REQUEST FOR INFORMATION (RFI)

Title of the RFI:

Deep Field Transmission for UAS

Date of this RFI: 6 May 2020	**Closing Date for Receipt of RFI at PD:** 8 June 2020

RFI Number: RFIGM3296

Address RFI response by fax or e-mail to the Attention of: Grzegorz Mularczyk

Fax Number: n/a

E-mail Address: mularczykg@un.org

UNSPSC Code: 43190000, 43200000

DESCRIPTION OF REQUIREMENTS

United Nations peacekeeping missions are geographically dispersed operations needing close to real-time access to video streaming, video clips and photographs. This data is being collected from UAS operating in countries with limited or no LTE networks where the UN provides satellite communications in lieu. This results in limited capacity such as low bandwidth, high latency and packet losses for data communications. In time-critical environments or in a crisis, the ability to quickly send precise UAV imagery and video to decision makers can have a direct effect on humanitarian and peace operations. Under these conditions, it is also important to let remote experts interact with UAS pilots in the field during flight.

The objective of the UN is to implement the capacity to transmit video and imagery from the fleet of Micro and Mini UAS currently deployed in UN Peace Operations utilising the satellite communications available in the field. This UAS fleet is composed of Micro UAS such as the DJI Mavic 2 Enterprise, Mavic 2 Pro, Parrot Anafi and Phantom 4 Pro. UN Missions are equipped with a range of different commercial satellite communication systems such as Turaya, Inmarsat (BGAN) and Iridium. In addition, there also exist proprietary satellite communications and commercial internet capacity in remote regions. The initial focus of the project will be the African and Middle Eastern peace operations.

This Request for Information seeks to identify vendors and technologies that can provide an off the shelf product suite (e.g. hardware, software, licenses, etc.) to enable the transmission of data (images and video) from Micro and Mini UAS during flight or immediately on landing , that are operating in remote areas without any LTE or Wi-Fi networks, via satellite phones, to the Sector, Force and Mission HQ as well as to other parts of the UN. The RFI submission should outline how the technology would work in principle and not be specific to satellite communication system.

Vendors answering this RFI are kindly requested to address the following points:
1. Does the product support the transmission of live streaming, video clips and images captured from UAS during flight? Is it possible to upload and transmit data from remote locations after UAS landing?

2. Describe the typical architecture of the product, its main components, characteristics, configuration and features.
3. Does the product have more than one version? In case yes, explain the different versions, their applications and capacities.
4. Can the images and the video clips be viewed in a web browser? How long after their capture images and video clips are available? Are the images interactive?
5. Can be the video streaming transmitted in almost real time for critical purposes? How does the product cope with networks with limited capability?
6. Please describe the technical requirements that your solution requires from satellite, radio and internet communication links to operate efficiently in the above mentioned geographic zones. E.g. bandwidth requirements, expected latency with the different communication types, etc.
7. Does the product have the capacity to provide interaction between the UAS Pilot and remote viewers (for guidance)?
8. How many users can access remotely to the network and utilise the data?
9. Does the product support the installation of on-premise data servers at any UN location?
10. Is the product modular and scalable?
11. Can the user pull regions of interest from the images?
12. Can be the acquired data be integrated with GIS and mapping systems?
13. Does the product work with Windows or Linux operating systems? Does the product have open interfaces (API, etc.) to integrate with UN applications?
14. How is data security provided and what is its privacy policy? Does the product have any encryption capacity?
15. Please explain the licensing scheme e.g. by users, by servers, by source, etc.
16. Has this product been field deployed? Please mention some reference users if shareable.
17. How long has the product been in the market?
18. How long is the product projection in the market?

Important Note: the UN is not requesting any price information at this time.

SPECIFIC REQUIREMENTS / INFORMATION (IF ANY)

The information gathered from this RFI will be used to determine solution feasibility and design, scope, limits, planning and implementation, and resources required by the UN that address this technology need, for UN peacekeeping missions worldwide.

Please note on the following:
1. All costs for preparing a response for the RFI must be covered by the vendor.
2. This RFI is a separate and independent process.
3. The requested information will only be used by the UN for internal planning purposes. All responses will be kept strictly confidential and only authorized personnel will have access to it.
4. The response to this RFI will not be used to pre-qualify vendors.
5. The provided information will not be contractually binding to the vendor.
6. To keep response formats consistent, the responses must be typed into a Word or PDF document.

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

VENDOR RESPONSE FORM

TO: Grzegorz Mularczyk   **RFI Number:** RFIGM3296

Email: mularczykg@un.org

FAX: n/a

FROM:

SUBJECT: Deep Field Transmission for UAS

To be filled by the Vendor (All fields marked with an '' are mandatory)*

COMPANY INFORMATION

UNGM Vendor ID Number*:

Legal Company Name (Not trade name or DBA name) **:**
Company Contact *:

Address *:	
City *:	**State:**
Country *:	

Telephone Number *:
Fax Number *:

Email Address:
Company Website:

We declare that our company fully meets the prerequisites A, B, C, D and E, for eligibility to register with the United Nations as outlined in the paragraph 1 of the RFI INSTRUCTIONS page.

Signature:_____ Date:_____

Name and Title:_____

** If not already registered with UN Procurement Division, please use the following URL to register at United Nations Global Marketplace (UNGM): www.ungm.org.

1) <u>Registering as a Vendor with the United Nations</u>

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/sc/suborg/en/sanctions/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**.

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) <u>RFI Process</u>
Vendors interested in responding should forward their information (as requested in the RFI) to the United Nations Procurement Division (UNPD) by the closing date set forth in this RFI. *Due to the high volume of communications, UNPD is not in a position to issue confirmation of receipt of RFIs.*

Please note that no further details of the planned 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.