



PURCHASE ORDER

ASTI – FM 03-17
 REV 3 / 10 October 2023

Supplier:	ATMO, INC.	PO No.:	AI-4RP-24-07-001
Address:	1266 Harrison St., San Francisco, CA 94103, United States of America	PO Date:	July 26, 2024
TIN:	648-722-926-00000	Mode of Procurement:	Competitive Bidding

Gentleman:

Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery:	ASTI Bldg., C.P. Garcia Ave., U.P. Technology Park Complex, U.P. Campus, Diliman, Quezon City 1101	Delivery Term:	Ninety (90) calendar days upon issuance of NTP
Date of Delivery:	_____	Payment Term:	Government Terms
		Warranty Term:	_____

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Lot	<p>Annual software subscription that offers an advanced weather forecasting service powered by cutting-edge artificial intelligence and deep learning technologies. Designed to deliver fast and accurate weather predictions on a national scale</p> <p>GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI is seeking qualified and competent bidders to supply and deliver an annual software subscription that offers an advanced weather forecasting service powered by cutting-edge artificial intelligence and deep learning technologies. Designed to deliver fast and accurate weather predictions on a national scale.</p> <p>1.2. The Approved Budget of the Contract is inclusive of government taxes and other charges.</p> <p>1.3. Should there be any discrepancies between the Purchase Request and Terms of Reference, the latter shall govern.</p> <p>TECHNICAL SPECIFICATIONS</p> <p>2.1. System Capability</p> <p>2.1.1. AI-based nationwide weather forecast specifically customized to the region of the Philippines.</p> <p>2.2. AI Uses Deep Learning</p> <p>2.2.1. The regional AI weather model must utilize deep learning techniques, specifically transformer-based neural networks and/or diffusion-based neural networks.</p> <p>2.3. AI Learns from Local Philippines Data</p> <p>2.3.1. The regional AI weather model must learn from local Philippines meteorological data to create customized forecasts.</p> <p>2.4. AI is Self-Correcting</p> <p>2.4.1. The regional AI weather model must have self-</p>	1	₱79,500,000.00	₱79,500,000.00

correcting mechanisms to improve forecasting accuracy over time.

2.5. Forecasting Resolution

2.5.1. Must create high-resolution weather forecasts with a 2 km x 2 km grid resolution.

2.6. Forecasting Time Step

2.6.1. Must create weather forecasts with a 15-minute time step

2.7. Forecast Update Frequency

2.7.1. Must create new forecasts every 12 hours or, ideally, every 6 hours

2.8. Forecasting Range

2.8.1. Must create short-range weather forecasts up to 72 hours and medium-range weather forecasts up to 14 days.

2.9. Performance Verification Toolkit

2.9.1. Must include comprehensive accuracy and performance verification tools that output charts comparing forecast skill and charts showing metrics as a function of lead-time via a user-friendly graphical interface.

2.10. Vectorized 3D Weather Maps

2.10.1. Must output 3D, interactive, browser-based, WebGL-enabled maps with detailed topography and fully vectorized weather information. It will encompass a pop-up feature that will show data presentation by clicking at any place on the map.

2.11. Real-time Weather Data Feeds

2.11.1. Must output real-time weather data feeds via API in popular formats such as ZARR, GeoTIFF, or NetCDF.

2.12. Historical Weather Reanalysis Toolkit

2.12.1. Must be capable of generating new, high-resolution, numerically based, historical weather reanalysis for use as training data via a user-friendly graphical interface.

OTHER REQUIREMENTS

3.1. Optional Services

3.1.1. Development of risk/hazard models, sub-seasonal, and seasonal meteorological models.

3.1.1.1. Sub-seasonal to seasonal with special emphasis on high-impact weather events.

3.2. Proven Government or Military Track Record

3.2.1. Supplier must have a proven track record of delivering AI meteorology services for other government and/or military entities. For this purpose, a bidder shall only be considered to meet these criteria if it has performed prior AI weather forecasting work for two or more government/military entities on two or more continents.

3.3. Proven High Performance Computing Expertise

3.3.1. Supplier must have proven expertise in utilizing high-performance computing in the context of weather forecasting. For this purpose, a bidder shall be considered to meet these criteria if it has previously utilized one or more top supercomputers.

WARRANTY AND AFTER SALES SUPPORT

4.1. During the period of performance of the contract, the services should be free from major defects and should perform according to the technical requirements and specifications outlined in the contract.

4.2. The system should undergo regular maintenance activities to ensure optimal performance and security of the system. The maintenance activities should include software updates, bug fixes, security patches, and database maintenance. The maintenance activities should be performed on a regular schedule, with minimal disruption to system operations.

4.3. The system should provide a service level agreement (SLA) that outlines the expected uptime, response times, and performance metrics of the system. The SLA should also include escalation procedures, incident reporting, and service credits in case of SLA breaches. The minimum service level is 99% availability, measured monthly, subject only to reasonable exceptions.

PAYMENT AND DELIVERY TERMS

5.1. The Supplier shall describe all financial bid prices and shall be paid in Philippine Peso.

5.2. Supplier payments may be made by (i) bank transfer, (ii) international wire, or (iii) letters of credit, as chosen by the contracting agency.

5.3. Payments shall be inclusive of all government taxes and fees as may be applicable.

5.4. Supplier shall be paid after completion of each of the milestones below:

5.4.1. Initial deployment of Philippines short-range and medium-range AI weather forecasting using Deep Learning Neural Networks.

5.4.1.1. 35% of the total contract price will be paid.

5.4.2. Expansion of the AI weather forecast over the entire Philippine Republic.

5.4.2.1. 25% of the total contract price will be paid.

5.4.3. Assimilation of local Philippine meteorological sensing data into the AI system.

5.4.3.1. 20% of the total contract price will be paid.

5.4.4. Evaluation report submitted on the AI-model forecast

5.4.4.1. 10% of the total contract price will be paid.

5.4.5. Conduct of capacity building and training.

5.4.5.1. 10% of the total contract price will be paid.

5.5. The supplier shall commence initial service within ninety (90) calendar days upon issuance of Notice to Proceed. Subsequently, the supplier shall make commercially reasonable efforts to expeditiously complete each of the project milestones noted in Section 5.4.


	<p>5.6. The supplier shall deliver the AI weather forecasting services as a cloud-hosted solution, ensuring scalable, secure, and reliable access. The service will produce and provide data feeds, maps, reports, and other deliverables as defined in the work plan and technical requirements document, accessible to the contracting agency through secure online interfaces.</p> <p>5.7. The acceptance of ongoing services and technologies will be based on completing the project milestones noted in Section 5.4. The contracting agency may note deviations from the defined milestones or technical requirements and the supplier shall be obligated to correct such deviations within ninety (90) days.</p> <p>5.8. Both the supplier and the contracting agency reserve the right to propose adaptations to the service scope or technical requirements in response to technological advancements or changing operational needs. Any proposed adaptations shall undergo a joint review process, requiring mutual approval from both parties.</p> <p><i>(Please see attached offer.)</i></p>			
			TOTAL:	₱79,500,000.00
(Total Amount in Words)			Seventy-Nine Million Five Hundred Thousand Pesos Only	

The contract price is inclusive of taxes and other fees or charges. In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, DOST-ASTI may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances and in accordance with the provisions of the latest implementing rules and regulations of RA 9184.

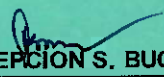
Conforme:

Very Truly Yours,

(Signature over Printed Name of Supplier)


FRANZ A. DE LEON, Ph.D.
Director, DOST-ASTI

(Date)

Fund Cluster:	07	ORS / BURS No.: 023086012024-07-000261
Funds Available:	₱79,500,000.00	ORS / BURS Date: JULY 31-2024
<p> GAY CONCEPCION S. BUGAGAO Accountant III</p>		Amount: ₱79,500,000.00



26 July 2024

NOTICE TO PROCEED
PUBLIC BIDDING

Atty. NATHAN RAPHAEL D.L. AGUSTIN
 Authorized Representative
ATMO, INC.
 1266 Harrison St.
 San Francisco, CA 94103
 United States of America

Dear Atty. Agustin,

Notice is hereby given to **ATMO, INC.** that work/delivery may proceed for the following procurement details:

Contract Name :	Supply and Delivery of Annual Software Subscription for Advanced Weather Forecasting Powered by Artificial Intelligence and Deep Learning Technologies
Purchase Request No. :	AI-4RP-24-06-19359
Purchase / Work Order No. :	AI-4RP-24-07-001
Total Contract Price :	₱79,500,000.00
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words :	Seventy-Nine Million Five Hundred Thousand Pesos


Upon signing receipt of this Notice, you are responsible for performing the services under the terms and conditions of the Agreement/Purchase Order/Work Order and in accordance with the schedule of requirements/delivery schedule.

You are also hereby required to file a Warranty Security for a minimum period of three (3) months, in the case of Expendable Supplies, or a minimum period of one (1) year, in the case of Non-Expendable Supplies, after acceptance by the Procuring Entity of the delivered supplies. It shall be covered by either retention money in an amount equivalent to at least five percent (5%) of every progress payment, or a special bank guarantee equivalent to at least five percent (5%) of the total contract price. The said amounts shall only be released after the lapse of the warranty period or, in the case of Expendable Supplies, after consumption thereof. Provided, however, That the supplies delivered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

Note that failure to comply with the above requirements and failure to perform the services under the terms and conditions of the Agreement/Purchase Order/Work Order may constitute grounds for its forfeiture.

Please acknowledge receipt and acceptance of this Notice by signing in the space provided below. There are two (2) copies of this document; you may keep one copy and return the other to the Bids and Awards Committee (BAC) Secretariat of the Advanced Science and Technology Institute. Should you have any questions or clarifications, you may reach us at bac-sec@asti.dost.gov.ph.

Respectfully,


FRANZ A. DE LEON, Ph.D.
 Director

Digitally signed by
 Bayani Benjamin R.
 Lara

DATE OF ISSUANCE: 01 AUG 2024	RECEIVED BY: _____ Signature over Printed Name _____ Date and Time	WARRANTY SECURITY Type of Warranty Security: Amount of Warranty Security: ₱ _____ O.R. No.: _____
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