



REQUEST FOR EXPRESSION OF INTEREST (EOI)

This notice is placed on behalf of UNECA. United Nations Procurement Division (UNPD) cannot provide any warranty, expressed or implied, as to the accuracy, reliability or completeness of contents of furnished information; and is unable to answer any enquiries regarding this EOI. You are therefore requested to direct all your queries to UNECA using the fax number or e-mail address provided below.

Title of the EOI:

COVID-19 Data Tracking and Analysis service platform

Date of this EOI: 9 November 2020

Closing Date for Receipt of EOI: 9 December 2020

EOI Number: EOIUNECA17873

Address EOI response by fax or e-mail to the Attention of: Rahel Tarekegne

Fax Number: N/A

E-mail Address: shiferaw3@un.org

UNSPSC Code: 43220000,43223200

DESCRIPTION OF REQUIREMENTS

Background

COVID-19 represents a unique and unprecedented threat to both Africa and humanity. For any strategies or policies to be effective against COVID, they must be based on significant, actionable data. In addition, there must be an effective two-way information and communication channel accessible to the majority of the population. The digital channels (Facebook, Twitter, WhatsApp, and Websites) provide a valuable and necessary mechanism for communication, information gathering, and data visualization. However, mobile penetration rates (% of population) in Africa are currently around 45%. Digital channels which require 3G/4G/Smartphone/Internet penetration is at slightly more than 50% of mobile penetration or just 25% of the population. Therefore, even utilizing the entire mobile network, less than half of the African population could be reached directly through this mechanism. In order to ensure inclusiveness, reaching those in the bottom half of the pyramid, as well as many of the most vulnerable, using “digital” channels will not be enough. The majority of those that can be reached electronically will be done via 2G, SMS, USSD/Short Codes and Interactive Voice Response (IVR).

The African COVID-19 Communications & Information Platform (ACCIP)

ECA, Africa CDC and partners are championing an African COVID-19 Communications and Information Platform (ACCIP). The platform will provide intelligent information to National COVID Task forces, respective ministries, and international development organizations, including allocation to implement COVID responses and actions, as well as inform data driven allocation of resources to mitigate and suppress the health and economic impact of COVID in Africa. The platform integrates public data from digital channels and online sources such as social media, with mobile narrowband information gathering via short codes (*xxx#) and interactive voice response (IVR). This unique approach combines the depth of

online digital information, which reaches 23% of Africans, with the extensive reach of mobile, which touches more than 600 million Africans. Information gathering and targeted communication is performed on behalf of authorized users to meet the requirements of the National COVID task-forces, Ministries of Health, WHO, CDC Africa, Health NGO's, inter-ministerial task-forces, and select Public-Private Partnerships Many different information and communication initiatives are already underway by national and international entities. Indeed, some of the components laid out here are already in an advanced stage of planning or roll-out. However, a framework to properly leverage and coordinate the combination of online broadband and mobile broadband for the most effective efforts to combat the virus has not yet manifest.

Objectives

The prime objective of the platform is to ease information and communication process at national and regional level for supporting efficient response to curbing the impact of the pandemic. The platform would collect, and analyse, non-personally identifiable big data using machine learning and artificial intelligence to answer critical questions and give valuable insights. Policymakers could ask critical questions, including how well COVID prevention practices are understood, what are the current key COVID misconceptions, when was the last time the household had a meal, and when was the last time the primary wage earner received money. Survey and information collection, both directly from citizens, as well by health and social workers, is also supported.

In order for the platform to function effectively, a timely and efficient collection, treatment and analysis of the data is critical. As a result, the ACIP platform aspires to identify and engage a data ingestion and analytics platform that could jointly function with the ACIP platform.

SPECIFIC REQUIREMENTS / INFORMATION (IF ANY)

For expected results, outcomes and specifications for COVID-19 DataTracking and Analysis service platform, please refer to the Terms of Reference attached.

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 the planned solicitation process should complete/submit the Vendor Response Form of this EOI either electronically (through the link available on the next page) or send it via fax or e-mail to UNECA (UNECA) before the closing date set forth above.

VENDOR RESPONSE FORM

TO: Rahel Tarekegne
Email: shiferaw3@un.org
FAX: N/A
FROM:

EOI Number: EOIUNECA17873

SUBJECT: COVID-19 Data Tracking and Analysis service platform

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).
- As you express interest in the planned solicitation by submitting this response form, please verify that your company is registered under its **full legal** name on the United Nations Global Marketplace (www.ungm.org) and that your application has been submitted to the UN Secretariat.
- We strongly recommend all companies to register at least at **Level 1** under the United Nations Secretariat prior to participating in any solicitations.

PLEASE NOTE: You can express your interest to this REOI by filling out this form manually or electronically (recommended) at:

<https://www.un.org/Depts/ptd/node/add/interest-expressed?EOI=EOIUNECA17873>

To be completed 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:

Postal Code * :

Country *:

Phone Number *:

Fax Number *:

Email Address *:

Company Website:

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

Signature : _____

Date: _____

Name and Title : _____

EOI 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/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 or 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 REOI. Vendors who have not completed the UNGM registration process with the UN Secretariat before the closing date of the REOI are not considered eligible to participate in solicitations of the UN Secretariat. 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) EOI Process

Vendors interested in participating in the planned solicitation process should forward their expression of interest (EOI) to UNECA (UNECA) by the closing date set forth in this EOI. *Due to the high volume of communications UNECA is not in a position to issue confirmation of receipt of EOIs.*

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 EOI is issued subject to the conditions contained in the EOI introductory page available at <https://www.un.org/Depts/ptd/eoi>.



United Nations
Economic Commission for Africa

Terms of reference for provision of data ingestion and analytics service platform



A. Background

i. COVID-19 Disaster

COVID-19 represents a unique and unprecedented threat to both Africa and humanity. If allowed to spread unchecked it is estimated that up to 70% of the general population could become infected, with 3.5% of the population losing their lives all before community immunity kicks-in.¹ According to the ECA report of COVID-19 in Africa, the pandemic could result in between 300,000 and 3.3 million Africans losing their lives, depending on the intervention measures taken to stop the spread. An analysis of disease evolution shows that from the first verified case to day 40, the African infection rate is following the same trajectory as Europe.² Apart from the mortality

rates and overwhelming the health and medical systems in most countries, the domino effect of the pandemic across the socio-economic spectrum is devastating. Containment efforts via quarantine and restricted movement are likely to slow the spread of the virus and spread out the effects (flattening the infection curve). However, this action comes at an enormous cost, including an economic contraction of 2.6 percent in the worst case. A contraction of this magnitude would push 27 million people into extreme poverty. Transport, supply chains, markets, and cargo are all disrupted. Obviously, strict lockdown even when effective from a health perspective cannot continue indefinitely. How do governments manage the post-containment strategy? With 422 million Africans already living in poverty, achieving SDG 1: No Poverty and related goals becomes even more challenging. According to the ILO more than 85% of employment in Africa is informal, with a disproportionate impact on women.⁴ With a high percentage of workers being daily wage labourers, any widespread restrictions on work or income generation have a devastating impact on people obtaining food and meeting basic requirements. i.e. “No work. No food.” Even in the best case, this is a health crisis, leading to an economic crisis, turning into a social crisis.

ii. Response

The World Health Organization (WHO), Africa CDC, and many others are on the frontlines of the COVID-19 response in advising governments. Governments are taking action and, in many cases, a senior lead is put in charge of a national task-force or inter-ministerial body that reports to the Head of State or the cabinet. Within the task-force, key areas affected by or required to manage the national response to COVID-19 are included. Task-force areas represented include Health & Social Services, Trade & Economy, Finance, Customs & Immigration, Police & Security Services among others. Additionally, large corporations and industry associations are sometimes represented as well.

iii. The Imperative for a communication and information platform

For any strategies or policies to be effective against COVID, they must be based on significant, actionable data. In addition, there must be an effective two-way information and communication channel accessible to the majority of the population. The digital channels (Facebook, Twitter, WhatsApp, and Websites) provide a valuable and necessary mechanism for communication, information gathering, and data visualization. However, mobile penetration rates (% of population) in Africa are currently around 45%. Digital channels which require 3G/4G/Smartphone/Internet penetration is at slightly more than 50% of mobile penetration or just 25% of the population. Therefore, even utilizing the entire mobile network, less than half of the African population could be reached directly through this mechanism. In order to ensure inclusiveness, reaching those in the bottom half of the pyramid, as well as many of the most vulnerable, using “digital” channels will not be enough. The majority of those that can be reached electronically will be done via 2G, SMS, USSD/Short Codes and Interactive Voice Response (IVR).

iv. The African COVID-19 Communications & Information Platform (ACCIP)

ECA, Africa CDC and partners are championing an African COVID-19 Communications and Information Platform (ACCIP). The platform will provide intelligent information to National COVID Task forces, respective ministries, and international development organizations, including allocation to implement COVID responses and actions, as well as inform data driven allocation of resources to mitigate and suppress the health and economic impact of COVID in Africa. The platform integrates public data from digital channels and online sources such as social media, with mobile narrowband information gathering via short codes (*xxx#) and interactive voice response (IVR). This unique approach combines the depth of online digital information, which reaches 23% of Africans, with the extensive reach of mobile, which touches more than 600 million Africans. Information gathering and targeted communication is performed on behalf of authorized users to meet the requirements of the National COVID task-forces, Ministries of Health, WHO, CDC Africa, Health NGO's, inter-ministerial task-forces, and select Public-Private Partnerships Many different information and communication initiatives are already underway by national and international entities. Indeed, some of the components laid out here are already in an advanced stage of planning or roll-out. However, a framework to properly leverage and coordinate the combination of online broadband and mobile broadband for the most effective efforts to combat the virus has not yet manifest.

B. Objective

The prime objective of the platform is to ease information and communication process at national and regional level for supporting efficient response to curbing the impact of the pandemic. The platform would collect, and analyse, non-personally identifiable big data using machine learning and artificial intelligence to answer critical questions and give valuable insights. Policymakers could ask critical questions, including how well COVID prevention practices are understood, what are the current key COVID misconceptions, when was the last time the household had a meal, and when was the last time the primary wage earner received money. Survey and information collection, both directly from citizens, as well by health and social workers, is also supported.

In order for the platform to function effectively, a timely and efficient collection, treatment and analysis of the data is critical. As a result, the ACIP platform aspires to identify and engage a data ingestion and analytics platform that could jointly function with the ACIP platform.

C. Expected results and outputs

The exchange platform will enable member states and their respective policy makers through the attainment of the following accomplishments as below.

Health and economic information gathered from the ACCIP would cover not just health issues, but availability of resources such as test kits, personal protection equipment (masks, glove, etc), available health facilities, etc. Recommendations from the analysis would also present the broad socio-economic impact of the virus, and the actions to take. Both digital and narrow-band (mobile) channels would be used. If appropriate and directed by the national authorities' nationwide responses and campaigns on the most effective channels could be coordinated. This could include national public service announcements and information that would be distributed over social media and through SMS.

The platform would provide a clear source of factual information, and a source of coordinated action in this period of uncertainty, fear, confusion.

The platform also supports integrated information dissemination across both the online and mobile channels—for example, health tips, symptom checker, food distribution locations, etc. The platform will not replace the efforts and initiatives that are already in place or at an advanced stage of planning. Instead, ACCIP will supplement and integrate these laudable efforts, including ECA and Global Partnership for Sustainable Development Data (GPSDD) Data for a resilient Africa initiative. As a result, the following results are expected from the project:

- **EA.1: Policy and Decision makers (national Ministerial taskforces in the respective member States) are armed with the relevant and timely policy options and good practices for effective response to COVID-19 using the advantages of technology and digitalization.**
 - *Output: COVID-19 Data and information pertaining to transmission level, socio economic impact and economic support demands are timely collected, analyzed and made available by country*
- **EA.2: Technology enabled data analytics and policy interventions help reduce adverse impact of COVID-19 on the economies of Member States.**
 - *Output: member States specific support and engagement implemented to ensure efficient response to the impact of COVID-19 pandemic.*

D. Specifications for COVID-19 Data Tracking and Analysis service platform.

1. Overall Functionality

The service platform should provide the following three key functionalities:

a) **Data Ingestion:** Provide a platform, API and process to ingest formatted data. Connect to up to 100 mobile operators (country-level) across 30 or more countries on the African continent, for the purposes of ingesting data collected from USSD and IVR applications and transmitted from the Mobile Operator (MNO) to the service platform on a daily basis. The interactive USSD & IVR platforms will be deployed nationwide in each country connecting more than 70% of each country's population. However, percentage usage may be low (e.g. 2% - 5%).

b) **Data Sets:** Provide extensive public economic and health data sets from popular social media and other online sources including Facebook, Instagram, Twitter, YouTube, etc. The deeper the access, the richer the insights into peoples' experience, behavior, and activity.

c) **Data analysis:** Provide comprehensive "big data" and unstructured data science analysis, visualization and reporting, including infographics, tools and capabilities. Full use of state of the art, data science, artificial intelligence and machine learning is required.

2. Mobile Data Ingestion

Provide either SFTP or an API for data ingestion. Meet the security standard and requirements of connecting to mobile operators. Data received should be processed and available within 24 hours.

Requirements include:

Ingest dynamic datasets on a sFTP server
Ingest dynamic datasets through API
Ingest data on a recurrent timeframe
Massage the data upon reception

3. Digital & Online Data Sets

In today's world, citizens have many different digital channels on which to express themselves and communicate what they are doing and what matters to them. ACIP requires the ability to "listen in" on public information to gain insights into what is important to citizens in the areas of health and economics. Breadth, depth, history, speed, and strength of channel coverage are all important. The data sources should be relevant and timely (preferably real-time) to the current and evolving health and economic situation in African countries.

Data Set Breadth and Quality

For each social media data channel, provide:

- Type/Strength of relationship
- Level of access from scraping to full firehose
- Language covered (English, French, Arabic, Portuguese, Spanish are mandatory)
- Sentiment and Accuracy
- History length (number of days in the past)
- Add & integrate new channel partner

Social Media
Twitter
Facebook
Instagram
LinkedIn
Pinterest
Reddit
YouTube
Wordpress
Other media (news, blogs, forums, etc.)

African blog & forum coverage
Unstructured business data (chat, call transcripts, email, surveys, etc.)
Structured business data (web analytics, CRM, marketing automation, etc.)

Other key Data Set Capabilities.

In order to generate insights, describe your data capturing, cleaning, enriching, contextualizing capabilities.

Cleaning: Text-based profanity, Spam and Ads

Enriching/Tagging: Language, Sentiment, Person Location, Message Location, Age range, Profession, General & Niche Interests, Country of Residence, Other (describe)

Contextualizing: Emotion, Questions/Queries, Complaints, Contextual sentiment scoring across entire statement (i.e. The social distancing was respected but the face masks were not), Customized categories, Version control and Topic query exclusion lists by keyword, profile, domain etc.

4. Analysis & Visualization

The solution should provide graph, drill-down, filter, export, and display to share the insights broadly.

Graph: Provide sophisticated, appealing and dynamic analysis visualizations to quickly surface important insights. Features required include:

Features
Flexible, insightful, and dynamic widgets
Preconfigured and customizable reports
Real-time analysis of data
Automatic refresh of widgets
Custom metrics and target goals
Version control (locking, sharing, and cloning of dashboards)
Extensive, flexible, and customizable reports and dashboard filters
Scheduled deliver of reports via email to platform and non-platform users

Drill Down: For deeper insight and analysis data drill-down capabilities are required.

Features
Drill down by Who/Audience: Influencers, Advocates, Detractors, Top mentioned, etc.
Drill down Where/Location: Country, State, City, known landmarks, custom business locations, etc.
Drill down by What/Topics: Conversations, things, actions, hashtags, emoticons, phrases, entity type, custom defined themes, custom
Drill down by What/Enriched categories: Language, sentiment, emotion, colors, gender, age range, marital status, profession, ratings/reviews, custom
Drill down by When/Time: Year, quarter, month, week, day, custom time range, time interval mentioned, etc.
Dynamic and unlimited data drilldown
Restricted drill down based on governance rules

Data Management

Requirements
Multi-select, inclusion/exclusion filters
Filters that match ALL the previously defined drilldown categories
Filters by custom properties
Standard and custom timeframe filters
Ability to save filters, widgets, drilldowns as custom reports/ boards

Exporting and Reporting

Ability to send data to third party applications for analysis on the desktop, further processing via core applications, and inclusion of insights into presentations.

Requirements
Multiple export formats: XLS (single, multi sheet), CSV, PDF (portrait, landscape), PPT, PNG
Annotations on exports
Scheduled exports with contextualized emails, including to non-registered users of the platform
Pre-built integrations (MS PowerBI, Domo, etc.)
API Integrations for additional 3rd party applications
Dashboard report delivery scheduling
Full Twitter re-syndication of messages & metrics approval
Countries reports with custom fonts & colors

5. Actionability

The ability to segment, categorize, synthesize, route, and respond to insights in real-time.

Segment

The ability to seamlessly segment engagement into audience types, and use the insights as the context messaging.

Requirements
Ability to segment based on who, what, where, when and custom demographics categories
Dynamic audience profiling with automation
Ability to manually or automatically tag audiences into segment classifications based on search criteria
Ability to use custom defined segments for further analysis, filtering & drilldown
Ability to use segments for owned communications or advertising for targeting purposes

Categorize

Associate insights at the individual profile level. Partner with to achieve a comprehensive privacy and governance approach.

Requirements
Create and manage a citizen experience profile
Annotate, label, and customize profile properties to note relevant insights with audiences
Authorized syndication of data from Twitter to associate information with citizen support cases
Manage requests to remove audience content upon request and track/audit the process, in compliance with privacy regulations
Add product, competitor, or location management as a categorization topic

Route

Ensure the right messages go to the right people with the right skills at the right time. Routing to key personal in a seamless way. Users should be able to act on key insights. This includes automatic anomaly detection and alerts to immediately notify the appropriate personnel.