

TERMS OF REFERENCE

Local Consultant for carrying out census mapping exercise using geospatial technology and the use GIS maps in census operations

(MDV-ToR/2020/09 Dated:16 July 2020)

TERMS OF REFERENCE (to be completed by Hiring Office)	
Hiring Office:	UNFPA Maldives Country Office
Purpose of consultancy:	<p>As National Bureau of Statistics (NBS) of Maldives embarks on the preparation for census 2021, one of the key activities to be carried out included preparation of census maps using geospatial technology and the use of GIS maps in census operation.</p> <p>In the past census, census maps have been prepared based on the soft/hard copies of the islands block maps received from the Councils. Once the maps were received, NBS divides the block into census blocks which is given to each enumeration team. The island blocks are divided into census blocks in a way that assigns a workload that the enumerators can complete within 7 days. Each census block (or enumeration area) has 40-50 households or a population of 200-250 people to enumerate.</p> <p>The Maldives Land Survey Authority (MLSA) is the main agency leading the GIS work in the country. Preparation of enumeration area maps would require an initial assessment of mapping process in GIS including capacity at LSA. Other government agencies are known to use GIS as well as private agencies for the purpose of different projects, and (stock taking – an inventory) will be required at initial stage.</p> <p>One of the main targets of this activity is the creation of a geo-referenced national Dwelling Frame to identify (physical address) and locate (geographic coordinates) for all structures on the ground. Together with the Dwelling Frame, a Business Frame will also be developed for use in the Economic Census 2021. Continuous maintenance of these frames (or the Dwelling Frame) is required for use as a basis for the statistical sampling frame for censuses and surveys, and hence mechanisms to do this will also be explored during this exercise, to ensure continuity and sustainability of this activity.</p> <p>The current capacity on GIS is non-existent within NBS and through this process, NBS together with LSA wishes to build their capacity in the area of geospatial technology, both in the census operation and in data dissemination.</p> <p>With support from UNFPA, NBS has recruited an international consultant who will be carrying out the initial assessment of GIS capacity and infrastructure in the country. The consultant will be doing a mapping of code structure and the steps required to embark on this exercise for census 2021.</p> <p>Hence, UNFPA is seeking a local consultant to assist the country team to carry out the census mapping exercise using geospatial technology and GIS maps in census operation. The consultant is also expected to guide the country team in the dissemination of census results using GIS maps.</p> <p>The local consultant will be working under the guidance of the international consultant.</p>
Scope of work: <i>(Description of services, activities, or outputs)</i>	<p>Scope and diversity of assignment:</p> <p>The Consultant is expected to work closely with the country team in achieving the following deliverables:</p>

	<p>Specific milestones:</p> <ol style="list-style-type: none"> 1. Determine the scope, capacity gaps and feasible timeline for the task at hand 2. Provide guidance on GIS software for census operation, census mapping and data dissemination. 3. Work with country team in the preparation of census enumeration area block maps using GIS- both for Male' and Atolls. 4. Propose updating and upgrading process of GIS maps to be used in future surveys and censuses. 5. Guide country team in the use of GIS technology in all stages of census operation. 6. Work with country team to develop a geo-referenced national Dwelling Frame and Business Frame and made available for use in census 2021. 7. Train country team in disseminating census results using GIS <p>Output:</p> <p>In 2020, the Consultant is expected to deliver</p> <ul style="list-style-type: none"> - Census maps for enumerators prepared for Male' – by Dec 2020
Duration and working schedule:	<p>Fifty (50) working days during the period 15 July to 15 December 2020</p> <ul style="list-style-type: none"> - Flexible working arrangement – this includes working closely with the team and providing remote support as well.
Place where services are to be delivered:	<p>The consultancy will be undertaken in close coordination with the National Bureau of Statistics. Consultant should be available for meetings during official hours when required.</p> <p>The consultant is expected to have face to face interaction with the team when required.</p>
Delivery dates and how work will be delivered (e.g. electronic, hard copy etc.):	<p>Milestones, outputs and deliverable target dates will be finalized upon recruitment.</p>
Monitoring and progress control, including reporting requirements, periodicity format and deadline:	<p>The Consultant will be briefed and debriefed by UNFPA and the National Bureau of Statistics and is expected to keep in close contact with both agencies via email</p> <p>The Consultant will be responsible for the quality and timeliness of the outputs, but will receive support from the National Bureau of Statistics.</p>
Supervisory arrangements:	<p>The consultancy will be managed by UNFPA Country Office/ NBS, the output will be assessed by the National Bureau of Statistics/MLSA and UNFPA</p>
Expected travel:	<p>None</p>
Required expertise, qualifications and competencies, including language requirements:	<p>Primary expertise required: GIS with GIS implementation experience in working with other countries.</p> <p>Educational background:</p> <p>Qualification: Advanced degree on demography, statistics, or other social sciences related to population census</p> <p>Work experience:</p> <ul style="list-style-type: none"> ● At least 5 years' experience in conducting training in geospatial tools ● Experience in developing dwelling register and business registers ● Integration of statistics data and geospatial information ● Experience in writing academic or policy papers. ● Experience in working on small island nations population and GIS management. ● Past experience working with the United Nations, World Bank or similar organization is desirable

	<p>Other competencies:</p> <ul style="list-style-type: none"> ● Project planning, management, implementation and coordination and evaluation ● Excellent report writing skills, analytical skills as well as good computer skills ● Excellent communication skills in English language, both oral and written ● Proficiency in statistical soft wares such as STATA, SPSS, etc
<p>Inputs / services to be provided by UNFPA or implementing partner (e.g support services, office space, equipment), if applicable:</p>	<p>Consultant:</p> <ul style="list-style-type: none"> ● Fulfil the stipulated in the contract and the ToR through review of documents, email communications, Skype calls and meetings, phone calls ● Maintain close contact by email with NBS and UNFPA ● Communicate any complications regarding the assignment as soon as possible ● Provide contact details that allow NBS and UNFPA to get in contact with the Consultant at any time during the consultancy <p>National Bureau of Statistics:</p> <ul style="list-style-type: none"> ● Assign a focal point to work with the Consultant ● Provide the relevant documents as required ● Provide data as required for the report ● Review and provide comments to the deliverables in a timely manner <p>UNFPA Maldives:</p> <ul style="list-style-type: none"> ● Monitor and facilitate the progress of the assignment ● Review and provide comments to the deliverables in a timely manner ● Facilitate necessary contacts ● Make payments upon completion and acceptance of each deliverable
<p>Other relevant information or special conditions, if any:</p>	<p>The other conditions that may apply in the undertaking of the assignment include:</p> <p>Basis of payment: Payments based on acceptance of the deliverables.</p> <p>Format of outputs: Editable electronic form</p> <p>Language of reports/publications and other documentation and working language in country of assignment: English</p> <p>Ownership of output: UNFPA, National Bureau of Statistics and Ministry of National Planning and Infrastructure</p>