

REQUEST FOR QUOTATION (RFQ)

Date: 04 April 2013

Dear Sir/Madam,

Subject: Request for Quotation for services «Setting up the model of pollutants transport and water balance in the Baikal Basin»

Project: 00078317, Integrated Natural Resource Management in the Baikal Basin Transboundary Ecosystem

Case reference: RFQ/EMO/2013-040 (IWC-00078317)

1. The United Nations Office for Project Services (hereinafter “UNOPS”) is pleased to invite you to submit a quotation for supply of the services described in Annex I to this Request for Quotation.
2. We would appreciate receiving your quotation on or before **25 April 2013 10:00 A.M. Irkutsk time** via e-mail DmitriP@unops.org (it must not exceed 8MB) or fax **+73012338030** to the attention of **Dmitry Popov**. Please specify above project and reference number on your quotation.
3. Any requests for clarification should be referred to:
Contact Person: Dmitry Popov
Office: UNOPS
Address: Room: 13,
8, Sakhyanovoy Str.,
670047, Buryatia, The Russian Federation

Telephone: +7 3012 415759
Fax +7 3012 338030
E-Mail: DmitriP@unops.org
4. Your quotation shall include the following:
 - Brief approach and methodology as well as CV(s) of proposed staff/personnel in response to the Terms of Reference as per Annex I.
 - Fixed overall quotation in a single currency (see Annex II) with the following structure:

Name(s) of consultant(s)
Number of working days and daily fee
Daily subsistence allowance
Number of international travels and cost
Number of local travels and costs
Other costs
TOTAL
 - Completed Previous Experience Form (see Annex III)

5. UNOPS evaluates the quotations based on best value, i.e. best quality and cost-effectiveness of the proposed offers. The following aspects will be considered for the evaluation:
 - (a) Suitability of the approach and methodology including firm's capacity to undertake the services
 - (b) Qualifications and suitability of the staff/personnel proposed for the assignment including their previous experience with same type of assignment
 - (c) Cost-effectiveness of price quotation
6. A contract may be awarded to the bidder having submitted the quotation representing the best value for UNOPS. However, UNOPS reserves the right to accept or reject any quotation, and to cancel the process and reject all quotations, at any time prior to the award of contract, without thereby incurring any liability to the Bidders or any obligation to inform the Bidders of the grounds for such action.
7. UNOPS reserves the right to make multiple arrangements for any item or items.
8. In the event of a Contract the UNOPS General Conditions will apply. The conditions are available at <http://www.unops.org/english/whatweneed/Pages/Guidelinesforsuppliers.aspx> under "UNOPS general conditions of contract": UNOPS Conditions of Services - For contracts of a value of less than USD 50,000. (Annex IV)
9. **Supplier eligibility.** Suppliers shall not be eligible to submit an offer and to be awarded a contract when at the time of bid submission:
 - (a) Suppliers are already suspended by UNOPS, or,
 - (b) Supplier's names are mentioned in the UN 1267 list of Terrorists issued by the Security Council resolution 1267, which establishes a sanctions regime to cover individuals and entities associated with Al-Qaida and/or the Taliban, or,
 - (c) Suppliers are suspended by the UN Procurement Division (UN/PD), or,
 - (d) Suppliers have been declared ineligible by the World Bank.

Furthermore, as a condition of doing business with UNOPS it is necessary that suppliers, their subsidiaries, agents, intermediaries and principals cooperate with the Office of Internal Oversight Services (OIOS) of the United Nations, UNOPS Internal Audit and Investigations Group (IAIG) as well as with other investigations authorized by the Executive Director and with the UNOPS Ethics Officer (during preliminary reviews in line with UNOPS whistle blower policy) as and when required. Such cooperation shall include, but not be limited to, the following: access to all employees, representatives, agents and assignees of the supplier; as well as production of all documents requested, including financial records. Failure to fully cooperate with investigations will be considered sufficient grounds to allow UNOPS to repudiate and terminate the contract, and to debar and remove the supplier from UNOPS's list of registered suppliers.

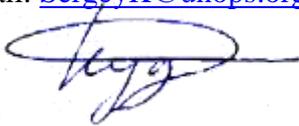
10. **Information regarding Bid Protest can be found at:**
<http://www.unops.org/english/whatwedo/services/procurement/Pages/Procurementpolicies.aspx>
11. UNOPS strongly encourages all Bidders to subscribe to the Tender Alert Service available on the United Nations Global Market Place (www.ungm.org). This will allow Bidders to be

notified automatically of all UNOPS business opportunities for the products and services for which they have registered. Instructions on how to subscribe to the Tender Alert Service can be found in the UNGM Interactive Guide for Suppliers.

12. UNOPS will effect payment within 30 days after receipt of original payment documentation.

We look forward to receiving your quotation.

Yours sincerely,
Sergey Kudelya
Project Manager
EMO/IWC
UNOPS
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8, Sakhyanovoy Str.,
670047, Buryatia, The Russian Federation
Telephone: +7 3012 415759
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ANNEX I - TERMS OF REFERENCES

Terms of Reference (TOR) for Local Service Contract

Setting up the model of pollutants transport and water balance in the Baikal Basin

Location :	Mongolia, The Russian Federation
Application Deadline :	25- Apr -2013
Type of Contract :	Service Contract
Post Level :	Local
Languages Required :	English, Russian
Starting Date :	30-Apr- 2013
Duration of Initial Contract :	30- Apr -2013 – 15- December- 2013
Expected Duration of Assignment:	8 months

Background:

The project's objective is to spearhead integrated natural resource management of Baikal Lake Basin and Hövsgöl Lake ensuring ecosystem resilience, reduced water quality threats in the context of sustainable economic development. The project has three primary components: elaborating a strategic policy and planning framework; strengthening institutional capacity for IWRM; and demonstrating water quality and biodiversity mainstreaming practice, including groundwater monitoring and protection.

This project builds upon a solid, decades-old baseline of bilateral cooperation between Russia and Mongolia on the transboundary waters of the Selenga River and by extension the Baikal Basin itself. To date, international support for environmental conservation and management in the Baikal Basin has not been transboundary in orientation; little support has been provided the two countries in strengthening their transboundary cooperation to manage sustainably the globally significant environmental benefits represented by the incomparable Lake Baikal and its transboundary Basin, at the top of which lies Mongolia's aquatic jewel, Lake Hovsgol. In addition to this solid baseline of transboundary cooperation are two rapidly growing economic baselines in mining and tourism, with mining being the biggest and fastest growing economic activity in the Baikal Basin and tourism a smaller but also rapidly growing sector in both the Russian and Mongolian portions of the Baikal Basin. Both of these sectors hold much promise in becoming better stewards of the Baikal Basin's aquatic ecosystems. In the absence of a GEF investment, these barriers are likely to continue hampering an effective transboundary response to the critical threats that are already impacting the ecosystem health and resilience of the Baikal Basin.

Successful implementation of a regional project like "Integrated Natural Resource Management in the Baikal Basin Transboundary Ecosystem", to a large degree depends on effective implementation and ownership of project-inspired work at the national and local levels.

Justification:

Lake Baikal and its transboundary basin including Lake Hovsgol represent an unparalleled global benefit in terms of international waters and biodiversity values. While past and current efforts to protect and sustainably utilize the environment and its natural resources are impressive,

they are insufficient to the task of addressing the threats to the health of the Baikal Basin's interconnected aquatic ecosystems. These threats include: climate change, pollution and sedimentation, nutrient loading, and habitat destruction. To address these threats successfully conservation work must move beyond the protected area limits and into the 87% of the Basin that is not protected where natural resource exploitation continues without regard to ecosystem health and biodiversity conservation objectives. Significant barriers hamper both countries' ability to move ahead both within their national jurisdictions and jointly on a robust transboundary level. These barriers include: policy and regulatory gaps, institutional weaknesses, poor utilization of BAT/BEP relevant to key issues facing the Basin, and low levels of awareness of transboundary BB issues.

Overall, the basic legal and policy frameworks for the conservation and sustainable management of the Baikal Basin are in place. From a transboundary perspective, lacking are specific laws or policies enabling the transboundary monitoring of aquatic ecosystem health both in Russia and Mongolia. The regulatory basis for ecosystem conservation and water-pollution prevention in Baikal has not yet been completed. For example, the regulatory and policy mechanisms needed to implement SAP, as well as sub-basin watershed management plans are as yet uncertain. Several scientific components for SAP development and implementation remain yet to be completed, particularly with regard to the extent of groundwater / surface water interconnectivity in the region, especially along the Selenga River; and accumulation of persistent organic pollutants in the benthic sediments and biota of the Basin's rivers, deltas and lakes. Neither Russian, nor Mongolian law adequately stipulates clear and practical environmental quality standards for ground water and surface water. The two are inextricably linked in most river systems. The picture of water quality threats from industrial and mining sites remains incomplete; and measures on how best to handle residual pollution problems from abandoned mining sites have not been defined in policies on either side of the border. The EIA procedures do not properly address biodiversity risks; and sectoral programs are operating without standards for minimization or reduction of impacts to biodiversity. Tourism laws and policies focus more upon the economic aspects of tourism development and promotion and give short shrift to detailing guidelines and training on mainstreaming biodiversity and ecosystem health management objectives into tourism planning and management practices, including utilizing new tools such as certification incentives for environmentally sustainable behavior by tourism operators.

None of the existing bodies set up at bilateral and national levels (the Joint Task Force, and the Baikal Commission in Russia) have the authority, budget and cooperative framework necessary to reduce threats / barriers to water quality and biodiversity objectives. Basin-wide water quality data does not exist and no collaborative monitoring system is in place.

The EIA process does not adequately address biodiversity conservation considerations. Even though Russia has established national procedures for assessing environmental impacts of economic projects, or any other activity that may have direct or indirect impacts on the environment, and biodiversity is an obligatory part of EIA content, there are still some barriers to fully integrating biodiversity conservation considerations into all phases of mining and tourism sector investment projects.

Obstacles to capacity building among involved stakeholders relate in part to peculiarities of public "environmental" awareness in the region.

Monitoring systems and data analysis methodologies are not consistent across the region and there is considerable variation in monitoring capabilities, equipment and activity. This service will enable Russian and Mongolian stakeholders to take modest steps in standardizing monitoring of joint, key monitoring parameters for aquatic ecosystem health and biodiversity in the Baikal Basin.

Under the auspices of the Joint Commission, project resources will assist the two countries in identifying, assessing and mapping water quality monitoring activity in the basin, including monitoring site locations, type of monitoring, technology used, and contaminants screened. Monitoring protocols and capabilities will also be analyzed. Joint monitoring of parameters will be endorsed by the Joint Commission and a limited number of sampling sites determined throughout the Selenga river basin. Sampling frequency, the inter-calibration of methods and techniques and mechanisms for joint analysis of data will also be agreed.

Project resources will support stakeholders' efforts to elaborate simple, shared methodological frameworks for sampling and analyzing data to enable comparability of key environmental data parameters on the state of aquatic ecosystem health across the transboundary Baikal Basin. Project resources will assist in establishing a baseline for the agreed upon monitoring parameters in the first year of project implementation, thereafter annually showing pollution loading levels and engendering a satisfactory degree of confidence in, and comparability of, water quality and species monitoring data across the Baikal/Selenga Basin.

The Project will also assist in establishing an early warning program to notify downstream users in the case of acute threats from water-borne pollutants and will coordinate pollution warning/alert/response simulation(s).

Development objective:

Set up the model of pollutants transport and water balance calculation in the Baikal Basin.

Immediate objective(s):

This Service will be done as part of the Output 2.4, "The harmonized Baikal Basin Water Quality Monitoring program set under implementation, including upgraded monitoring stations".

The Service will accomplish the following tasks:

- Conduction of trainings for acquaintance with principles of HEC-RAS, WEAP model work and necessary skills of ArcGIS.
- Calibration and verification of one-dimensional hydrodynamic model (HEC-RAS) for chosen key parts of river net.
- Calibration and verification of WEAP for the lake Baikal basin.
- Development of expert-analytical system of chemical element transfer down the Selenga river.
- Installation of program complex HEC-RAS, WEAP and developed models on computers of Baikal Information Centre in Mongolia and Russia.
- Visualization of scenario results of river net reaction forecast and water balance calculation published on Baikal Information Centre web-site.

Specific Deliverables:

The service is expected to deliver the following results:

- Description and working complex of modeling system, including mathematical model based on packet HEC-RAS of the Tuul river's and the Orkhon river's channels (lower than junction with Tuul river) till junction with Selenga, the Dzhida river till junction with Selenga, and expert-analytical system of Selenga (basing on delution equation).
- WEAP-based model of water balance of the Lake Baikal basin.
- Results of space spreading of pollutants' characteristics in weighted and dissolved form of burden of river drift (turbidity, heavy metals, tracers) under different nature-anthropogenic conditions (maps, graphics, tables).
- Estimation of characteristics of water drift stocks and dissolved substances for different hydrological conditions.
- Forecast modeling of volume of accumulated material in river channel and in floodplain along the length of river systems; estimation of geochemical barriers.
- Development of structure of model and water balance web-page on the Baikal Institute of Nature Management web-site.

Input:

The database for modeling and simulation of pollutants transport in the Baikal Basin.

Expected Outputs, reports and related logistics:

- Detailed calendar plan for activities at the end of first 15 days.
- Technical progress reports (every 2 months).
- Training reports.
- WEAP Model of the Baikal basin.
- HEC-RAS Model of pollutants transport of the Selenga basin.
- BIC web site model and water balance pages structure.
- Final report.

Payment will be made in 4 installments based on the acceptance of the required deliverables by the Project Manager as specified below:

- 20% payment as a first installment upon the submission of detailed calendar plan for activities to be carried out within the framework of the consultancy;
- 20% remaining payment upon providing training reports – no later 1 July 2013;
- 30% remaining payment upon submission of WEAP Model of the Baikal basin and HEC-RAS Model of the Selenga basin – no later 1 Oct 2013.
- 30% remaining payment upon installation of the models in countries, BIC web site pages configuration and submission of the final report – no later 1 Dec 2013.

Duration of Initial Contract: 15- Apr -2013 – 15- December- 2013

Expected Duration of Assignment: 8 months

Budget: An indicative cost of USD 49,500 has been estimated for these services.

**Приблизительный перевод
(английский текст имеет преимущественное значение)**

Цель и задачи:

Данная работа выполняется как часть Output 2.4, "The harmonized Baikal Basin Water Quality Monitoring program set under implementation, including upgraded monitoring stations".

В рамках работы должны быть выполнены следующие задачи:

- Проведение учебных тренингов на базе Байкальского Института Природопользования и института Гидрологии и Метеорологии МАН по ознакомлению с принципами работы с моделью HEC-RAS, WEAP и необходимых навыков ArcGIS.
- Калибровка и верификации одномерной гидродинамической модели (HEC-RAS) для выбранных ключевых участков речной сети
- Калибровка и верификации WEAP для бассейна озера Байкал
- Разработка экспертно-аналитической системы переноса химических элементов по длине р. Селенга ниже
- Установка программного комплекса HEC-RAS, WEAP и разработанных моделей на компьютеры Байкальского Информационного Центра в Монголии и России.
- Визуализация сценарных результатов прогноза реакции речной сети и расчета водного баланса на сайте Байкальского Информационного Центра.

Конкретные результаты:

В рамках работы должны быть получены следующие результаты:

- описание и рабочий комплекс системы моделирования, включающий математическую модель на базе пакета HEC-RAS русла р. Туул и Орхон (ниже слияния с р. Туул) до слияния с р. Селенга и р. Джида до слияния с р. Селенга и экспертно-аналитической системы (на основе уравнения разбавления) р. Селенга
- модель водного баланса бассейна озера Байкал на базе WEAP
- результаты пространственного распространения характеристик загрязнителей во взвешенной и растворенной форме наносов (мутность, тяжелые металлы, трасеры) при разных природно-техногенных условиях (карты, графики, таблицы)
- оценка характеристик стока наносов и растворенных веществ и их характеристик для разных гидрологических условий
- прогнозное моделирование объемов аккумулируемого материала в русле и на пойме по длине речных систем, оценка геохимических барьеров
- разработка структуры страницы на сайте БИП по модели и водному балансу.

ANNEX II. FINANCIAL OFFER

Name(s) of consultant(s) (a)	Number of working days (b)	Daily fee (c)	Daily subsistence allowance (d)	Total (e)=(b)x((c)+(d))
GRAND TOTAL				

International/National travels (a)	Quantity (b)	Cost (c)	Currency (d)	Total (e)=(b)x(c)
GRAND TOTAL				

Other Costs (description)	Cost
GRAND TOTAL	

ANNEX III: PREVIOUS EXPERIENCE FORM

Previous Experience				
Description of services/goods/works/	Country	Total amount of contract	Contract Identification and Title and Contact details of Client: (Name, Address, telephone, email, fax)	Year project was undertaken

Authorized Signature: _____

Date: _____

ANNEX IV - UNOPS CONDITIONS OF SERVICES

1-Contractor's Status In all matters relating to this Contract, the Contractor shall be acting as an independent contractor. Neither the Contractor nor its employees are the employees of UNOPS. The Contractor assumes all liabilities or obligations imposed by any law or regulation with respect to such employees. The Contractor shall not have the authority to create any obligation on behalf of UNOPS and shall not represent itself as an agent, employee or in any other capacity of UNOPS. The Contractor shall be responsible for the professional and technical competence of its employees, who shall be expected to respect local customs and conform to a high standard of moral and ethical conduct.

2-Damage to Persons and Property The Contractor shall indemnify and hold harmless UNOPS, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of this Contract.

3-Intellectual Property Rights All intellectual property and other proprietary rights, including but not limited to patents, copyrights and trademarks, in all countries, with regard to maps, drawings, photographs, mosaics, plans, manuscripts, records, reports, recommendations, estimates, documents and other materials, except pre-existing materials, publicly or privately owned, collected or prepared as a consequence of or in the course of the performance of this Contract, shall become the sole property of UNOPS. The Contractor shall hold harmless and fully indemnify UNOPS from and against all claims and proceedings for infringement of any patent rights, design trademark or name or other protected rights resulting from Contractor's performance.

4-Confidentiality All maps, drawings, plans, reports, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of UNOPS, shall be treated as confidential and shall be delivered only to the duly authorized representative of UNOPS upon completion of the Services.

5-Advertising The Contractor shall not advertise or otherwise make public the fact that it is performing, or has performed services for UNOPS or use the name, emblem or official seal of UNOPS or the United Nations or any abbreviation of the name of UNOPS or the United Nations for advertising purposes or any other purposes.

6-Modifications Any modification or change to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and UNOPS.

7-Sub-contracting and Assignment of Contract The Contractor shall not sub-contract the Services or otherwise assign, transfer, pledge or make other disposition of this Contract or any part thereof or of any of the Contractor's rights, claims or obligations under this Contract.

8-Termination UNOPS may terminate this Contract for cause or convenience in the interest of the UNOPS upon not less than fourteen (14) days written notice to the Contractor. Upon termination of this Contract, the Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum. Unless such termination has been occasioned by the Contractor's breach of this Contract, the Contractor shall be entitled to be paid for the part of the Services satisfactorily completed as of the date of termination, plus substantiated costs resulting from commitments entered into prior to the date of termination as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

9-Privileges and Immunities Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the United Nations of which the UNOPS is an integral part.

10-Settlement of Disputes Any controversy or claim arising out of or in connection with provision of this Contract or any breach thereof, shall, unless resolved through direct negotiation, be settled in accordance with the UNCITRAL Arbitration Rules then in force. UNOPS and the Contractor shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy or claim.