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| **National Consultant to Support Central Expanded Programme on Immunization (CEPI) in the geospatial data management and technologies national consultant – continued roll-out in all townships of Mandalay, Nay Pyi Taw and Ayeyarwaddy region.** **Section in Charge: Health and Nutrition** **How does the consultancy relate to work plan:**  By 2022, more children under 5 and women of reproductive age equitably access and utilize evidence-based health, HIV & nutrition interventions, including adoption of key behaviours, especially among vulnerable populations in most deprived states/regions, conflict-affected and peri-urban areas (Goal Area 1 UNICEF Strategic Framework 2018-2021)**Outcome reference**: 0600/A0/05/201/001: By 2022, national and subnational health care institutions and front-line health workers have improved capacity to reach more vulnerable populations with quality immunization and MNCH (including PMTCT) services in at least four most deprived States/Regions and in conflicts, disaster affected and peri-urban areas in Yangon. **Output reference:** WBS: 0600/A0/05/201/003/007: Capacity development in evidence-based planning and budgeting  |
| 1. Background:

The Myanmar Central Expanded Programme of Immunization (cEPI) is using WHO's Reaching Every Community Strategy to vaccinate every child in the country. In this strategy, the development of a microplan based on the population information in the catchment areas of the health workers is an important tool to ensure effective coverage and equity.The EPI review conducted in 2016 highlighted an important number of missed children, most of them being from “special populations” (e.g., migrants, displaced, peri-urban slum dwellers, monks, orphans,..). These populations are not always reflected in the official figures from the General Administration Department or targeted by health workers during immunization campaigns leading to underreporting as well as planning and monitoring challenges. This situation is exacerbated in big cities like Yangon were increased urban population and unregistered settlements are observed.The use of proper geospatial data management practices and technologies (Global Navigation Satellite Systems (GNSS, Geographic Information System (GIS) and Remote Sensing (RS)) can help filling this gap through the collection, management, visualization and use of geo-located data and information on vaccination service, population distribution as well as the establishment, maintenance and sharing of a master list[[1]](#footnote-1) for the geographic objects core to immunization (health facilities, communities, ...). This help identifying inequities in vaccination coverage and health outcomes, addressing existing gaps in service delivery by optimally deploying available resources with minimum waste, and effectively monitoring progresses toward national and global development targets. UNICEF is working closely with cEPI and the GIS team of the Department of Public Health to provide technical assistance regarding the use of geospatial data and technologies in support of the microplanning process across the country. This activity includes but is not limited to building the technical capacity of the MOHS at the central as well as State and Regional level. cEPI in collaboration with DOPH and UNICEF have implemented the extended pilot project in five townships of Yangon over the period between July 2018 and June 2019. An international and a national consultant were recruited to take a lead on the implementation of the pilot projects.  As of June 2019, the extended Yangon pilot project has led to the testing of set of technical GIS solution for the collection of the necessary data and the production of web-based and static GIS maps for 5 focus townships in the Yangon region. This project has highlighted several implementations as well as technical challenges for the collection of data and production of GIS maps which have been reviewed by implementers and technical partners during a dedicated workshop in Nay Pyi taw on March 20-21, 2019. As an outcome of this review, a modified set of GIS solutions have been proposed to address some of the technical challenges encountered in the first phase, and a phased national rollout with first roll-out in remaining township of Yangon and all townships of Kayah State using the modified GIS solution. The most recent contract extension deliverables (roll-out in remaining townships of Yangon and all Townships of Kayah State), have been accomplished by the end of contract extension period, 14th June 2020. Based on the successfully implementation of GIS in Yangon and Kayah state and to continue the Ministry’s recommended activities of phased national roll out, the project still further needs to be continued for additional another one year to implement GIS activities in Mandalay region, and Nay Pyi Taw thereby allowing to inform the most suitable approach for nationwide scale up. As it is intended to cover three regions while there are sever complex steps in GIS microplanning process, it is important to have two national consultants so that timely technical assistances can be provided in define project timeframe. Out of two consultancies required, the first consultancy is expected to start earlier to ensure the smooth roll-out of GIS implementation in Mandalay and Nay Pyi Taw region, and hence this TOR is developed accordingly.According to HSS-2 project workplan, the full-scale national roll-out is expected after this project in Mandalay, and Nay Pyi Taw. The continuous technical assistance is required for national roll-put but the modality of Technical Assistance beyond 2020 will be decided aftermath of the evaluation of the project.  |
| 1. Objectives of the consultancy:

The main purpose of this consultancy is to support the technical implementation of the subsequent national roll-out in all townships of Mandalay and Nay Pyi Taw region as well as to continue provision of technical support related to geospatial data and technologies to the EPI program and the DOPH GIS Team. **Specific objectives:**1. **To ensure the implementation of the subsequent roll-out in all townships of Mandalay and Nay Pyi Taw region on the defined workplan and timeline (40%)**
* Working under the supervision of the UNICEF Immunization Manager, Health Specialist and technical support of the international consultant, the national consultant works in close collaboration with the cEPI program, , the central level DOPH geospatial data manager/GIS technicians and the regional level geospatial data managers to ensure the technical implementation of the project based on the defined workplan and timeline.
1. **Support the DOPH geospatial data managers and skills transfers: (20%)**
* Development, maintenance, update and sharing of the master lists for the geographic objects core to public health (health facilities, villages and administrative divisions) and technical assistance in development of program specific master list (e.g. EPI Communities) of project areas;
* Review and update the guidelines, data specifications and protocols/SOPs as relevant and also support in identifying the necessary standards aiming at improving the availability, quality (completeness, uniqueness, timeliness, validity, accuracy and consistency) and accessibility of geospatial data;
1. **Supporting the EPI officers (20%)**
* Development, maintenance, regular update and sharing of the EPI communities master list of project areas
* Review and update the guidelines, standards and protocols/SOPs necessary for the development, maintenance, regular updating and sharing of the EPI communities master list, field data collection as well as the production of the GIS-based microplanning maps
* Geospatial data management and technology capacity building activities for DOPH and cEPI staff at the Region/State and Township level
1. **Supporting the Region/State level geospatial data manager when it comes to: (20%)**
* Providing geospatial data management and GIS technical support to the project region/State and Township level;
* Contributing to the development and regular updating of the master lists for the geographic objects core to public health (health facilities, villages and administrative divisions) and specific health programs (e.g. EPI Communities) of project areas. More specifically: supports in
* Implementing the guidelines and protocols/SOPs that have been developed;
* Coordinating and supporting capacity building activities for project Region and Township level MOHS staff related to management and use of geospatial data and technologies
* Supporting the implementation of the geographic component of the microplanning as well as Monitoring & Evaluation process
* Participate in regular meetings and workshops for project coordination and reporting
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| 1. Geographic Area:

The consultant will be based in Yangon with frequent travel to Townships in Mandalay and Nay Pyi Taw region as required.  |
| 1. Duration of Consultancy: 11.5 months (starting 1st December 2020 – 14th November 2021) with possible extension for another 11.5 months based on the performance, programmatic need and fund availability. The contract will be full-time, with flexible working hours.
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| 1. Type of Supervision/support required from UNICEF: The consultant will report to Health Specialist, work closely with UNICEF GIS team on day to day matters. The consultant will work in close collaboration with GIS data Managers from the DOPH GIS Team (Admin/Finance Division) and the GIS focal and medical officers from the expanded Programme on Immunization.
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| 1. Description of Assignment:

| **Tasks** | **Deliverables** | **Timeline & Expected Percentage of Payment** |
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| (inception report, concept, SOP,) Identify the necessary standards necessary for the implementation of the Project in Mandalay, Ayeyarwaddy and Nay Pyi Taw)  | Submission of the inception report  |  31 December 2020 **5%** |
| To develop the tools and guidelines for the township staffs of Mandalay and Ayeyarwady and Naypyidaw Region to check/improve/add the geographic coordinates of the health facilities and vaccination posts and then delimitate the EPI communities. | Necessary SOPs and online mapping tools to implement the boundary delimitation workshop of Mandalay, Ayeyarwady and Naypyidaw Region developed. | 31 January 2021 **11%** |
| **(1st round of Data Collection)**To Collect, check and clean the EPI communities and Health facilities of Mandalay region by using Kobo Collect. | List (1st version) of the EPI communities and Health facilities of Mandalay and Nay Pyi Taw Region completed. | 31 March 2021 (Mandalay) 30 April 2021 (NPT) **13%** |
| **(2nd round of Data Collection)**Support the township staff to get familiar with the use of google my maps. (Mandalay Region) | The geocoordinates and polygons for all Health facilities, EPI community boundaries, vaccination posts are defined and located (Mandalay Region) | 31 May 2021 (Mandalay) 30 June 2021 (NPT)14% |
| Integrating the Master lists and Web-Map• Fill and clean any potential gaps and issues of master lists• Updating the further information from the Google my maps into the web map app(Mandalay Region) | Final version of Health facilities master list and vaccination posts master list and Web map of all townships of Mandalay and NPT Region developed. | 31 July 2021 (MDL) 31 August 2021 (NPT) 19% |
| Validate the microplan through use of the web-based app.• Integrating data to the existing web map and app to be used for the validation of the microplan.• Train the cEPI officer across levels on the use of the web app containing the combined microplanning maps. (Mandalay Region) | The micro plan across levels through use of web-based map for all townships of Mandalay and NPT Region validated.  | 28th September (MDL AND NPT) 19% |
| Prepare the paper-based static maps layout for Mandalay Region * Distribute the paper-based static maps to all townships of Mandalay Region.
* Train the township staff to use the web mapping tools and apps and user interface (either physical training or virtual training using Zoom facility
 | The paper-based static maps of all townships of Mandalay and NPT regions are ready and distributed.cEPI and UNICEF Technical staff trained (submission of training report) | 14November 2021 19%  |

Since this consultancy involves the capacity building and skills transfer to GIS data managers from DOPH GIS team, and GIS data managers from cEPI therefore the consultant is expected to spend minimal 5 days every alternate month to work in Nay Pyi Taw. It is estimated to spend more time during the training and meetings in Nay Pyi Taw (ministry office) while important milestones are reviewed, and next steps are implemented (**minimum** 5 visits to Nay Pyi Taw is expected throughout the project period with average of 5-7 days duration for each visit). **In addition,** the consultant may need to travel to **townships in Nay Pyi Taw and Mandalay** for at 30-40 days (average 3-4 days in a month) depending on the project phases and period, but it may increase to 10 days in the months of data collections, validation of the EPI communities master list.Given that there is an unpredictable situation of COVID-19 pandemic in Myanmar, the consultant may consider the virtual capacity building activities by using Zoom facility in case the travel is not feasible.  |
| 1. Payment Terms

Payments will be processed upon submission of report of work completed against the major deliverables as indicated above in section 6, Description of Assignment. |
| 1. Selection process (EOI to be attached to TOR)

The selection will be competitive recruitment process via UNICEF website and HR networks.  |
| **11. Qualification and specialized knowledge/experience required for the assignment:****Education:** University degree in natural science, Information Systems or related discipline or enough professional experience in these areas to be considered as equivalent; A background in public health would be seen as an advantage**Skills:*** Highly proficient in the use of desktop and web-based GIS software such as ArcGIS, ArcGIS online, QGIS
* Highly proficient in the use of data management software such as Microsoft Excel
* Highly proficient with the use of field collection tools such as Survey123, KoboToolbox and similar

**Work Experience:** * At least 5 years professional experience in the use of geospatial data and technologies. Experience in public health related projects highly preferred
* Demonstrated experience in participating to projects related to the field collection of geographic data
* Demonstrated experience in designing and coordinating training and capacity building activities related to geospatial data and technologies
* Demonstrated experience in the production of guidance documents, training materials, Standard Operating Procedures and/or user manuals

***Language:*** Full professional proficiency in English (written and oral) is required. Full professional proficiency in Myanmar language is required.***Competencies:*** The successful candidate is expected to demonstrate the following competencies that are necessary to this consultancy:**Core Competencies*** Excellent communicator of concepts both verbally and in writing to a developing country government and international audience.
* Able to quickly understand instructions, to proactively seek clarification when needed.
* Able to work well in a team environment and with good leadership skills.

**Functional Competencies*** Works independently and is problem-solving oriented.
* Works well in a multi-cultural environment and establishes harmonious and effective working relationships.
* Demonstrates communication and relationship-building skills.
* Proven capacity to work across different locations utilizing technical skills within supply chain management and data visualization, management and/or monitoring.
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| **14. Other conditions:** The consultant will be working under the technical guidance of Health Specialist, Supply Chain. In addition, the consultant will need to work closely with DOPH's GIS Team, the Yangon geospatial data managers and the EPI Medical officer in charge of the project. She/he will be in charge to ensure that the knowledge and skill necessary for the creation of GIS based microplanning maps are being transferred to the MOHS. The consultant is expected to have frequent travel to Nay Pyi Taw and Project sites in Mandalay Region. In Nay Pyi Taw and Mandalay region, the consultant needs to travel to townships for at least 55-75 days depending on the project phases and period, but more frequent visits in the months of data collections, validation of the EPI communities master list. UNICEF will provide the office laptop for use in the GIS software and data management purposes related to GIS. All required travel in the field, must be arranged and organized by the consultant and the cost to be reimbursed on actual approved and authorized travels.**Life and health insurance** UNICEF does not provide or arrange life or health insurance coverage for consultants and individual contractors, and consultants and individual contractors are not eligible to participate in the life or health insurance schemes available to United Nations staff members. Consultants and individual contractors are fully responsible for arranging, at their own expense, such life, health and other forms of insurance covering the period of their services as they consider appropriate. The responsibility of UNICEF is limited solely to the payment of compensation for service-incurred death, injury or illness as per the provisions detailed below.**Insurance for service-incurred death, injury or illness**Consultants and individual contractors who are authorized to travel at UNICEF expense or who are required under their contract to perform services in a UNICEF or United Nations office shall be provided with insurance coverage, through a UNICEF-retained third party insurance provider, covering death, injury and illness attributable to the performance of official UNICEF duties. Compensation in the event of service-incurred death, injury or illness shall be equivalent to amounts stipulated in the agreement between UNICEF and the insurance provider. **Ethical principles:**Research methods used should be consistent with UNICEF Ethical and Principle Guidelines for the reporting on children and young people under 18 years old. <http://childethics.com>**Payment schedule:**Payments will be made based on reception of deliverables as mentioned in detail under section 6, Description of Assignment. **Confidentiality:** The documents produced during the period of this consultancy will be treated as strictly confidential, and the rights of distribution and/ or publication will reside solely with UNICEF. The contract signed with the consultant will include the other general terms defined by UNICEF. |
| **15. Nature of Penalty Clause to be stipulated in the contract:**UNICEF Myanmar reserves the right not to pay the Contractor or withhold part of the payable amount if one or more requirements established for this assignment is not met or deadline set for the accomplishment of the tasks is missed. |

1. Authoritative (officially curated), complete, up-to-date and uniquely coded list of all the active records for a given geographic object [↑](#footnote-ref-1)