

TERMS OF REFERENCE

1. Project Information

Assignment Title:	International Consultant for Air Quality Systems
Cluster/Project:	Sustainable Urban Mobility for All Initiative (SUMAI) Project
Post Level:	Specialist
Contract Type:	Individual Contractor (IC)
Duty Station:	Homebased and Phnom Penh
Expected Place of Travel:	Phnom Penh, Cambodia
Contract Duration:	10 working days from the mid week of May to the first week of June 2019

2. Background and Project Description

Air pollution is one of the most serious environmental issues all over the world. According to the United Nations Environment Programme (UNEP), air pollution causes 1 in 8 deaths worldwide, accounting for about one-third of deaths from various health diseases such as, stroke, chronic respiratory disease, lung cancer and heart attack amongst others. This is about 7 million deaths worldwide per year from air pollution, wherein over two-thirds take place in Asia, which is home to about less than 60% of the global population¹. According to the World Health Organisation, the Southeast Asian region suffer around 2.4 million or 34% of all air pollution deaths.

The pollutants are coming from various sources such as burning of fossil fuels (gasoline and natural gas), power plants and vehicles. The transport sector has become one of the largest contributors to greenhouse gas emissions as well as air pollution worldwide.

Rapid urbanization has also led to a growing demand for improved mobility and transport. The rapid urbanisation of Phnom Penh has reinforced a demand for mobility and transport modes. The number of registered vehicles in Phnom Penh has been increasing at an average rate of about 20% each year, and has reached now 3.2 million vehicles registered, including 2.7 million motorbikes². This rapid motorization has particularly resulted in growing congestion throughout of the city impacting air quality, pollution, road safety and contributing to Green House Gas (GHG) emission.

The Sustainable Urban Mobility for All Initiative (SUMAI) project of UNDP in Cambodia builds on the recognition that cities are on the front lines of the fight against air pollution and climate change, and that managing transport and greenhouse gas emissions are complex tasks requiring innovation, multi-stakeholder engagement and investment. It recognizes that sustainable urban transport system would require strengthening various features of the system including accessibility, efficiency, safety and people/environment friendliness.

Viewed as a catalytic investment, the project would provide the means to plan and improve the present urban traffic and transport systems through the generation of data on traffic and air quality in the city to guide policy and regulatory decisions. The intended impact would be better-informed policies and investment decisions in support of sustainable and smart urban transport solutions.

¹ <https://asia.nikkei.com/Economy/Two-thirds-of-all-air-pollution-deaths-occur-in-Asia>

² MPWT

The objective of SUMAI is to improve availability and quality of transport data in Phnom Penh to guide decisions on transport investments and policies that are in line with sustainability objectives. In pursuit of this objective, the project would focus its interventions to support:

- Improving efficiency of existing urban traffic and transport system through generation of traffic and air quality data in Phnom Penh;
- Reducing urban transport GHG emission through promotion of clean vehicles and fuels measures;
- Stimulating innovations in smart transport solutions to accelerate progress on safety and mobility for all.

The relevance of the work is to assess and map air quality monitoring systems in Phnom Penh and to provide recommendations on how to work with the devices and position UNDP in the air quality management work.

This is linked to the programme/project context by supporting two of the project's key focus interventions, ***"Improving efficiency of existing urban traffic and transport system through generation of traffic and air quality data in Phnom Penh"***, mostly on the traffic data and ***"Stimulating innovations in smart transport solutions to accelerate progress on safety and mobility for all"***.

3. Scope of work

Existing data that can be shared by the Ministry of Environment will be used for the assessment. Moreover, the assignment will assess the existing devices that are available in Cambodia, have been tested or have been used in the countries within the region. The assessment can explore options of other types of devices that are found to be suitable to the country's air quality context.

The specialist will perform the following tasks:

Task 1: Mapping and Assessing air quality management in Cambodia

- Map out and assess the air quality monitoring devices and management in Cambodia.

Task 2: Provide a report and recommendation

- Write a report on findings.
- Provide recommendation on way forward/how to proceed with air quality monitoring and management.
- Provide a strategy on how to position UNDP in the air quality monitoring and management.

4. Expected Outputs and Deliverables

No	Deliverables/Outputs	Estimated Duration to Complete	Target Due Dates	Payment amount (%)	Review and Approvals Required
1	Output 1: Work plan for air quality device/systems assessment in Phnom Penh; and a rapid assessment report on air	5 days	By mid-May 2019	50%	

	quality device/systems in Phnom Penh				UNDP SDG and Private Sector Analyst
2	Output 2: Report –assessment guidebook of air quality devices/systems in Phnom Penh including recommendations and strategy and a presentation of findings	5 days	By end of May 2019	50%	
	Total	10 days		100%	

5. Institutional Arrangement

The International Consultant for Air Quality Systems will perform his/her task under the supervision of the UNDP SDG and Private Sector Analyst. S/he will liaise and work closely with UNDP Private Sector Project Manager.

6. Duration of the Work

The duration of the work is 10 working days over the period from the mid-week of May to the first week of June 2019. Within the period, the International Consultant is responsible for developing and submitting to UNDP the above-mentioned deliverables.

7. Duty Station

The assignment is home based and Phnom Penh. The consultant is expected to have one mission to travel to Cambodia for maximum of 5 days.

Selected individual contract(s) who is expected to travel to the Country Office (CO) to undertake the assignment in the country (Cambodia) is required to undertake the *Basic Security in the Field (BSIF) training*

(<https://dss.un.org/dssweb/WelcometoUNDSS/tabid/105/Default.aspx?returnurl=%2fdssweb%2f>) prior to travelling. CD ROMs must be made available for use in environments where access to technology poses a challenge.¹

8. Minimum Qualification of the Individual Contractor

Education:	Master's degree or higher in biodiversity, health sciences, natural/environmental sciences, climate change or a relevant field.
Experience:	<ul style="list-style-type: none"> • Minimum 7 years of demonstrable experience in the technical area of air quality, biodiversity, land degradation, climate change and natural resource management. • Previous experience in designing, managing and assessing air quality projects. • Extensive international experience in developing air quality

	<p>systems Project framework/policy/agreement, including policy and legal analysis.</p> <ul style="list-style-type: none"> • Previous experience in designing sustainable financing and assessing air quality monitoring systems/devices in the region is an asset.
Competencies:	<ul style="list-style-type: none"> • Demonstrates integrity by modelling the UN values and ethical standards. • Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability. • High level planning, organizational and time management skills, including flexibility, attention to detail and the ability to work under pressure to meet challenging deadlines. • Analytical and problem-solving skills of a high order, including the ability to formulate recommendations and advice senior management on tackling difficult scenarios. • Excellent interpersonal skills, including ability to establish strong cooperative relationships with senior government officials, civil society and donors. • Ability to quickly adapt to change, and to remain calm under pressure. • Proven cross-cultural communication and the ability to function effectively in an international, multicultural environment.
Language Requirement:	Fluency in written and spoken English.

9. Criteria for Evaluation of Technical Compliance of Individual Contractor

Technical Evaluation Criteria	Obtainable Score
Master's degree or higher in biodiversity, health sciences, natural/environmental sciences, climate change or a relevant field.	10
Minimum 7 years of demonstrable experience in the technical area of air quality, biodiversity, land degradation, climate change and natural resource management.	30
Previous experience in designing, managing and assessing air quality management.	20
Extensive international experience in developing air quality systems Project framework/policy/agreement, including policy and legal analysis.	25
Previous experience in strategy formulation on air quality management and institutional positioning.	15
Total Obtainable Score:	100