

REQUEST FOR PROPOSAL (RFP) FOR BLOCK CHAIN BASED PILOT FOR CASHMERE VALUE CHAIN MANAGEMENT

TO ALL INTERESTED CANDIDATES	DATE: December 4, 2018
	REFERENCE: RFP-2018-029

Dear Sir / Madam:

We kindly request you to submit your Proposal for Professional service to run a blockchain-based pilot for cashmere value chain management.

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

Proposals may be submitted on or before 11:00 am, Monday, December 17, 2018 and via email, courier mail or fax to the address below:

United Nations Development Programme

UN House-14201, United Nations Street 14, Sukhbaatar district, Ulaanbaatar, Mongolia B.Tsetsenbaatar, Procurement staff Email: Bids.mn@undp.org

Your Proposal must be expressed in the English, and valid for a minimum period of 120 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.

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,

Daniela Gasparikova Deputy Resident Representative

12/4/2018

DESCRIPTION OF REQUIREMENTS

Context of the Requirement	Professional service to run a blockchain-based pilot for cashmere value chain management		
Implementing Partner of UNDP	This project is directly implemented by UNDP Mongolia Country Office (UNDP CO)		
Brief Description of the Required Services ¹	The Service Provider is expected to develop and run a blockchain and RFID- based cashmere traceability system in Mongolia. The Service Provider is expected to design, develop and deliver a system that entails appropriate level of technical specifications that can complement existing and working IT and data platforms by other organizations.		
	The Service Provider is also responsible for developing and executing technical and non-technical strategies in developing, deploying and managing the blockchain and RFID-based platform so that UNDP CO can pilot the value chain business model in mid-March 2019.		
List and Description of Expected Outputs to be Delivered	 The main deliverables are: A document explaining the system architecture and implementation design (5-10 pages). This document should entail an appropriate level of technical specifications (both software and hardware) that can complement existing and working IT and data platforms by other organizations; Functional prototype and completion of its User Acceptance Test (i.e. to UNDP CO); Completion of a pilot run of the functional prototype in the field during the cashmere harvest season (scheduled to take place for 10 days between the end of March 2019 and beginning of April 2019), demonstrating the traceability of cashmere from origination point (e.g. goats or bales) to end point (e.g. apparel firms or end-customers). This prototype pilot needs to run in coordination with herders and key local value chain stakeholders; Pilot evaluation report explaining the deployed software and hardware solutions, technical outputs and outcomes of the pilot, technical and non-technical challenges encountered, their solutions, and recommendations for scaling up; and 		
Person to Supervise the Work/Performance of the Service Provider	Satoko Okamoto, Sustainable Development Goals and Private Sector Officer at UNDP Mongolia County Office		
Frequency of Reporting	Minimum biweekly reporting and upon completion of each deliverable		
Progress Reporting Requirements	Update on progress via call and/or emails		
Location of work	☑ At Contractor's Location		

Expected duration of work	72 days over 4 m	Uniting Starting	I I OIII December	2010	
Target start date	20 December 2018				
Latest completion	30 April 2019				
date Travels Expected	Destination/s	Estimated Duration	Brief Descripti the Travel	on of Purpose o	of Target Date/s
	Ulaanbaatar, Mongolia	25 days	Scan Tag Spec Integrating Sca	n Tag Application coordination with	February and March 2019
Special Security Requirements	 ☑ Comprehensive Travel Insurance □ Others [pls. specify] 				
Facilities to be	⊠Office space (U	llaanbaatar) a	nd facilities		
Provided by UNDP (i.e., must be excluded from Price Proposal)	 Land Transportation (Vehicle arrangement during the field mission(s): The intervention areas (i.e. Khentii and Dornod <i>Aimag</i>) are located approximately 650 km east of Ulaanbaatar (7 hours' drive from Ulaanbaatar). Others: Support for coordinating with stakeholders (herders, intermediaries, local governments and buyers), prior to, during and following the pilot run, both in the intervention areas and Ulaanbaatar. 				
Implementation Schedule indicating breakdown and timing of activities/sub- activities	⊠ Required				
Names and curriculum vitae of individuals who will be involved in completing the services	⊠ Required				
Currency of Proposal	☑ United States Dollar				
Value Added Tax on Price Proposal	I must be inclusive of VAT and other applicable indirect taxes				
Validity Period of Proposals (Counting for the last day of submission of quotes)	☑ 120 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.				
Partial Quotes Payment Terms	☑ Not permitted Outputs		Percentage ²	F	Condition for Payment Release

² One hundred (100) percent constitutes all-inclusive fee minus hardware cost. Hardware costs will be covered by UNDP CO before or after the purchasing the hardware. Hardware costs will be based on the cost estimation figures presented in the financial proposal. The Service Provider purchases the required hardware in consultation with UNDP CO. Upon completion of the project, all purchased hardware needs to be handed over to UNDP CO.

	a. A 5-10 page document explaining the system architecture and implementation design. This document should also entail data model and database specification. ³	15%	Mid- January	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written
	b. Functional prototype. Completion of working software with appropriate setup environment and user interface, followed by a User Acceptance Test to UNDP CO prior to or during the mission to Mongolia. ⁴	30%	End of February	acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service
	c. Pilot run. Completion of a pilot run of the functional prototype in the field during the cashmere harvest season (scheduled to take place for 10 days between end of March 2019 and beginning of April 2019). This pilot run should demonstrate the traceability of cashmere from origination point (e.g. goats or bales) to end point (e.g. apparel firms or end- customers). ⁵	30%	End of March	Provider.
	d. Pilot evaluation report explaining the deployed software and hardware solutions, technical outputs and outcomes of the pilot, technical and non-technical challenges encountered, the solutions deployed, and recommendations for scaling up.	15%	End of April	
	e. Documentation on further optimization and development needs, alongside with separate reports for maintenance, support, and training program	10%	End of April	
Person(s) to review/inspect/ approve outputs/completed services and	Daniela Gasparikova, Deputy F	Resident Represe	ntative, UNDP	Mongolia

³ For suggested activities to complete this deliverable, please see Task 1 and 2 in Suggested Development Workflow and Timelines Table (Table 5) in Annex 4.
⁴ For suggested activities to complete this deliverable, see Task 3, 4, and 5 of Table 5 of Annex 4.
⁵ See Task 6 and 7 of the same.

authorize the	
disbursement of	
payment	
Type of Contract to be Signed	☑ Institutional Contract
Criteria for Contract Award	☐ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution)
	☑ Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion 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.
Criteria for the	Technical Proposal (70%)
Assessment of Proposal	Expertise of the entity (proven record of completing similar assignments and work samples should be provided) - 25%
	☑ Proposed methodology and timeliness of the implementation plan - 20%
	 ☑ Proposed team management and qualification of the preferred team members - 20%
	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 to:	☑ One and only one Service Provider
Annexes to this	☑ Form for Submission of Proposal (Annex 2)
RFP ⁶	General Terms and Conditions / Special Conditions (Annex 3) ⁷
	☑ Detailed Terms of Reference (Annex 4)
	□ Others ⁸ [pls. specify]
Contact Person for	B.Tsetsenbaatar
Inquiries	Procurement Staff
(Written inquiries only) ⁹	bids.mn@undp.org
	Any delay in UNDP's response shall not be 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.

⁷ Please note that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

⁹ 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.

Other Information	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: a) Profile – describing the nature of business, field of expertise, licenses,
	certifications, accreditations;
	 b) Business Licenses – registration papers, tax payment certification, etc. c) Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation;
	 d) Track Record – list of clients for similar services, indicating description of contract scope, contract duration, contract value, contact references e) Certificates and Accreditation – including Quality Certificates, Patent
	Registrations, Environmental Sustainability Certificates; f) 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
	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 will be appropriate to the local conditions and context of the work.
	The Service Provider must provide:
	 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; and c) Written confirmation from each personnel that they are available for the entire duration of the contract.

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL¹⁰

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery¹¹)

[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 [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

A. Qualifications of the Service Provider

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:

a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;

- b) Business Licenses Registration Papers, Tax Payment Certification, etc.
- c) Latest Audited Financial Statement income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc.;
- d) Track Record list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
- e) Certificates and Accreditation including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
- f) 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.

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 will be appropriate to the local conditions and context of the work.

C. Qualifications of Key Personnel

The Service Provider must provide:

¹⁰ This serves as a guide to the Service Provider in preparing the Proposal.

¹¹ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers

⁻ for verification purposes

- 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) Written confirmation from each personnel that they are available for the entire duration of the contract.

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 per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
I. Personnel Services				
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				
6. Others				
III. Other Related Costs				

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

GENERAL TERMS AND CONDITIONS FOR SERVICES

1.0 LEGAL STATUS:

The Contractor shall be considered as having the legal status of an independent contractor vis-àvis the United Nations Development Programme (UNDP). The Contractor's personnel and subcontractors shall not be considered in any respect as being the employees or agents of UNDP or the United Nations.

2.0 SOURCE OF INSTRUCTIONS:

The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its services under this Contract. The Contractor shall refrain from any action that may adversely affect UNDP or the United Nations and shall fulfill its commitments with the fullest regard to the interests of UNDP.

3.0 CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES:

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

4.0 ASSIGNMENT:

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims or obligations under this Contract except with the prior written consent of UNDP.

5.0 SUB-CONTRACTING:

In the event the Contractor requires the services of sub-contractors, the Contractor shall obtain the prior written approval and clearance of UNDP for all sub-contractors. The approval of UNDP of a sub-contractor shall not relieve the Contractor of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform to the provisions of this Contract.

6.0 OFFICIALS NOT TO BENEFIT:

The Contractor warrants that no official of UNDP or the United Nations has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

7.0 INDEMNIFICATION:

The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, UNDP, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractor's employees, officers, agents or sub-contractors, in the performance of this Contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of

patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.

8.0 INSURANCE AND LIABILITIES TO THIRD PARTIES:

- **8.1** The Contractor shall provide and thereafter maintain insurance against all risks in respect of its property and any equipment used for the execution of this Contract.
- **8.2** The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or the equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.
- **8.3** The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under this Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with this Contract.
- **8.4** Except for the workmen's compensation insurance, the insurance policies under this Article shall:
 - 8.4.1 Name UNDP as additional insured;
 - **8.4.2** Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the UNDP;
 - **8.4.3** Provide that the UNDP shall receive thirty (30) days written notice from the insurers prior to any cancellation or change of coverage.
 - **8.5** The Contractor shall, upon request, provide the UNDP with satisfactory evidence of the insurance required under this Article.

9.0 ENCUMBRANCES/LIENS:

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with the UNDP against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Contractor.

10.0 TITLE TO EQUIPMENT:

Title to any equipment and supplies that may be furnished by UNDP shall rest with UNDP and any such equipment shall be returned to UNDP at the conclusion of this Contract or when no longer needed by the Contractor. Such equipment, when returned to UNDP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear. The Contractor shall be liable to compensate UNDP for equipment determined to be damaged or degraded beyond normal wear and tear.

11.0 COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS:

11.1 Except as is otherwise expressly provided in writing in the Contract, the UNDP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for the UNDP under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the

Contract, and the Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the UNDP.

- **11.2** To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, the UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to the UNDP a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract.
- **11.3** At the request of the UNDP; the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to the UNDP in compliance with the requirements of the applicable law and of the Contract.
- **11.4** Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of the UNDP, shall be made available for use or inspection by the UNDP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to UNDP authorized officials on completion of work under the Contract.

12.0 USE OF NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS:

The Contractor shall not advertise or otherwise make public the fact that it is a Contractor with UNDP, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UNDP or THE United Nations, or any abbreviation of the name of UNDP or United Nations in connection with its business or otherwise.

13.0 CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION:

Information and data that is considered proprietary by either Party and that is delivered or disclosed by one Party ("Discloser") to the other Party ("Recipient") during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party and shall be handled as follows:

- **13.1** The recipient ("Recipient") of such information shall:
 - **13.1.1** use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar information that it does not wish to disclose, publish or disseminate; and,
 - **13.1.2** use the Discloser's Information solely for the purpose for which it was disclosed.
- **13.2** Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the Information confidential in accordance with the Contract and this Article 13, the Recipient may disclose Information to:
 - 13.2.1 any other party with the Discloser's prior written consent; and,
 - **13.2.2** the Recipient's employees, officials, representatives and agents who have a need to know such Information for purposes of performing obligations under the Contract, and employees officials, representatives and agents of any legal entity that it controls it, or with which it is under common control, who have a need to know such Information for purposes of performing obligations under the Contract, provided that, for these purposes a controlled legal entity means:

- **13.2.2.1** a corporate entity in which the Party owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; or,
- **13.2.2.2** any entity over which the Party exercises effective managerial control; or,
- 13.2.2.3 for the UNDP, an affiliated Fund such as UNCDF, UNIFEM and UNV.
- **13.3** The Contractor may disclose Information to the extent required by law, provided that, subject to and without any waiver of the privileges and immunities of the United Nations, the Contractor will give the UNDP sufficient prior notice of a request for the disclosure of Information in order to allow the UNDP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.
- **13.4** The UNDP may disclose Information to the extent as required pursuant to the Charter of the UN, resolutions or regulations of the General Assembly, or rules promulgated by the Secretary-General.
- **13.5** The Recipient shall not be precluded from disclosing Information that is obtained by the Recipient from a third party without restriction, is disclosed by the Discloser to a third party without any obligation of confidentiality, is previously known by the Recipient, or at any time is developed by the Recipient completely independently of any disclosures hereunder.
- **13.6** These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract.

14.0 FORCE MAJEURE; OTHER CHANGES IN CONDITIONS

- 14.1 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify the UNDP of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this Article, the UNDP shall take such action as, in its sole discretion; it considers to be appropriate or necessary in the circumstances, including the granting to the Contract.
- **14.2** If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, the UNDP shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 15, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.
- **14.3** Force majeure as used in this Article means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force.
- **14.4** The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in or for any areas in which the UNDP is engaged in, preparing to engage in, or disengaging from any peacekeeping, humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh conditions within such areas or to any incidents of civil

unrest occurring in such areas shall not, in and of itself, constitute force majeure under the Contract..

15.0 TERMINATION

- **15.1** Either party may terminate this Contract for cause, in whole or in part, upon thirty (30) days notice, in writing, to the other party. The initiation of arbitral proceedings in accordance with Article 16.2 ("Arbitration"), below, shall not be deemed a termination of this Contract.
- **15.2** UNDP reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case UNDP shall reimburse the Contractor for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.
- **15.3** In the event of any termination by UNDP under this Article, no payment shall be due from UNDP to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract.
- **15.4** Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, the UNDP may, without prejudice to any other right or remedy it may have under the terms of these conditions, terminate this Contract forthwith. The Contractor shall immediately inform the UNDP of the occurrence of any of the above events.

16.0 SETTLEMENT OF DISPUTES

- **16.1 Amicable Settlement**: The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of this Contract or the breach, termination or invalidity thereof. Where the parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation Rules then obtaining, or according to such other procedure as may be agreed between the parties.
- 16.2 Arbitration: Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably under Article 16.1, above, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The decisions of the arbitral tribunal shall be based on general principles of international commercial law. For all evidentiary questions, the arbitral tribunal shall be guided by the Supplementary Rules Governing the Presentation and Reception of Evidence in International Commercial Arbitration of the International Bar Association, 28 May 1983 edition. The arbitral tribunal shall be empowered to order the return or destruction of goods or any property, whether tangible or intangible, or of any confidential information provided under the Contract, order the termination of the Contract, or order that any other protective measures be taken with respect to the goods, services or any other property, whether tangible or intangible, or of any confidential information provided under the Contract, as appropriate, all in accordance with the authority of the arbitral tribunal pursuant to Article 26 ("Interim Measures of Protection") and Article 32 ("Form and Effect of the Award") of the UNCITRAL Arbitration Rules. The arbitral tribunal shall have no authority to award punitive damages. In addition, unless otherwise expressly provided in the Contract, the arbitral tribunal shall have no authority to award interest in excess of the London Inter-Bank Offered Rate ("LIBOR") then prevailing, and any such interest shall be simple interest only. The Parties shall be bound by any arbitration award rendered as a

result of such arbitration as the final adjudication of any such dispute, controversy, or claim.

17.0 PRIVILEGES AND IMMUNITIES:

Nothing in or relating to this Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs.

18.0 TAX EXEMPTION

- 18.1 Section 7 of the Convention on the Privileges and Immunities of the United Nations provides, inter-alia that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs duties and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the United Nations exemption from such taxes, duties or charges, the Contractor shall immediately consult with the UNDP to determine a mutually acceptable procedure.
- **18.2** Accordingly, the Contractor authorizes UNDP to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with the UNDP before the payment thereof and the UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide the UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

19.0 CHILD LABOUR

- **19.1** The Contractor represents and warrants that neither it, nor any of its suppliers is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical mental, spiritual, moral or social development.
- **19.2** Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, at no cost to UNDP.

20.0 MINES:

- **20.1** The Contractor represents and warrants that neither it nor any of its suppliers is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.
- **20.2** Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind of UNDP.

21.0 OBSERVANCE OF THE LAW:

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract.

22.0 SEXUAL EXPLOITATION:

- **22.1** The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by it or by any of its employees or any other persons who may be engaged by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all appropriate measures to prohibit its employees or other persons engaged by it from, exchanging any money, goods, services, offers of employment or other things of value, for sexual favors or activities, or from engaging in any sexual activities that are exploitive or degrading to any person. The Contractor acknowledges and agrees that the provisions hereof constitute an essential term of the Contract and that any breach of this representation and warranty shall entitle UNDP to terminate the Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind.
- **22.2** The UNDP shall not apply the foregoing standard relating to age in any case in which the Contractor's personnel or any other person who may be engaged by the Contractor to perform any services under the Contract is married to the person less than the age of eighteen years with whom sexual activity has occurred and in which such marriage is recognized as valid under the laws of the country of citizenship of such Contractor's personnel or such other person who may be engaged by the Contractor to perform any services under the Contract.

23.0 AUTHORITY TO MODIFY:

Pursuant to the Financial Regulations and Rules of UNDP, only the UNDP Authorized Official possesses the authority to agree on behalf of UNDP to any modification of or change in this Contract, to a waiver of any of its provisions or to any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against UNDP unless provided by an amendment to this Contract signed by the Contractor and jointly by the UNDP Authorized Official.

TERMS OF REFERENCE

Project/Programme Title:	Piloting the Sustainable Cashmere Value Chain Business Model in the Eastern Region in Mongolia under Value Chain Focused Private Equity Investment Fund Project
Type of contract:	Professional service to run a blockchain-based pilot for cashmere value chain management
Location:	Home country based with one or two missions to Mongolia
Assignment for:	72 days over 4 months
Expected start date:	Immediately
Expected end date:	Apr. 2019
Language requirement:	English

1. PROJECT DESCRIPTION

UNDP Mongolia Country Office (UNDP CO) is accelerating its efforts to engage with the private sector to achieve the Sustainable Development Goals (SDGs) by 2030. It envisages becoming a trusted partner for private sector companies by providing them with support to maximize opportunities to align their businesses with the SDGs. As a part of a project that attempts to attract private sector investment into livestock commodity sectors, UNDP CO is aiming to create a blueprint for ecologically sustainable and socially inclusive business models in the cashmere sector and is running a pilot project to test this in March 2019.

The business model is currently designed while the political, economic, social and technological factors in the prospective intervention areas are assessed. At minimum, the model will encompass several key components including the provision of a) financial and non-financial incentives for suppliers (herders); b) greater buyer- and customer-facing traceability and credibility on Sustainable Cashmere by adopting an IT system utilizing blockchain technology; and c) financial estimation the operation.

The pilot findings are expected to provide UNDP CO with insights into opportunities and challenges for UNDP's private sector engagement and the model's scalability. The IT system needs to be ready for implementation in mid-March 2019 when the UNDP CO tests the operational viability of the model.

2. BACKGROUND INFORMATION ON THE CONTRACT

This pilot is an attempt to build on several existing initiatives on certified cashmere value chains. Development partners and the Government of Mongolia (GoM) support these initiatives to maximize certified cashmere's potential for the SDGs. The key stakeholders involved in the development of IT solutions to support the implementation of a certified cashmere value chain include:

- National Agency for Meteorology and Environmental Monitoring
- Agency of Land Management, Geodesy and Cartography
- State Veterinary and Animal Health Agency
- Mongolian National Federation of Pasture User Groups

UNDP CO envisages that the blockchain solution that this pilot develops will be complementary to and/or eventually integrated into other solutions being developed by these organizations.

There are several operational and technological challenges with this project. One technological challenge is the absence of blockchain infrastructure: It does not exist in Mongolia. One operational challenge is a limited timeline. Cashmere collection takes place only once a year (between mid-March and early April in the intervention area) and the pilot needs to run during this time. Buyers have expressed interest in partnering with UNDP CO, purchasing traceable Sustainable Cashmere and trailing the IT solution.

All relevant information available at the UNDP CO will be shared with the Service Provider.

3. OBJECTIVES OF THE CONTRACT

The objective of this contract is to pilot a technology solution that is relevant to stakeholders' needs and concerns in view of Mongolia's political, economic, social, technological and environmental contexts. Testing this technology will allow UNDP CO to gather insights into the scalability of the blockchain-enabled cashmere value chain and share lessons learned with development partners, the GoM, value chain actors, and other stakeholders.

The Service Provider is expected to develop and run a blockchain and RFID-based cashmere traceability system in Mongolia. The Service Provider is expected to design, develop and deliver a system that entails:

- Appropriate level of technical specifications that can complement existing and working IT and data platforms by other organizations;
- Technical and non-technical strategies for developing, deploying and managing the blockchain and RFID based platform; and
- Other strategies that the Service Provider should assume that will enable UNDP CO to pilot the blockchain-enabled value chain business model in mid-March 2019.

4. SCOPE OF WORK AND DELIVERABLES

Scope of Work	The main purpose of the contract is to develop and run a blockchain and RFID based cashmere traceability system in Mongolia. The Service Provider is expected to design, develop and deliver a system that entails:
	 Appropriate level of technical specifications that can complement the existing and working IT and data platform by other organizations; Technical and non-technical strategies for developing, deploying and managing the blockchain and RFID based platform; and Other strategies that the Service Provider should assume that will enable UNDP CO to pilot the value chain business model in mid-March 2019.
	The Service Provider is expected to conduct the activities specified below in order to design, develop and deliver the system for a pilot run.
	 a. Analyse the stakeholder requirements in the cashmere value chain b. Design the system architecture and integration plan for integration with the existing IT system of other organizations.
	c. Define data models and database technology and inform the UNDP CO on purchasing the required hardware for the system in line with the following guidelines:
	 RFID Tags RFID Readers
	 Blockchain Full Nodes (Intel quad-core 2.2Ghz CPU each, 32GB of memory and 500GB of storage) Blockchain Light Nodes (Raspberry Pi 3) Any other hardware
	 d. Develop the system (i.e. Setup Environment(s)). This entails coding, configuration, testing and piloting of the complete system including the APIs for integration with existing IT systems
	e. Launch the pilot and UAT
	f. Provide UAT support and deliver the complete functional system (hardware and software) to UNDP

	 g. Provide maintenance, supporting, and training instruction (in documentation)
	,
Deliverables	 The main deliverables are: A document explaining the system architecture and implementation design (5-10 pages). This document should entail an appropriate level of technical specifications (both software and hardware) that can complement existing and working IT and data platforms by other organizations; Functional prototype and completion of its User Acceptance Test (i.e. to UNDP CO); Completion of a pilot run of the functional prototype in the field during the cashmere harvest season (scheduled to take place for 10 days between end of March 2019 and beginning of April 2019), demonstrating the traceability of cashmere from origination point (e.g. goats or bales) to end point (e.g. apparel firms or end-customers). This prototype pilot needs to run in coordination with herders and key local value chain stakeholders; Pilot evaluation report explaining the deployed software and hardware solutions, technical outputs and outcomes of the pilot, technical and non- technical challenges encountered, their solutions, and recommendations for scaling up; and Documentation for further optimization and development needs, alongside
	with separate reports for maintenance, support, and training program.
Institutional Arrangement	 Service provider will be under the overall supervision of UNDP CO's Deputy Resident Representative with day-to-day guidance provided by the SDGs and Private Sector Officer.

5. SUGGESTED DEVELOPMENT WORK FLOW AND TIMELINES

UNDP CO is cognizant that there are multiple ways to sequence tasks to produce the deliverables specified above. However, the following sequencing of the activities and durations is suggested for the Service Provider. The table below explains the suggested development workflow and timelines for each activity. One or two missions can be accommodated depending on the Service Provider's needs for being in the field (see Task 5, 6 and 7). The Service Provider is not required to adhere to this workflow and timeline as long as the project completes within 72 days. In case of non-adherence, an alternative workflow and timeline should to be proposed.

	Task	Details	Est. time in Work Days (total 72 days)	Location
1	System Architecture and Design	Designing overall system architecture and designing	5	Home country
2	Data Model and Database	Defining core data models and technology	5	Home country
3	Setup Environment	All system environments, primarily development, quality assurance, staging & production	5	Home country
4	User Interface	Splash page	1	Home country
		Tag generation and token management	1	Home country
		Dashboard	1	Home country
		Data analysis and visualization	1	Home country
		Market view	10	Home country
		Tag registration and management	1	Home country
		Shipment creation	5	Home country
		Shipment transfer	1	Home country

		Order Acceptance	1	Home country
5	User Acceptance Test	Support on UAT	5	Mongolia (mission)
6	Scan Tag Specifications	Investigation and research of a several options for RFID tags and viability of alternate technologies such as QR Code, barcode, etc.	10	Mongolia (mission)
7	Integrating Scan Tag Application	Integration of tag technology with the core application	10	Mongolia (mission)
8	APIs for existing IT systems	Developing APIs to integrate a couple of existing IT systems with the Blockchain infrastructure	10	Home country

6. QUALIFICATIONS OF THE SUCCESSFUL CONTRACTOR

For the legal entities to provide the service:

- Highly organized legal entity that produces quality work and meets deadlines
- At least 3 years of experience in designing, developing and deploying blockchain technology solutions for international development work
- Proven track record of having successfully completed at least 3 similar projects
- A sample of work (Github link, documentation, etc.) on the project(s) of a similar nature
- A reference letter from a previous client would be an asset

Qualification requirement for the team leader

- Project Manager with an advanced university degree in Information Technology, Systems and Management, Computer Science, Information Science or other related Science, Technology, Engineering or Mathematics (STEM) discipline
- Project Manager has at least 7 years of increasingly responsible professional experience
- Completion of at least two projects of a similar complexity assessing the feasibility, proving the concept and/or developing, deploying, and managing blockchain or its alternative under a public sector funded project
- Strong track record of innovative leadership in forging IT solutions and proven ability to produce demonstrable results

Qualification requirements for a team member

- Degree in Computer Science, Computer Engineering or in a related field combined with relevant work experience
- Postgraduate degree in relevant field is an asset
- At least 5 years of experience in software development, testing, and related work
- Experience developing on top of Ethereum or HyperLedger Fabric
- Experience developing smart contracts especially in Solidity
- Good understanding of blockchain test tools such as Truffle
- Good understanding of smart contracts, cryptography, Ethereum and Javascript
- Exceptional critical-thinking and problem-solving skills
- Proficient in coding with any language of choice

7. SCOPE OF PRICE PROPOSAL AND PAYMENT TERMS

The payment shall be made following the acceptance of each deliverable indicated in the deliverables section. The payment structure corresponding to the respective deliverables are suggested below:

Deliverable	Payment ¹²
a. A 5-10-page document explaining the system architecture and	15% of
implementation design. This document should also entail data model and	(All-inclusive fixed
database specification.	total contract price) –
	(hardware cost)
b. Functional prototype. Completion of working software with appropriate	30% of the same
setup environment and user interface, followed by a User Acceptance Test	
to UNDP CO prior to or during the mission to Mongolia.	
c. Pilot run. Completion of a pilot run of the functional prototype in the field	30% of the same
during the cashmere harvest season (scheduled at the end of March 2019 to	
beginning of April 2019). This pilot run should demonstrate the traceability of	
cashmere from origination point (e.g. goats or bales) to end point (e.g.	
apparel firms or end-customers).	
d. Pilot evaluation report explaining the deployed software and hardware	15% of the same
solutions, technical outputs and outcomes of the pilot, technical and non-	
technical challenges encountered, the solutions deployed, and	
recommendations for scaling up.	
e. Documentation on further optimization and development needs alongside	10% of the same
with separate reports for maintenance, support, and training program	

¹² Hardware costs will be covered by UNDP CO before or after the purchasing the hardware. Costs will be based on the cost estimation figures presented in the financial proposal. The Service Provider purchases the required hardware in consultation with UNDP CO. Upon completion of the project, all purchased hardware needs to be returned to UNDP CO.