UNITED NATIONS PROCUREMENT DIVISION

REQUEST FOR INFORMATION (RFI)

This notice is placed by UNPD. The accuracy, reliability and completeness of the contents of furnished information is the responsibility of UNITED NATIONS PROCUREMENT DIVISION. You are therefore requested to direct all queries regarding this RFI to UNITED NATIONS PROCUREMENT DIVISION using the fax number or e-mail address provided below.

Title of the RFI:

Unmanned Aircraft System (UAS)/Remotely Piloted Aircraft System (RPAS) Logistics Support Pilot Services in support of the United Nations Support Office in Somalia

Date of this RFI: 25 April 2024 Closing Date for Receipt of RFI: 31 May 2024

RFI Number: RFIUNPD22596

Beneficiary Country/Territory: Somalia

Commodity/Service category: UAS/RPAS and Airborne ISR

Address RFI response by fax or e-mail to the Attention of: Ignacio Inestal-Fernandez And Remy Raul

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UNSPSC Code:

46151600 - Security and control equipment

78111500 - Passenger air transportation

25131705 - Target or reconnaissance drones

92110000 - Military services and national defense

78140000 - Transport services



DESCRIPTION OF REQUIREMENTS

The United Nations (UN) is considering the option of conducting a procurement exercise for the provision of Unmanned Aircraft System (UAS)/Remotely Piloted Aircraft System (RPAS) Logistics Support Pilot Services in support of UN Support Office in Somalia (UNSOS). Given the Pilot nature of this project, the UN will consider suitable proposals with a minimum Technology Readiness Level 7 (TRL 7). The purpose of this Request for Information (RFI) is to inquire about the capabilities of market suppliers in offering practical solutions for UAS/RPAS logistics support services in support of UNSOS, Somalia.

The primary objective of this proposed services is to proof and validate the concept of utilizing UAS/RPAS capabilities for logistics service delivery in support of UNSOS. Therefore, initial requirements will be flexible and adapted to achieve timely deployment and efficient utilization and service delivery.

SPECIFIC REQUIREMENTS / INFORMATION (IF ANY)

This UAS/RPAS logistics support pilot services comprises three (3) segments as follows:

- a. Segment 1: Transportation of cargo, including Dangerous Goods (DG).
- b. Segment 2: Transportation of medical supplies such as blood, plasma, vaccines, general medical equipment, emergency kits, etc. (including medical emergency response service). Segment 2 will be developed on three (3) pillars as follows:
- 1) Public Health and Disaster Relief: Employ UAS delivery of medical supplies during disease outbreaks and facilitating emergency response in natural disasters.
- 2) Telemedicine in Remote Locations: Integrate telemedicine capabilities with UAS technology for remote consultations, diagnoses and treatments in undeserved regions through external or integrated medical solutions.
- 3) Medical Logistics: Utilize UAS to transport medical logistics, offering unparalleled speed, agility and adaptability in transporting critical supplies and bolstering healthcare system resilience in high-risk environments.
- c. Segment 3: Provision of precision agricultural solutions (crop spraying and planting of seedlings), 3D Mapping for Geographical Information System (GIS) and efficient aerial surveillance solutions to support engineering related projects. (For the 3D maping and aerial surveillance solutions only), the imagery data must be made available to the UN in an unencrypted, non-proprietary format.

This proposed pilot service will be implemented into two (2) phases as follows:

- a. Phase 1: The Phase 1 service will be conducted from one Main Operating Base (MOB) in Jowhar, Somalia and involve transportation of between 15 50 kg of cargo at a maximum of 50 km (for Segments 1 and 2 only) as well as implementation of Segment 3 . It is envisaged that Phase 1 services will be attain Initial Operational Capability (IOC) by Q4 2024 or Q1 2025.
- b. Phase 2: The Phase 2 service will be conducted from two (2) MOBs (Jowhar and one other MOB, to be decided), with solutions capable of transporting cargo at a maximum range of 250 km (for segments 1 and 2 only) and optimizing services of Segment 3 to be provided from two different MOBs simultaneously and including improved technology and features not included in phase 1. It is envisaged that Phase 2



services will attain IOC by Q3 or Q4 2025.

It should be noted that while both phases are defined by operational objectives rather than timelines, the UN may consider deploying more than one solution covering Segments 1, 2 and 3 at the same time. In addition, the services of Segments 1, 2 and 3 may be provided by different service providers, with each segment handled independently (vendors are not required to provide all segments, if they do not possess relevant experience, expertise, or capacity. Hence, vendors are not obliged to provide solutions to all segments.

- Phase 1 Tasking Line (TL) is defined as the ability to operate one (1) UAS/RPAS including the unmanned aircraft (UA) and its associated elements, out of MOB Jowhar, Somalia, to a distance of 50 km and back to the MOB. The vendors must describe the ideal equipment composition of each TL, including number of UAs, Ground control stations, launchers, recovery equipment, or any other necessary elements for that matter. The distance is indicative and landing at the destination (for UAS refueling, battery change, loading/offloading payload) may be required for Segments 1 and 2. Segments 1,2 and 3 must include at least 1 fully operational TLs per segment in phase 1. Vendors are encouraged to propose effective solutions based on experience and best practice.

MOB Jowhar, situated in African Union Transition Mission in Somalia (ATMIS) sector 5 (see indicative Figure 1) is normally providing logistic support services to up to ten (10) surrounding remote Forward Operational Bases (FOBs) which are located at varying distances from the MOB. These FOBs are inhabited by ATMIS Forces. For clarity, the main supply routes for Segments 1, 2 and 3 solutions will be limited to providing logistics support to these FOBs. For planning purposes, it is envisaged that a maximum range of 50 km will be sufficient for Phase 1. However, vendors are expected to work out modalities and state available options (such as optimized antennas, signal booster, repeater or relay, satellite ink etc) to increase range of the UAS/RPAS to service farther FOBs, as operationally required. Please note cellular network in Somalia is not reliable in most areas and should not be considered to extend range communications. There is no initial requirement to have contractor/sub-contractor personal footprint at these FOBs, however, it is noteworthy that vendors are to propose "Turn Around" modalities and basic training of ATMIS personnel at these FOBs to support turn around activities such as; battery replacement and charging, cargo collection and management etc), if required.

- Phase 2 TL is defined as the ability to operate two simultaneous UAS/RPAS, one (1) UAS/RPAS including the UA and its associated elements, out of MOB Jowhar and a second (2) UAS/RPAS out of MOB 2 (to be determined), to a distance of 250 km and back to either of the MOBs, as applicable. Deployment to a second MOB is not mandatory and will depend on the operational tempo, however, vendors must be capable of operating from two (2) MOBs should that be required by the UN. Any given vendor might be subjectable of being located in one MOB only depending on the specific solutions offered and the Mission operational needs. The distance is indicative and landing at the destination may be required for Segments 1 and 2 only. This definition is appliable to Segments 1 and 2 only.

The UAS/RPAS, service components and personnel will be permanently based and operated at the designated MOB Jowhar, Somalia. The proposed solutions must be robust, mobile, and tactical in nature and adaptable to high operating temperatures. The solutions and personnel must be capable of operating in hostile and austere environment and have a small footprint to allow for rapid relocation, due to operational exigencies, to different locations within Somalia, up to 7 days, if required. However, Temporary Duty Travel (TDY) for testing purposes may be possible. In this regard, the UN will provide necessary support to the service provider(s) (including transportation, infrastructure, security, etc). The security situation in Somalia is tense, volatile, and highly unpredictable.

The proposed services must be able to integrate with existing ATMIS Force components and support elements in accordance with UNSOS requirements.

The logistics support pilot services will be available 24/7 and tasked as follows:



- a. Routine Tasking: The routine tasking will be planned well in advance and applies to Segments 1,2 and 3 with a minimum of one (1) TL per segment simultaneously, Ideally the UN envisage using three TLs (one per segment) simultaneously) however, vendors are encouraged to propose cost effective solutions that might include combining equipment for execution of two or more TLs. Please note that, due to operational exigencies, there is a requirement to respond to "Standby Tasking" for all segments, with an emphasis in segments 1 and 2, with a readiness response time of 60 minutes.
- b. Emergency Tasking: The emergency tasking will involve Segment 2 only with an availability of two (2) simultaneous TLs (one of them can be the routine TLs from segments 1 and 2, however vendors are encouraged to propose cost effective solutions based on experience) and a 15-minute Notice to Move (NTM).

The airfield in MOB Jowhar is unpaved and covered in gravels. Preliminary analysis indicates that a high wing propeller UA can operate adequately to avoid FOD. MOB Jowhar also boasts of paved and unpaved Helicopter Landing Sites (HLS). This fact indicates that the UA must be capable of take-off and landing from small and confined areas. Hence, vertical take-off and landing (VTOL) configuration is envisaged. However, the UNSOS welcomes other novel potential solutions that could meet operational and safety requirements. The UN is seeking information on a turnkey solution, including the provision of UAS/RPAS services in accordance with (iaw) the standards or equivalent with Annexes 1,6 and 8 of the Convention on International Civil Aviation (the Convention) and associated service components, maintenance, personnel and exploitation of the imagery and data. The UN will provide the necessary infrastructure for its equipment and personnel.

It is expected that contracts will be for an initial period of one (1) year, with the option of extending for additional two (2) periods of one (1) year each (1+1+1).

The UN envisages the following requirement for the UAS/RPAS Logistics Support Pilot Services:

- a. Availability of Service. The UN anticipates a minimum potental award of one TL for Segments 1 and 3 to meet the demands of routine and standby tasking, and a minimum of two (2) TLs for Segment 2 only to meet operational demand of routine, standby and emergency taskings. Each TL must be operationally available on a 24/7 basis. Ideally, a TL must include a complete UAS/RPAS, including pilot/operators, one (1) operational UA/RPA, one (1) spare, and the necessary communications, data transfer, launch and recovery elements described by the system manufacturer. UNSOS will coordinate with the vendor regarding crew management in order to have uninterrupted service delivery capability on 24/7 basis as required by operational tempo. The vendor must be able to provide on a continuous basis sufficient flight and ground crew and associate dpersonnel to ensure at least one (1) sortie per TL on a 24 hour period. UAS/RPAS in all segments must be able to operate in desert type weather conditions with temperatures exceeding 40 degrees celsius and winds up to 25 knots including gust.
- b. Flight Time. For Segments 1, the UN estimates a flight time of 100 hour per month. For Segment 2, the UN estimates a flight time of 100 hour per month per TL (2 TLs, 200 hour). For segment 3, the UN estimates a flight time of 50 hour per month. These estimated flight hours are operational service hours and do not include currency or training requirements. Personnel must be able to shift from day to night operations and vice versa as required by UNSOS to support 24/7 operational requirements.
- c. Onboard Equipment. UAS/RPAS operating under Segments 1 and 2 must be able to operate in uncontrolled with transponder 3/A and C, and/or mode S or TCAS I, ADS-B transponder (IN and OUT) as per ICAO and Somalian Civil Aviation Authority (SCAA) requirements. In addition, Segments 1 and 2 UAS/RPAS possess flight tracking hardware (100nm transmission) and Ping station (receiver) to integrate with UN web-based aviation flight tracking service (Skyrouter).



d. All UAS/RPAS in Segments 1, 2 and 3 must be highly mobile with a small footprint to allow for quick reaction.

Preparation of cargos and medical supplies

- e. For Segment 1 only, cargos will be prepared by UNSOS Movement Control (MOVCON) Section in coordination with the UAS operator. Vendor(s) will be required to provide dimensions and limitations of the cargo compartments and transportation platforms.
- f. For Segment 2 only, medical supplies will be prepared by UNSOS medical section in coordination with MOVCON and the UAS operator. Vendor(s) will be required to provide dimensions and limitations of the compartments and transportation platforms.
- 1) Crash Protected Containers: Medical supplies and specimens carried by drones need secure and crash protected containers to prevent damage during transportation.
- 2) Cold chain active or passive measures are required.
- 3) Biohazard procedures should be deployed in case of outbreak bio-specimen transport.
- 4) Integration with UNSOS tracking and monitoring system or owned deployed tracking system in essential.
- 5) Operate with a 15 minute Notice to Move for emergency request.
- 6) Develop capabilities for rapid and on demand delivery of pharmaceuticals, medical equipment, and emergency kits to remote and inaccesible regions.
- 7) Deploy drop off or delivery emergency kit systems and resupply medical logistics.

Other Considerations

- g. In Phase 1 under Segments 1, 2 and 3, applicable UAS/RPAS must be able to take off and land within a 100 ft x 100 ft area bounded by 100 ft high obstacle. Additionally, landing area preparation is not possible. It is envisaged to operate the UAS/RPAS out of regular asphalted runway (8,000 feet) in Phase 2. Due to the operating environment, VTOL and/or catapult launch solutions are envisaged to be more operationally effective in all Segments during Phase 1.
- h. The UN intends to provide all necessary logistics support at its MOB(s) and locations, including accomodation, subsistence and relevant infrastructural amenities.
- i. Data link should be able to penetrate very noisy 2.4 GHz spectrum over city's or be able to switch to a non-standard frequency without too much degradation of real time feed.
- j. The UAS/RPAS different components, including UA, sensors and related equipment must be adapted to operate in harsh weather conditions with high humidity and temperature.
- k. The UAS/RPAS including associated support equipment must be modular with robust field maintenance capability and enough spare components to minimize downtime.
- I. UAS/RPAS including associated components under Segments 1, 2 and 3 should be portable and transportable by Mi-8/Mi-17 type aircraft.
- m. UAS operators who wish to provide services to the United Nations shall have established, implemented and maintain a management system that:
- (1) Corresponds to the size of the company, to the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.
- (2) Depicts the UAS operator's management structure and organizational chart.
- (3) Defines clearly the company reporting lines, responsibilities and accountabilities, operational safety and



quality policy and objectives, safety promotion, management of risk, and compliance monitoring activities (regulatory and contractual as applicable).

n. The UN envisages that total number of personnel/contractors operating under all Segments at MOB Jowhar should not exceed 10 people, however this figure is estimated only, and might defer based on the selected vendor/s operational needs. The UAS operator's personnel including pilots, payload operators and any support personnel shall have the adequate specific qualification and /or training to perform their respective functions during operations in accordance with their National Aviation Authority regulations, applicable ICAO Annexes and SARPs and UN aviation standards and procedures.

Following the conclusion of the Pilot Project, the UN may explore the possibility of instituting service contracts lasting up to three (3) years, with the potential to extend the duration by two (2) additional periods of one (1) year each. These contracts would be applicable in Somalia or any other location where UN services are needed. The new service contract will require a minimum TRL 9. The objective is to potentially establish service contract arrangements with one or more of the vendors who successfully deliver cargo UAS/RPAS support services during the pilot project in the UNSOS area. Further details will be provided within the scope of works of the competitive procurement process (RFP), which is anticipated to be initiated by Q3-2024.

Response Submission

Please refer to Annex A (Vendor Response Form) and Annex B (RFI Questionnaire) and return a filled out version of these documents by the designated RFI Closing Date.

Vendor Registration:

Vendor's response to this RFI will be appreciated. However, please note that to participate in the upcoming RFP Procurement Exercise, vendors will need to be registered at Level 2 in UNGM. Additional technical and operational requirements may apply for registration of air operators (AOC holders) with the UN.

Given the Pilot nature of this project, the UN reserve the right to waive certain operators requirements, such as the AOC, should that be of interest for the successful implementation of this project. Future potential contracts resulting out of this pilot project, will require a full air operator registration.

Detailed information is available online at the address below: https://www.un.org/Depts/ptd/aviation

NOTE

Information on tendering for the UN Procurement System is **available free of charge** at the following address: https://www.ungm.org/Public/Notice

Only the United Nations Global Marketplace (UNGM) has been authorised to collect a nominal fee from vendors that wish to receive automatically Procurement Notices or Requests for Expression Of Interest. Vendors interested in this Tender Alert Service are invited to subscribe on http://www.ungm.org

Vendors interested in participating in a potential future solicitation process should submit the Vendor Response Form of this RFI electronically (through the link available on the next page) before the closing date set forth above.



VENDOR RESPONSE

NOTICE

- Companies can only participate in solicitations of the UN Secretariat after completing their registration (free of charge) at the United Nations Global Marketplace (www.ungm.org).
- Please verify that your company is registered under its full legal name on the United Nations Global
 Market Place (www.ungm.org) and that your application for registration as vendor has been submitted to
 the UN Secretariat in the same site, to be able to participate in any potential solicitation process as a
 result of this RFI.
- While companies can participate in solicitations after completion of registration at Basic Level, we strongly recommend all companies to register at least at **Level 1** under the United Nations Secretariat prior to participating in any solicitations.
- Companies are reminded of the restrictions of employment of former UN personnel that were involved in
 the procurement process during their last three years of service as per ST/SGB/2006/15, including (a)
 employing those personnel for one year after separation of service and (b) allowing those personnel to
 communicate with, or appear before, active UN personnel for matters related to the procurement process
 for two years after separation of service. Violation of the provisions of ST/SGB/2006/15 may lead to
 suspension of the registration of the company as a UN vendor.

PLEASE NOTE: You should submit your response to this RFI electronically at: https://www.un.org/Depts/ptd/node/add/interest-expressed?EOI=RFIUNPD22596

In case you have difficulties submitting your response electronically, please contact ignacio.inestalfernandez@un.org; raul@un.org directly for instructions.



RFI INSTRUCTIONS

1) Registering as a Vendor with the United Nations

Vendors interested in fulfilling the requirement described above must be registered at the UN Global Marketplace (www.ungm.org) with the UN Secretariat in order to be eligible to participate in any solicitation. Information on the registration process can be found at https://www.un.org/Depts/ptd/vendors.

Prerequisites for Eligibility

In order to be eligible for UN registration, you must declare that:

- A. Your company (as well as any parent, subsidiary or affiliate companies) is not listed in, or associated with a company or individual listed in:
 - I. the Compendium of United Nations Security Council Sanctions Lists (https://www.un.org/securitycouncil/content/un-sc-consolidated-list), or
 - II. the IIC Oil for Food List website or, if listed on either, this has been disclosed to the United Nations Procurement Division in writing.
- B. Your company (as well as any parent, subsidiary or affiliate companies) is not currently removed or suspended by the United Nations or any other UN organisation (including the World Bank):
- C. Your company (as well as any parent, subsidiary of affiliate companies) is not under formal investigation, nor have been sanctioned within the preceding three (3) years, by any national authority of a United Nations Member State for engaging or having engaged in proscribed practices, including but not limited to: corruption, fraud, coercion, collusion, obstruction, or any other unethical practice;
- D. Your company has not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against your company that could impair your company's operations in the foreseeable future:
- E. Your company does not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with the Vendor in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15).
- F. Your company undertakes not to engage in proscribed practices (including but not limited to: corruption, fraud, coercion, collusion, obstruction, or any other unethical practice), with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN.

For Registered Vendors: Vendors already registered at the UN Global Marketplace with the UN Secretariat must ensure that the information and documentation (e.g. financial statements, address, contact name, etc.) provided in connection with their registration are up to date in UNGM. Please verify and ensure that your company is registered under its full legal name.

For Vendors Interested in Registration: Vendors not yet registered should apply for registration on the United Nations Global Marketplace (http://www.ungm.org); information on the registration process can be found at https://www.un.org/Depts/ptd/vendors. Vendors must complete the registration process prior to the closing date of the RFI. Vendors who have not completed the UNGM registration process with the UN Secretariat before the closing date of the RFI are not considered eligible to participate in the potential solicitation process related to the RFI. We strongly recommend all companies to register at least at Level 1 under the UN Secretariat prior to participating in any solicitations.

IMPORTANT NOTICE: Any false, incomplete or defective vendor registration may result in the rejection of the application or cancellation of an already existing registration.

2) RFI Process

Vendors interested in participating in the potential solicitation process should forward their information (as requested in the RFI) to UNITED NATIONS PROCUREMENT DIVISION (UNPD) by the closing date set forth in this RFI. <u>Due to the high volume of communications UNPD is not in a position to issue confirmation of receipt of RFIs.</u>

Please note that no further details of the potential solicitation can be made available to the vendors prior to issuance of the solicitation documents.

This RFI is issued subject to the conditions contained in the RFI introductory page available at https://www.un.org/Depts/ptd/rfi.



