4, N2O) from organic (peat) soils in	
	10% - upon a positive endorsement (Deliverable 3) of	-
	scientific and technical board of the State Environmental	
	Investment Agency of Ukraine regarding approval of	
	Consolidated methodology for estimation of	
	greennouse gas emissions and removals (CO2, CH4, N2O) from organic (neat) soils in Ukraine	
	20% upon finalization and hand over f a a CIS hand	
	thematic layer digital map "Organogenic soils of	
	Ukraine" in scale not less than 1:200 000 for estimating	

¹ UNDP preference is not to pay any amount in advance upon signing of contract. If the Service Provider strictly requires payment in advance, it will be limited only up to 20% of the total price quoted. For any higher percentage, or any amount advanced exceeding \$30,000, UNDP shall require the Service Provider to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the payment advanced by UNDP to the Service Provider.

	of greenhouse gas emissions and removals from organic soils for the purposes of national GHG inventory (developed and designed in line with the requirements set out under TASK III here above) – Expected submission date – 7 months after the Contract signature date).
	5% Developed and submitted concept (MS Word file in Ukrainian) of spatial database for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date – 6 months after the Contract signature data)
	15% Developed and designed structure of spatial database (in a format compatible with ArcGIS 10 for Windows 7 and higher) for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date – 9 months after the Contract signature date).
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	UNDP Project Manager
	Purchase Order
Type of Contract to be Signed	
Type of contract to be signed	
	Cong-rerm Agreement
Criteria for Contract Award	\square Lowest Price Quote among technically responsive others
	\simeq Highest combined score (based on the 70% technical one) and 30% price weight distribution)
	\boxtimes Full accentance of the LINDP Contract General Terms and Conditions
	(GTC). This is a mandatory criteria and cannot be deleted regardless of
	the nature of services required. Non acceptance of the GTC may be
	grounds for the rejection of the Proposal.
	Technical Proposal (70%)
Criteria for the Assessment of	Expertise of Firm / Organization submitting Proposal 30%
Proposal	Proposed Work Plan and Approach 40%
	⊠ Personnel 30%
	Financial Proposal (30%)
	To be computed as a ratio of the Proposal's offer to the lowest price
	among the proposals received by UNDP.
UNDP will award the contract	☑ One and only one Service Provider
to:	\Box One or more Service Providers, depending on the following factors :

	Form for Submission of Proposal (Annex 2)
Annexes to this RFP	General Terms and Conditions / Special Conditions - Available
	through the Link:
	http://www.undp.org/content/undp/en/home/operations/procureme
	nt/how_we_buy/contract_terms/
	Detailed TOR and Evaluation Criteria (Annex 3)
	☑ Contract for professional services template (Annex 4)
	Procurement Unit
Contact Person for Inquiries	UNDP Ukraine
(Written inquiries only) ²	Procurement.ua@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Documents to be submitted in	☑ Dully filled in and Signed Form for Submission of Proposal (Annex 2)
proposal	Business Licenses (Copies of State/Tax registration documents) and
	other Certificates (if any)
	☑ Financial statements (Copies of income/balance statements for last
	2 years)
	CVs of proposed team members
	Reference letters (at least three, if any)
Other Information Related to	Administrative Requirements:
the RFP	Submitted offers will be reviewed on "Pass" or "Fail" basis to determine compliance with the below formal criteria/ requirement/s: Offers must be submitted within the stipulated deadline Offers must meet required Offer Validity Offers have been signed by the proper authority Offers include requested company/organization documentation, including documentation regarding the company/organization's legal status and registration Offers must comply with general administrative requirements: a) Properly registered company/organization Other information is available on http://www.undp.org.ua/en/tenders; For the information, please contact procurement.ua@undp.org

² This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

Annex 2

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL³

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery⁴)

[insert: Location]. [insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated 9/30/2013, and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

BRIEF COMPANY PROFILE The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :		
Full registration name		
Year of foundation		
Legal status	If Consortium, please provide written confirmation from each member	
Legal address		
Actual address		
Bank information		
VAT payer status		
Contact person name		
Contact person email		
Contact person phone		
Company/Organization's core activities		

³ This serves as a guide to the Service Provider in preparing the Proposal.

⁴ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations (If any);	Please indicate here
Business Licenses – Registration Papers, Tax Payment Certification, etc	EDRPOU, ID tax number Copies of State registration and Tax registration should be attached
Latest Audited Financial Statement or Financial results (2011 -2012)	Copies of income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation
Track Record performed within the last 5 years	Please indicate here the List of clients for similar services as those required by UNDP, indicating description of contract scope (including titles of documents developed and analysis prepared), contract duration, contract value, contact references;
Certificates and Accreditation	Please indicate here applicable including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
Please provide contact details of at least 3 previous partners for reference	Please attach the signed reference letters <i>if any</i> .
Company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.	Yes/No (Please choose)
Other r relevant information	

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology, and expected deliverables; implementation schedule for each deliverable/output; will be appropriate to the local conditions and context of the work. Please indicate:

- Detailed description of activities to be undertaken to achieve the expected results in the form of proposal, comprising of at least the following sections: activities to be undertaken/tasks to be carried out; expected results/deliverables by activities; implementation schedule (workplan) for each deliverable/output; managing structure during activity performance; quality assurance mechanism; reporting.
- The Offeror should provide the list and description of previous similar works and/or projects similar to the announced terms of reference (including titles of documents developed) performed during last five years. Description should include the following: project/assignment's title, customer, short description of results/outputs produced, including maps generated using GIS technology and remote sensing; owned designed and developed GIS databases.
- The Offeror should provide the description of internal project management control mechanisms.

C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide :

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Please indicate that all proposed personnel are available for the entire duration of the contract.

Parts D – E should be included to the financial proposal in password protected separate archive!!!

D. Cost Breakdown per Deliverable*

	Deliverables [list them as referred to in the RFP]	Percentage of Total Price (Weight for payment)	Price (Lump Sum, All Inclusive)
1	Deliverable 1		
2	Deliverable 2		
3			
	Total	100%	

*This shall be the basis of the payment tranches

E. Cost Breakdown by Cost Component [This is only an Example]:

Description of Activity	Remuneration	Total Period of	No. of Personnel	Total Rate
I. Personnel Services		21.545611611	. croonner	
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a . Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
VI. Other costs				
Total not incl. VAT				
VAT (if applicable)				
Grand Total incl. VAT				

[Name and Signature of the Service Provider's Authorized Person] [Designation] [Date]

Annex 3

Terms of Reference

Subject: Development of Carbon stocks and fluxes assessment methodology for organic (peat) soils to be used by the National GHG inventory system of Ukraine for estimating and reporting of greenhouse gas (CO2, CH4, N2O) emissions and removals from organic (peat) soils (tier 2 or higher approach)

1. INTRODUCTION

Concentration of atmospheric CO2 has accelerated upward during the past few decades. The implications of increased concentration of CO2 for climate and health of the global environment are topics of intense scientific, social and political concern. The direct solution to the problem is to reduce CO2 emission.

The United Nations Framework Convention on Climate Change (UNFCCC), established at the 1992 UN Conference on Environment and Development (UNCED), led to many nations implementing policies to stabilize or reduce their greenhouse gas emissions. While long-term stabilization can only be attained through considerable reductions in the consumption of fossil fuels, it is also clear that major reductions cannot be achieved immediately. Here is where the carbon sinks role is of paramount importance. Because growing vegetation absorbs carbon dioxide, much hope has been put into the ability of trees, other plants and the soil to temporarily sink the carbon that fossil fuel burning releases into the atmosphere. The Kyoto Protocol, the international communities' main instrument for halting global warming suggests that the absorption of carbon dioxide by trees and the soil is just as valid a means to achieve emission reduction commitments as cutting carbon dioxide emissions from fossil fuels.

Together with forests, peatlands absorb CO2 from atmosphere acting as important "carbon sinks", storing vast amounts of greenhouse gases. Covering merely 3% (4,000,000 km2) of the World's land area, peatlands store 550 Gton of carbon in their peat soil, i.e. twice as much as all forest biomass of the world⁵. Peatlands are thus the most carbon-dense ecosystems of the terrestrial biosphere. The destruction or drainage of peatlands does not only release CO2 but also destroys important ecosystems that are essential for biodiversity.

In the framework of climate politics, greenhouse gas fluxes (emissions by sources and removals by sinks) must be quantified. Hence, estimating carbon stocks and fluxes from peatlands (organic soils) is an important task for understanding and modifying the carbon cycle.

2. ASSIGNMENT'S BACKGROUND

2.1. Project framework

Through the renewed European Neighbourhood Policy (ENP) the European Union is building an ever deeper relationship with the East Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia and Ukraine), supporting their reforms so they are better equipped for greenhouse-gas emission reductions and better prepared to deal with climate change impacts.

The specially designed EC programme supporting Climate Change Mitigation and Adaptation in Russia and ENP East countries – "Clima East" has started in October 2012 and includes both technical assistance projects aimed at fostering improved climate change policies, and pilot projects supporting the development of ecosystems-based approaches to climate change.

The Ukrainian **"Conservation and Sustainable Use of Peatlands"** is a part of the 'Clima East' pilot projects package and is aimed to demonstrate the relevance of nature management techniques for climate mitigation and adaptation.

⁵ Parish *et al*.2008

The objective of the project in Ukraine is to contribute to the climate change mitigation capacity building by means of:

(1) building capacity of the National GHG inventory system of Ukraine in the Land Use, Land-Use Change and Forestry (LULUCF) sector, namely organic soils carbon stock changes accounting;

(2) developing and testing at a pilot region a practical ecosystem-based approach for degraded agricultural peatlands, including restoration to semi-natural conditions with high value for local people and biodiversity conservation.

Thus, strengthening carbon accounting, integrating it into national GHG inventory and developing a National Green Investment Scheme (NGIS) for organic soils (peatlands) is among the key project activities.

2.2. Background information on the National Greenhouse Gas Inventory

Ukraine signed the UN Framework Convention on Climate Change (UNFCCC) in June 1992, ratified it in May 1997, and became a Party to Annex I of the UNFCCC in August 1997. In accordance with Articles 4 and 12 of the UNFCCC, Ukraine, as a Party to the UNFCCC, has an obligation to develop, periodically update, publish and provide to the Secretariat of the UNFCCC National inventories of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol.

The Intergovernmental Panel on Climate Change (IPCC) has developed software and a general methodology for estimating GHG emissions and sinks, which has been published in IPCC Guidelines and Good Practice Guidances that provide internationally agreed methodologies intended for use by countries to estimate greenhouse gas inventories to report to the UNFCCC.

Ukraine's GHG inventory determines emissions of six GHGs of direct action: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6). The GHG inventory also provides data on GHGs of indirect action – carbon monoxide (CO), nitrogen oxides (NOx) and non-methane volatile organic compounds (NMVOC), as well as data on emissions of sulfur dioxide (SO2).

Estimation of GHG emissions in Ukraine is conducted in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (1996), **2006** IPCC **Guidelines for National** Greenhouse Gas **Inventories** (2006) and the IPCC Good Practice Guidance and Uncertainty Management in National GHG Inventories (2000). Inventory in the sector "Land use, land-use change and forestry" (LULUCF) is carried out in accordance with the Guidelines for Sood Practice for Land Use, Land Use Change and Forestry (2003) and **2006** IPCC **Guidelines for National** Greenhouse Gas **Inventories** (2006).

2.3. Background resources

- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
 - http://www.ipcc-nggip.iges.or.jp/public/2006gl/
- Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories
 - http://www.ipcc-nggip.iges.or.jp/public/gl/invs1.htm
- GPG2000 Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories
 - <u>http://www.ipcc-nggip.iges.or.jp/public/gp/english/</u>
- GPG2003 Good Practice Guidance for Land Use, Land-Use Change and Forestry
 - <u>http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.htm</u>
- EFDB Emissions Factor Database
 - <u>http://www.ipcc-nggip.iges.or.jp/EFDB</u>
- IPCC Inventory Software 2006 IPCC Guidelines; Revised 1996 IPCC Guidelines; Software for the Workbook
 - <u>http://www.ipcc-nggip.iges.or.jp/public/gl/software.htm</u>
- Subsidiary Body for Implementation (SBI)
 - <u>http://maindb.unfccc.int/library</u>

- Subsidiary Body for Scientific and Technological Advice (SBSTA)
 - <u>http://maindb.unfccc.int/library</u>

3. OBJECTIVE OF THE ASSIGNMENT

The universality of the currently used IPCC methodology can slightly decrease the efficiency of the National GHG inventory, as default methods cannot consider regional disparities within country, which could thus increase inventory uncertainty. Uncertainties are particularly high in land use, land-use change and forestry (LULUCF) sector input data and estimates. For example, aggregating the available information for EU countries suggests an uncertainty of about 35-40% for the whole LULUCF sector.⁶ Specifically, there is also a great deal of uncertainty in assessing the surface area of peatlands and their carbon stocks, this is due to the fact that peat and peatlands have been defined differently depending on country.

Taking into account the enormous differences in emissions between mineral and organic soils, it is correct that these have to be reported separately within categories. To assess the impact of organic soils on GHG emissions, it is necessary to perform a key category analysis for the soil types separately.

This is, however, not yet done in Ukraine. Due to lack of relevant dataset and methodology, the National GHG Inventory System of Ukraine uses the default Tier 1 method of mineral soils for the forest area on organic soils and peatlands, which may lead to an (sometimes severe) underestimation of emissions.

Countries should intensify their efforts in this respect to reduce uncertainty and, according to the IPCC Guidelines, correspond to a progression from the use of simple equations with default data (Tier 1 emission factors), to country-specific data in more complex national systems (Tier 2 & 3 emission factors)⁷.

Thus, the objective of the assignment is to develop a relevant methodology for accounting GHG (CO2, CH4, N2O) emissions and removals from organic (peat) soils (LULUCF sector) and relevant dataset (Tier 2 and higher approach) for the purposes of the National GHG inventory system of Ukraine.

<u>Final beneficiary and recipient of deliverables under the assignment</u>: Government of Ukraine (State Environmental Investment Agency of Ukraine), National GHG Inventory System of Ukraine.

4. SCOPE OF THE ASSIGNMENT

The selected Contractor shall perform the following tasks and activities:

Task I. Review existing methodologies (Tier 1, preferably Tier 2 and higher, if available) for estimation and reporting of GHG emissions and removals from organic (peat) soils in National Inventories (both in Ukraine and at least 5 other countries with similar climate conditions, as soil organic carbon stocks and fluxes are essentially based on soil type, long term climate and also long term land use).

- 1. Analytical review of existing experiences and best practices regarding methodological approaches for estimating and reporting greenhouse gas emissions and removals from organic (peat) soils for the purpose of national GHG inventories in at least 5 countries with similar climate conditions:
 - 1.1. Collect data and submit comparative analysis of current methodological approaches to estimating greenhouse gas emissions and removals from organic (peat) soils for the purpose of national GHG inventories.

⁶ European Commission - Joint Research Centre, Institute for Environment and Sustainability, Climate Change Unit - Ispra (VA), Italy, 2010

⁷ Tiers implicitly progress from least to greatest levels of certainty, as a function of methodological complexity, regional specificity of model parameters, spatial resolution and the availability of activity data.

- 1.2. Provide recommendations regarding feasibility of applying one of the existing methodological approaches in other countries or consolidated approach by combining components from two or more methodological approaches.
- 2. Analytical review of existing experiences and best practices regarding methodological approaches for estimating and reporting of greenhouse gas emissions and removals for the purpose of national GHG inventory of Ukraine:
 - 2.1. Review of existing methodological approaches for estimating and reporting of greenhouse gas emissions and removals for the purpose of national GHG inventory.
 - 2.2. Provide recommendations regarding feasibility of applying one of the existing in Ukraine methodological approaches for estimating and reporting of greenhouse gas emissions and removals, or development of consolidated approach by combining of two or more existing approaches in Ukraine or other countries.

Task II: Development of methodology for estimating and reporting greenhouse emissions and removals from organic (peat) soils for the purposes of National GHG inventory of Ukraine considering current practice and experience in Ukraine and best practices available in other countries.

- 3. Analytical review of the recommended under Task I methodological approach of one selected country (Ukraine or other) or consolidated approach (combined two or more approaches of different countries) practiced for greenhouse gas emissions and removals estimation for the purposes of national GHG inventory in the selected countries:
 - 3.1. Analysis of advantages and disadvantages of the recommended methodological approach to determine the necessity of its revision and further development regarding: a) cost reduction for data collection for estimating and reporting of greenhouse gas emissions and removals from organic soils, b) usage of high-tech solutions for collection, accumulation, compilation, storage, processing and analysis of primary data, c) simplification of the monitoring procedure for estimating and reporting of greenhouse gas emissions and removals and reporting of greenhouse gas emissions and removals from organic soils.
- 4. Development of consolidated methodology for estimating and reporting of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine for the purposes of national GHG inventory, using model calculations of emissions and removals from organic soils build on models of carbon and nitrogen cycles in organic soils of agro- and ecosystems.
- 5. Finalization in the required format and presentation of consolidated methodology for estimating and reporting of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine for the purposes of national GHG inventory, to the scientific and technical board of the State Environmental Investment Agency of Ukraine.

Task III: Development of a relevant dataset (including database concept and structure, and GIS-based thematic layer digital map "Organogenic soils of Ukraine") to support the methodology, for the purposes of National GHG inventory of Ukraine.

6. Development, design and hand-over of a GIS-based thematic layer digital map "Organogenic soils of Ukraine" in scale not less than 1:200 000 for estimating of greenhouse gas emissions and removals from organic soils for the purposes of national GHG inventory.

The GIS should include at minimum:

Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Bog soils** (Soil type \mathbb{N} 133 according to the classification (The Nomenclature of Soils of Ukraine)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Peaty bog soils** (Soil type \mathbb{N} 135)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Peat-bog soils** (Soil type \mathbb{N} 136)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **High- and transition moor peat soils** (Soil type \mathbb{N} 137)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **High- and transition moor peat soils** (Soil type \mathbb{N} 137)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Fer soils** (Soil type \mathbb{N} 138)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Fer soils** (Soil type \mathbb{N} 139)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Ferruginous fen soils** (Soil type \mathbb{N} 139)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Calcareous fen soils** (Soil type \mathbb{N} 140)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Calcareous fen soils** (Soil type \mathbb{N} 140)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Medium/deep weakly to medium decomposed drained peat soils** (Soil type \mathbb{N} 151)"; Thematic layer of digitized map "**Organogenic soils of Ukraine**. **Medium/deep strongly decomposed drained peat soils** (Soil type \mathbb{N} 153)" in .shp file format (polygonal objects representation) compatible with ArcGIS 10 for Windows7 that includes boundaries of organogenic soils within 13 core peat-rich oblasts of Ukraine: Vinnytsya, Volyn, Zhytomyr, Kyiv, Lviv, Poltava,

Rivne, Sumy, Ternopil, Kharkiv, Khmelnytsky, Cherkasy and Chernigiv, and other oblasts of Ukraine where organic soils can be found in any meaningful scale.

Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Bog soils (Soil type N 133 according to the Ukrainian soils nomenclature"); Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Peaty bog soils (Soil type N 135)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Peat-bog soils (Soil type N 136)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Peat-bog soils (Soil type N 136)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. High- and transition moor peat soils (Soil type N 137)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Fen soils (Soil type N 138)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Ferruginous fen soils (Soil type N 139)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Calcareous fen soils (Soil type N 140)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine. Medium/deep weakly to medium decomposed drained peat soils (Soil type N 151)"; Attributes table of thematic layer of digitized map Organogenic soils of Ukraine. Soil type N 151)"; Attributes table of thematic layer of digitized map Organogenic soils of Ukraine. Medium/deep strongly decomposed drained peat soils (Soil type N 153)" that contain corresponding descriptions of each field including: soil number according to the Ukrainian soils nomenclature, soil name in Ukrainian, Russian, English languages, area of the polygonal object.

Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Bog soils (Soil type № 133 according to the Ukrainian soils nomenclature); Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Peaty bog soils (Soil type № 135)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Peatbog soils (Soil type № 136)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). High- and transition moor peat soils (Soil type № 137)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Fen soils (Soil type № 138)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Ferruginous fen Soils (Soil type № 139)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Calcareous fen Soils (Soil type № 140)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Medium/deep weakly to medium decomposed drained peat soils (Soil type № 151)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Medium/deep strongly decomposed drained peat soils (Soil type № 153)" in .shp file format (polygonal objects representation) compatible with ArcGIS 10 for Windows7 that includes boundaries of organogenic soils within 13 core peat-rich oblasts of Ukraine: Vinnytsya, Volyn, Zhytomyr, Kyiv, Lviv, Poltava, Rivne, Sumy, Ternopil, Kharkiv, Khmelnytsky, Cherkasy and Chernigiv, and other oblasts of Ukraine where organic soils can be found in any meaningful scale

Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by **regions (oblasts).** Bog soils (Soil type $\mathbb{N}^{\mathbb{D}}$ 133 according to the Ukrainian soils nomenclature)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). **Peaty bog Soils** (Soil type № 135)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Peat-bog Soils (Soil type № 136)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Highand transition moor peat soils (Soil type № 137)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Fen Soils (Soil type № 138)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Ferruginous fen Soils (Soil type № 139)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Calcareous fen Soils (Soil type № 140)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Medium/deep weakly to medium decomposed drained peat soils (Soil type Nº 151)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Medium/deep strongly decomposed drained peat soils (Soil type № 153)" that contain corresponding descriptions of each field including: name of the region (oblast), soil number according to the Ukrainian soils nomenclature, soil name in Ukrainian, Russian, English languages, area of the polygonal object.

Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Bog Soils (Soil type № 133 according to the Ukrainian soils nomenclature); Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Peaty bog Soils (Soil type № 135)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). Peat-bog Soils (Soil type Nº 136)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. High- and transition moor peat soils (Soil type № 137)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Fen Soils (Soil type № 138)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Ferruginous fen Soils (Soil type № 139"); Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Calcareous fen Soils (Soil type № 140"); Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Medium/deep weakly to medium decomposed drained peat soils (Soil type № 151)"; Thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Medium/deep strongly decomposed drained peat soils (Soil type № 153)" in .shp file format (polygonal objects representation) compatible with ArcGIS 10 for Windows7 that include boundaries of organogenic soils within rayons of 13 core peat-rich oblasts of Ukraine: Vinnytsya, Volyn, Zhytomyr, Kyiv, Lviv, Poltava, Rivne, Sumy, Ternopil, Kharkiv, Khmelnytsky, Cherkasy and Chernigiv, and other oblasts of Ukraine where organic soils can be found in any meaningful scale.

Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Bog soils (Soil type № 133 according to the Ukrainian soils nomenclature)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Peaty bog Soils (Soil type № 135)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Peat-bog Soils (Soil type № 136)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by regions (oblasts). High- and transition moor peat soils (Soil type № 137)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Fen Soils (Soil type № 138)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Ferruginous fen Soils (Soil type № 139"); Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Calcareous fen Soils (Soil type № 140"); Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Medium/deep weakly to medium decomposed drained peat soils (Soil type № 151)"; Attributes table of thematic layer of digitized map "Organogenic soils of Ukraine with a breakdown by rayons. Medium/deep strongly decomposed drained peat soils (Soil type № 153)" that contain corresponding descriptions of each field including: name of the region (oblast), name of rayon, soil number according to the Ukrainian soils nomenclature, soil name in Ukrainian, Russian, English languages, area of the polygonal object.

Data reference for the soil types and their boundaries: Map of the soils of Ukrainian SSR, not older than 1967. Scale not less than 1: 200 000.

Thematic layers have to be performed in a coordinate system WGS-84, each object layer is characterized by the same set of attributes. The semantics of attributes should be the same for all objects in the layer. Subject to soils types and data availability, other thematic layers can be added.

 Development of a concept and design of a structure of spatial database for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine.

The concept of special database should include, at minimum, the description of the following :

- General principles of spatial data concept;

- Specifications of automated tools to store and process information in AcrGIS 10 for Windows (version 7 and higher);

- Types of spatial data;

- Conceptual scheme of the database content;

- Proposed spatial data base structure; primary thematic layers description;
- Description of attributes tables of primary thematic layers;
- other information necessary of the database development, design and functioning.

The Concept of spatial database (hereinafter – the Concept) supplementary to the Methodology for estimating and reporting greenhouse emissions and removals from organic (peat) soils (hereinafter - Methodology). Language - Ukrainian. File format -. Doc. The database, which is described in the concept, is to be developed and design in a format compatible with ArcGIS 10 for Windows 7.

The database is a set of thematic layers. A thematic layer shall contain the information about each option at a certain time period, in the context of Ukraine, or oblasts of Ukraine, or in terms of rayons of Ukraine. Thematic layers are created in the *.shp the format, in the «UTM», «WGS 84" coordinate system. All the thematic layers are characterized by the same set of attributes. All objects in the layer shall have the same set of attributes and the information representation that provides the capabilities of applying changes and updates without disrupting of the stored data and ensuring unaltered data robustness and accuracy level. Thematic layers should be grouped according to the theme and featured in chronological order. Thematic layers must have unique names in Ukrainian, Russian and English languages and coding describing the nature of the data presented in the layer. Attribute table of thematic layers shall contain field names in Ukrainian, Russian and English. The number and nature of the field attribute tables shall be determined based on the needs to provide complete information as required by the Methodology. Attribute tables shall include, but not be limited to, the fields "Serial Number", "Relative code", "Name in Ukrainian", "Name in Russian", "Name in Ukrainian", "Surface area" (for polygonal objects), "administrative identity" (oblast, rayon).

Patterns corresponding vector thematic layers files shall be in MS Excel format. Structure files in Excel should he identical to the structure attribute table of vector thematic layers. The database structure should include, but not be limited to, the following topics: Primary data (according the Methodology): format compatible with ArcGIS 10 for Windows (7 or higher). **Derived data** (according to the Methodology):

The N parameter (1 to m) with varying value. Baseline year, 1990 (according to the Methodology):

- Thematic layer file format. shp for Ukraine, the corresponding attributes table, corresponding file in Excel format.
- Thematic layer file format. shp with a breakdown by oblasts of Ukraine, the corresponding attributes table, corresponding file in Excel format.
- Thematic layer file format. shp with a breakdown by rayons of Ukraine, the corresponding attributes table, corresponding file in Excel format.

The N parameter (1 to m) with varying value. Reporting year (according to the Methodology):

- Thematic layer file format. shp for Ukraine, the corresponding attributes table, corresponding file in Excel format.
- Thematic layer file format. shp with a breakdown by oblasts of Ukraine, the corresponding attributes table, corresponding file in Excel format.
- Thematic layer file format. shp with a breakdown by rayons of Ukraine, the corresponding attributes table, corresponding file in Excel format.

The number of N parameters (1 to m), included in the database must match the number of parameters specified by the Methodology. The parameters included in the database shall fully coincide with the parameters used by the Methodology for estimating GHG emissions removals from organic (peat) soils.

5. EXPECTED OUTPUTS / DELIVERABLES UNDER THE ASSIGNMENT

- 1. Analytical document in Ukrainian language (with a synopsis in English) with a review of current/existing approaches (Tier 1, preferably Tier 2 and higher, if available), both in Ukraine and at least 5 other countries with similar climate conditions, for estimation and reporting of greenhouse gas emissions and removals from organic (peat) soils for the purposes of national GHG inventory (Expected submission date 1,5 months after the Contract signature date).
- Consolidated methodology for estimation of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic (peat) soils in Ukraine for the purposes of national GHG inventory using model calculations for estimating and reporting of greenhouse gas emissions and removals from organic soils (Expected submission date – 4 months after the Contract signature date).
- A positive endorsement of scientific and technical board of the State Environmental Investment Agency of Ukraine regarding approval of consolidated methodology for estimation of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine for the purposes of national GHG inventory of Ukraine using model calculations of/ estimations for greenhouse gas emissions and removals from organic soils (Expected date – 7 months after the Contract signature date).
- 4. Developed, designed and handed-over a GIS-based thematic layer digital map "Organogenic soils of Ukraine" in scale not less than 1:200 000 for estimating of greenhouse gas emissions and removals from organic soils for the purposes of national GHG inventory (developed and designed in line with the requirements set out under TASK III here above) Expected submission date 7 months after the Contract signature date).
- Developed and submitted concept (MS Word file in Ukrainain) of spatial database for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date – 6 months after the Contract signature date).
- 6. Developed and designed structure of spatial database (in a format compatible with ArcGIS 10 for Windows 7 and higher) for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date 9 months after the Contract signature date).

6. IMPLEMENTATION ARRANGEMENTS AND CONDITIONS OF ENGAGEMENT

6.1 General Provisions

- The UNDP will establish and communicate formatting requirements for the reports and documents which will be prepared/developed by the Contractor. The Contractor shall use/apply such formatting requirements in preparation, revision and adjustment of the documents required by the Project under this engagement.
- Any copyrights and other kinds of intellectual property emerging in the course of contract implementation and produced by the Contractor under the contract shall be retained by UNDP; the Contractor shall not be entitled for any intellectual property in this regard.
- Any documents and/or information owned by UNDP and any other entities provided or shared by UNDP to the Contractor in the course of contract implementation shall remain confidential and shall not be disclosed or shared to other parties and by the Contractor without written permission from authorized UNDP official.
- At UNDP side contract implementation will be coordinated and supervised by the Project Manager and the Contractor will be responsible to obtain his/her clearance of each drafted/revised document before its finalization. Upon request from the Project Manager the Contractor shall revise or correct the drafted documents and address all his/her comments.
- The Contractor shall nominate a dedicated team leader, who will be responsible for contract implementation, coordination and communication with the Project, logistics, planning and performance monitoring, reporting and other relevant activities.

6.2 Coordination and management

- The Project is responsible for the stakeholder consultation on deliverables.

- The UNDP will approve the deliverables upon consultations with the State environmental investment agency of Ukraine (Beneficiary of the assignment).
- The payments will be made upon endorsement by UNDP.

6.3 Contractual and payment arrangements

- UNDP Standard Contract for Professional Services will be signed with the selected Contractor. The Contract will be in 2 languages, where English language prevails over Ukrainian.
- Standard UNDP payment terms up to 30 days after receipt of the original invoice and satisfactory fulfillment of the contractual obligations/deliverables.
- The Payments will be made as follows:

10% - after submission of Analytical document (Deliverable 1), with a review of current/existing approaches (Tier 1, preferably Tier 2 and higher, if available), both in Ukraine and at least 5 other countries with similar climate conditions, for estimation and reporting of greenhouse gas emissions and removals from organic (peat) soils for the purposes of national GHG inventory.

30% - after submission of Consolidated methodology for estimation of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic (peat) soils in Ukraine (Deliverable 2).

10% - upon a positive endorsement (Deliverable 3) of scientific and technical board of the State Environmental Investment Agency of Ukraine regarding approval of Consolidated methodology for estimation of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic (peat) soils in Ukraine.

30% - upon finalization and hand-over f a a GIS-based thematic layer digital map "Organogenic soils of Ukraine" in scale not less than 1:200 000 for estimating of greenhouse gas emissions and removals from organic soils for the purposes of national GHG inventory (developed and designed in line with the requirements set out under TASK III here above) – Expected submission date – 7 months after the Contract signature date).

5% Developed and submitted concept (MS Word file in Ukrainian) of spatial database for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date – 6 months after the Contract signature date).

15% Developed and designed structure of spatial database (in a format compatible with ArcGIS 10 for Windows 7 and higher) for collection, accumulation, compilation, processing and analysis of primary input data and derived data based on/according to the approved consolidated methodology for estimating and reporting of GHG emissions and removals (CO2, CH4, N2O) from organic soils in Ukraine (Expected submission date – 9 months after the Contract signature date).

7. REQUIRED MINIMUM QUALIFICATIONS AND EXPERIENCE OF THE OFFERORS

Experience and qualification requirements:

- Duly registered legal entity. At the moment of the contract signature the organization/company should have a valid registration for economic activities in Ukraine and be able to operate legally in Ukraine.
- At least 3 years of working experience of the company related to the subject area.
- Proven expertise and practical experience of the company or offered project group (formed group of experts) in the methodology development for estimation of greenhouse gas emissions and removals (preferably in Land-use, land-use change and forestry sector).
- Proven practical experience of the company or offered project group (formed group of experts) in the development and implementation of models, algorithms and relevant software for estimation of greenhouse gas emissions and removals (CO2, CH4, N2O) from organic soils.
- Proven practical experience of the company or offered project group (formed group of experts) in mapping of vegetation surface and development of relevant thematic digital map layers based on data collected

with the help of remote analysis methods using satellite images, including the retrospective analysis of the Earth's surface (e.g. Earth vegetation mapping based on existing archival satellite images).

- Proven practical experience of the company or offered project group (formed group of experts) in the development of GIS database for environmental projects.
- The Offeror has to submit information on proposed key experts:
 - Key expert 1. Team leader head of the group with practical experience on managing tasks and/or projects aimed at developing methodology for estimation of greenhouse gas emissions and removals.
 - Key expert 2. National expert in carbon and nitrogen cycling and modeling in agro-ecosystems.
 - Key expert 3. Expert on the use of remote sensing methods for the analysis of the earth's surface needs environmental projects, including the creation of thematic layers of digital maps based on information analysis of satellite images, GIS databases for collecting, storing and analyzing data.
 - Other experts and/or technical staff (if necessary).

Summary of Technical Proposal Evaluation Forms		Score Weight	Points Obtainable
1.	Expertise of Firm / Organization	30%	300
2.	Proposed Methodology, Approach and Implementation Plan	40%	400
3.	Management Structure and Key Personnel	30%	300
	Total		1000

Evaluation Criteria

Reputation & proven

Technic	cal Proposal Evaluation	Points
Form 1		obtainable
	Expertise of the Firm/Organization	
1.1	Reputation of Organization and Staff / Credibility / Reliability / Industry Standing	50
	- Company profile,	
	- Previous experience working with governmental bodies, scientific institutions,	
	international organizations and NGOs	
	- Available reference from at least three previous partners	
	Excellent reputation & proven experience in the subject area with various partners -	
	50 points (10 years in the subject area), good (5+ years in the subject area, 1 point for	
	each year over 5) – 35 points, satisfactory (3-5) – 25 points, week (3 or less) -10-15	
	points.	
1.2	General Organizational Capability which is likely to affect implementation	60
	 Financial stability (20 points max, balance sheet data) 	
	 loose consortium, holding company or one firm (10 points max) 	
	 age/size of the firm (10 points max) 	
	- number of qualified staff employed (less that 5 experts – 5 points, 10-5 – 10	
	points, over 10 experts – 20 points)	
1.3	5 major clients / 5 major assignments	50
	the more significant assignments/clients in the subject area, the higher the points	
1.4	Quality assurance procedures in place, warranty	20

1.5	Relevance of:	120
	 Specialized Knowledge (of the company and/or key experts, to be assessed together) in the areas of carbon stocks and fluxes assessment methodologies development (preferably in LULUCF sector), carbon accounting etc (max 70). Experience on Similar Assignments / Projects (30) Work for the Government of Ukraine / Scientific institutions /UNDP/ major multilateral/ or bilateral programmes (20) 	
		300

Tech	nical Proposal Evaluation	Points
Form	2	Obtainable
	Proposed Methodology, Approach and Implementation Plan	
2.1	Is the methodical approach suggested appropriate for the task and corresponds to the TOR?	120
2.2	Have the important aspects of the task been addressed in sufficient detail and is the sequence of activities logical?	70
2.3	Are the different components of the assignment adequately weighted relative to one another?	50
2.4	Is the proposed workplan detailed and realistic and promise efficient implementation to the project?	100
2.5	Adequacy of logical and management arrangements	60
		400

Technical Proposal Evaluation							
Form 3							
	Management Structure and Key F	Personnel					
3 1	2.1 Team Leader						
5.1	Sub-Score						
	General Qualification		90				
	At least 5 years of experience in the development carbon	30					
	assessments methodologies, carbon footprint						
	measurements and similar assignments						
	At least 5 years of experience in managing teams of experts	20					
	with various background and expertise in this sphere						
	Education (Equivalent of Master's degree or higher in						
	Proven successful experience in the similar assignments for						
	the national government/international						
	organizations/academia with acknowledged results						
	- Language Qualifications (Ukrainian – 5 points, English – 5 po	10					
		100					
	National expert in carbon and nitrogen cycling and modeling in agro-						
3.2	ecosystems		100				
		Sub-Score					

	General Qualification	90		
	Suitability for the Project			
	At least 5 years of experience in the development carbon assessments methodologies, carbon footprint measurements, carbon & nitrogen cycling & modeling, and similar assignments (the more years of proven experience the higher points)			
	Education (Equivalent of Master's degree or higher in environmental sciences/ chemisty), Masters -10, PhD - 20			
	Proven successful experience in the similar assignments for the national government/international organizations/academia with acknowledged results			
	 Language Qualifications (Ukrainian/Russian – 5 points, Engli points) 	10		
			100	
3.3	Expert on the use of remote sensing methods			100
			Sub-Score	
	General Qualification		90	
	Suitability for the Project			
	At least 5 years of experience in the analysis of the earth's surface needs environmental projects, including the creation of thematic layers of digital maps based on information analysis of satellite images, GIS databases for collecting, storing and analyzing data (the more years of proven experience the higher points)	40		
	Education (Equivalent of Master's degree or higher in environmental sciences/ computer science, certification in GIS is a must), Masters -10, PhD - 20	20		
	Proven successful experience in the similar assignments for the national government/international organizations/academia with acknowledged results	30		
	 Language Qualifications (Ukrainian/Russian – 5 points, English – 5 points) 		10	
		100		
	Total Part 3			300

Annex 4

Model Contract for Professional Consulting Services

between UNDP and a Company or other entity⁸

Date _____

Dear Sir/Madam,

Ref.: ____/ ____/ ____ [INSERT PROJECT NUMBER AND TITLEOR OTHER REFERENCE]

The United Nations Development Programme (hereinafter referred to as "UNDP"), wishes to engage your [company/organization/institution], duly incorporated under the Laws of ______ [INSERT NAME OF THE COUNTRY] (hereinafter referred to as the "Contractor") in order to perform services in respect of ______ [INSERT SUMMARY DESCRIPTION OF THE SERVICES] (hereinafter referred to as the "Services"), in accordance with the following Contract:

1. Contract Documents

- 1.1 This Contract is subject to the UNDP General Conditions for Professional Services attached hereto as Annex I. The provisions of such Annex shall control the interpretation of this Contract and in no way shall be deemed to have been derogated by the contents of this letter and any other Annexes, unless otherwise expressly stated under section 4 of this letter, entitled "Special Conditions".
- 1.2 The Contractor and UNDP also agree to be bound by the provisions contained in the following documents, which shall take precedence over one another in case of conflict in the following order:
 - a) this letter;
 - b) the Terms of Reference [ref.dated......], attached hereto as Annex II;

c) the Contractor's technical proposal [ref....., dated], as clarified by the agreed minutes of the negotiation meeting⁹[dated......], both documents not attached hereto but known to and in the possession of both parties.

1.3 All the above shall form the Contract between the Contractor and UNDP, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Contract.

2. Obligations of the Contractor

- 2.1 The Contractor shall perform and complete the Services described in Annex II with due diligence and efficiency and in accordance with the Contract.
- 2.2 The Contractor shall provide the services of the following key personnel:

NameSpecializationNationalityPeriod of service

....

⁸This model contract is intended for services (studies, consultancies by firms, etc) to be obtained from companies as well as from NGOs, Universities, etc. It is not to be used for procuring goods or works. Any substantial deviations to the text should be made in consultation with BOM.

⁹ If there are updates to the technical proposal or correspondence exchanged in clarification of certain aspects, reference them too, provided that they are fully acceptable to UNDP. Otherwise, aspects which resolution is pending should be dealt with in this letter itself or in the Terms of Reference, as appropriate.

2.3	Any	changes	in	the	above	key	personnel	shall	require	prior	written	approval	of
	[NAME and TITLE], UNDP.												

2.4 The Contractor shall also provide all technical and administrative support needed in order to ensure the timely and satisfactory performance of the Services.

2.5 The Contractor shall submit to UNDP the deliverables specified hereunder according to the following schedule:

[LIST DELIVERABLES]	[INDICATE DELIVERY DATES]			
e.g.				
Progress report	//			
Final report	//			

2.6 All reports shall be written in the English language, and shall describe in detail the services rendered under the Contract during the period of time covered in such report. All reports shall be transmitted by the Contractor by _____[MAIL, COURIER AND/OR FAX] to the address specified in 9.1 below.

2.7 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the deliverables and reports foreseen under this Contract in accordance with the highest industry and professional standards.

OPTION 1 (FIXED PRICE)

3. <u>Price and Payment</u>¹⁰

- 3.1 In full consideration for the complete and satisfactory performance of the Services under this Contract, UNDP shall pay the Contractor a fixed contract price of _____ [INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS].
- 3.2 The price of this Contract is not subject to any adjustment or revision because of price or currency fluctuations or the actual costs incurred by the Contractor in the performance of the Contract.
- 3.3 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Services.
- 3.4 UNDP shall effect payments to the Contractor after acceptance by UNDP of the invoices submitted by the Contractor to the address specified in 9.1 below, upon achievement of the corresponding milestones and for the following amounts:

MILESTONE¹¹ AMOUNT TARGET DATE

Upon....

./../....

Invoices shall indicate the milestones achieved and corresponding amount payable.

OPTION 2 (COST REIMBURSEMENT)

¹⁰ This version of section 3 is to be used for fixed price contracts. Fixed price contracts should normally be used when it is possible to estimate with reasonable accuracy the costs of the activities which are the subject of the Contract.

¹¹ If an advance payment is granted, define the first milestone as "upon signature of the contract by both parties". Please note that advance payments should be granted only in exceptional cases, and that they must comply with UNDP policies and procedures.

3. <u>Price and payment¹²</u>

- 3.1 In full consideration for the complete and satisfactory performance of the Services under this Contract, UNDP shall pay the Contractor a price not to exceed _____ [INSERT CURRENCY & AMOUNT IN FIGURES AND WORDS].
- 3.2 The amount contained in 3.1 above is the maximum total amount of reimbursable costs under this Contract. The Breakdown of Costs in Annex **[INSERT ANNEX NUMBER]** contains the maximum amounts per cost category that are reimbursable under this Contract. The Contractor shall reflect in his invoices the amount of the actual reimbursable costs incurred in the performance of the Services.
- 3.3 The Contractor shall not do any work, provide any equipment, materials and supplies, or perform any other services which may result in any costs in excess of the amount under 3.1 or of any of the amounts specified in the Breakdown of Costs for each cost category without the prior written agreement of ______ [NAME and TITLE], UNDP.
- 3.4 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's performance of the Services.
- 3.5 The Contractor shall submit invoices for the work done every _____ [INSERT PERIOD OF TIME OR MILESTONES].

OR

3.5. The Contractor shall submit an invoice for ______ [INSERT AMOUNT AND CURRENCY OF THE ADVANCE PAYMENT IN FIGURES & WORDS] upon signature of this Contract by both parties and invoices for the work done every ______ [INSERT PERIOD OF TIME OR MILESTONES].¹³

3.6 Progress and final payments shall be effected by UNDP to the Contractor after acceptance of the invoices submitted by the Contractor to the address specified in 9.1 below, together with whatever supporting

documentation of the actual costs incurred is required in the Breakdown of Costs or may be required by UNDP. Such payments shall be subject to any specific conditions for reimbursement contained in the Breakdown of Costs

Breakdown of Costs.

4. <u>Special conditions</u>¹⁴

4.1 The responsibility for the safety and security of the Contractor and its personnel and property, and of UNDP's property in the Contractor's custody, rests with the Contractor.

4.1.1. <u>Security</u>

The Contractor shall:

- (a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
- (b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

¹² This version of section 3 is to be used for cost reimbursement contracts. Normally, cost reimbursement contracts should be used when it is not possible to estimate with reasonable accuracy the total costs of the activities which are the subject of the Contract.

¹³ This clause should be used if an advance payment is granted. Please note that advance payments should be granted only in exceptional cases, and that they must comply with UNDP policies and procedures. Any advance which represents 30% or more of the proposed total contract value must be cleared by the Office of Finance and Administration prior to contract signature, with the exception of contracts below \$50,000.

¹⁴ Under this Section, you may propose special clauses in order to adapt the model contract to the specific situation. In this sample clause 4, several clauses of common use are given. If they are not required, they should be deleted. If there are no special conditions, please choose the alternative version of 4 in order to conform to clause 1.1.

4.1.2 UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

4.2 Audits and Investigations

Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses, the company shall reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.

4.2.1 The Contractor acknowledges and agrees that, at anytime, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

4.3 Anti-terrorism

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under this Contract are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all subcontracts or sub-agreements entered into under this Contract.

- 4.4 The advance payment to be made upon signature of the contract by both parties is contingent upon receipt and acceptance by UNDP of a bank guarantee for the full amount of the advance payment issued by a Bank and in a form acceptable to UNDP.¹⁵
- 4.5 The amounts of the payments referred to under section 3.6 above shall be subject to a deduction of [INSERT PERCENTAGE THAT THE ADVANCE REPRESENTS OVER THE TOTAL PRICE OF THE CONTRACT] % (... percent) of the amount accepted for payment until the cumulative amount of the deductions so effected shall equal the amount of the advance payment.¹⁶
- 4.6 Owing to [......], Article(s) [.....] of the General Conditions in Annex I shall be amended to read/be deleted.¹⁷

 $^{^{15}}$ This clause must be used when an advance payment of <u>\$50,000</u> or more is granted to the Consultant and may be used for payments under <u>\$50,000</u> when appropriate. Please note that advance payments should be exceptional, whatever their amount and must comply with UNDP Financial Regulations and Rules.

¹⁶ This clause must be used when an advance payment is granted (whatever the amount) in a cost reimbursement contract. A payment upon signature is considered an advance payment.

¹⁷ This is a sample clause for the rare cases where there is a conflict with a provision of the General Conditions which does not involve privileges and immunities, arbitration or some other fundamental aspects of the UNDP legal status. All such changes to the General Conditions shall require consultation with OLPS/BOM.

- 5. <u>Submission of invoices</u>
- 5.1 An original invoice shall be submitted by mail by the Contractor for each payment under the Contract to the following address:
- 5.2 Invoices submitted by fax shall not be accepted by UNDP.
- 6. <u>Time and manner of payment</u>
- 6.1 Invoices shall be paid within thirty (30) days of the date of their acceptance by UNDP. UNDP shall make every effort to accept an invoice or so advise the Contractor of its non-acceptance within a reasonable time from receipt.
- 6.2 All payments shall be made by UNDP to the following Bank account of the Contractor:

[NAME OF THE BANK], [ACCOUNT NUMBER], [ADDRESS OF THE BANK]

- 7. Entry into force. Time limits.
- 7.1 The Contract shall enter into force upon its signature by both parties.
- 7.2 The Contractor shall commence the performance of the Services not later than _____ [INSERT DATE] and shall complete the Services within ______ [INSERT NUMBER OF DAYS OR MONTHS] of such commencement.
- 7.3 All time limits contained in this Contract shall be deemed to be of the essence in respect of the performance of the Services.
- 8. <u>Modifications</u>
- 8.1 Any modification to this Contract shall require an amendment in writing between both parties duly signed by the authorized representative of the Contractor and _____ [NAME AND TITLE] UNDP.
- 9. <u>Notifications</u>

For the purpose of notifications under the Contract, the addresses of UNDP and the Contractor are as follows:

For the UNDP:

[INSERT CONTRACT REFERENCE & NUMBER]

For the Contractor:

[INSERT NAME, ADDRESS AND TELEX, FAX AND CABLE NUMBERS]

If the above terms and conditions meet with your agreement as they are typed in this letter and in the Contract Documents, please initial every page of this letter and its attachments and return to this office one original of this Contract, duly signed and dated.

Yours sincerely,

[INSERT NAME AND TITLE]

For [INSERT NAME OF THE COMPANY/ORGANIZATION]