

STATEMENT OF WORK

SCOPE OF WORK, ACTIVITIES, TASKS, DELIVERABLES AND TIMELINES, PLUS BUDGET PER DELIVERABLE

Project AEDES, the First Local Vetted DPG

With support from the Digital Public Goods Alliance (DPGA), UNICEF is working to increase awareness in the Philippine technology sector about DPGs and identify mature solutions that are well-poised to become DPGs. One such solution is Project AEDES, an internationally recognized data-driven dengue portal. AEDES is the first Philippine technology solution to be vetted by the Digital Public Goods Alliance (DPGA) as a digital public good.

The AEDES prototype is an information portal that predicts dengue hotspots by making correlations from dengue cases and deaths, real-time climate data, Google searches, and satellite maps. It is targeted to be used by public health and local government agencies to give them advanced notice of dengue outbreaks. This helps them pre-position resources and plan a response to mitigate or address a dengue outbreak.

Project AEDES Enhancement

1.) conduct a review or audit of the current AEDES platform and, based on that review, propose appropriate enhancements as discussed and agreed with UNICEF Philippines; and

2.) integrate a risk assessment framework for dengue in regions and provinces of the Philippines using the INFORM Epidemic GRI Model. Considering that the model is applicable to several types of risks and epidemics, it has the potential to be adapted for evaluating dengue risk at both the national and local levels.

Detailed Activities

- a) Data Collection and Processing - Database Management and Automated Data Ingest for Search Trends, Climate, Satellite, and Health Data which entails continuous research on alternate global open data sources.
- b) Data Analysis - Incorporate Socio-Economic indicators using Dengue RISK INFORM in the predictive modeling and deploy to all regions. INFORM Framework can effectively explain the variation in dengue mortality and morbidity across regional and provincial locations. Socio-economic and environmental factors help explain susceptibility and vulnerability of communities. Developing risk indices can aid in formulating disease vector surveillance and management strategies. INFORM Epidemic Global Risk Index shall be the guiding framework on its three dimensions of risk: Hazard & Exposure, Vulnerability, and Lack of Coping Capacity by identifying relevant factors.
- c) Product Development - Redesign AEDES interface and functionalities which include information portals, publicly-accessible APIs, and near-real-time daily updates. This will entail Dengue Trends Overview, Outbreak/Epidemic Monitoring (time-series projections, dengue hotspot map visualizations), At-Risk Community Assessment (risk ranking of regions and provinces, risk maps), and Actions and Recommendations.
- d) Beneficiary Engagement - For the impact of the study to be fully embraced, it must be backed up and supported by its target beneficiaries. To ensure that the AEDES dashboard will be functional

and useful for its intended users, CirroLytix will partner with local government units that were in a previous discussion (San Fernando, Pampanga) and initial targets (Iloilo, Tacloban, and Cotabato) and public health agencies such as the Department of Health and Bangsamoro Ministry of Health and engage with them through the formation of public health campaigns, target control activities, and on-site validation.

DELIVERABLES AND PAYMENT TERMS

#1 - Project Plan

The project plan should contain the following:

- 1) Workplan
- 2) Report on the proposed environment set up
- 3) Review of open-source regional search trends
- 4) Data management and data preparation
- 5) Assessment of Project AeDES

25% of the total amount will be disbursed upon receipt and approval

#2 - Mid-term monitoring and evaluation report:

The midterm and evaluation report should have the following:

- 1) Reports on the following:
 - Risk Inform model integration
 - Data analysis time series/social listening risk mapping
 - Dengue Risk mapping
- 2) UI/UX mockups
- 3) Update on application development

50% of the total amount will be disbursed upon receipt and approval

#3 - Final monitoring and evaluation report: 25% of the total amount will be disbursed upon receipt and approval

The final report should contain the following

- 1) Complete application development based on approved project plan
- 2) Testing results
- 3) Deployment report
- 4) Training materials
- 5) Pilot report
- 6) Training report

25% of the total amount will be disbursed upon receipt and approval

