


TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANT

TERMS OF REFERENCE	
Hiring Office:	UNFPA Country Office in Bosnia and Herzegovina
Purpose of consultancy:	<p>Although global population has been continuously on the increase, demographic situation in Bosnia and Herzegovina (and other countries in the Western Balkans sub-region) has had mostly a downward trend since the beginning of 1990s. This is largely due to under-replacement total fertility rates that have reached lowest low levels of under 1.3 children per woman of reproductive age. At the same time, migrations are on the increase, initially fuelled by conflicts in the region and afterwards due to unfavourable levels of socio-economic development of the country, high levels of corruption and strong pull factor from developed countries (mostly Germany but also other European countries, US and Canada). This has resulted in significant changes to population structure in Bosnia and Herzegovina. Number of young people is constantly decreasing while the number of older people, due to extended human lifespan, is on the increase. Less young people means that working-age population will shrink in size as well, while less working-age population means that public services (especially health care, social protection and education) will suffer from insufficient funding if productivity of economic sector is not improved. Recently calculated population projections in Bosnia and Herzegovina show that the country might lose over 50% of total population in the next 50 years.</p> <p>In order to respond to such demographic changes and stabilise demographic structure in the country at the level favourable for socio-economic development, policy makers need to develop adequate population policies and measures. Development of such policies and measures is quite a demanding process as a) it requires multisectoral expertise and engagement with good understanding of demographic trends, and b) ability to swiftly change/adjust population measures in line with ongoing demographic changes. It is obvious that common denominator in policy development is the availability of relevant longitudinal population data and capacity of relevant authorities to monitor not only demographic trends but also the effects of population policies to those trends. Finally, population data need to be presented in a way that enables analysis of such data in real time without the need for data mining (development of a repository of population data for longer period of time and with potential for graphic representation of data).</p> <p>In the last couple of decades, UNFPA provided technical and financial support to statistical institutions for data collection, where employees of statistical institutions participated in various trainings relevant for their work. In parallel to these trainings, UNFPA has engaged in data analysis either in cooperation with universities or individual national and international experts (as statistical institutions are responsible for data collection but not for data analysis). Processes such as population situation analysis implemented in some of the WB countries have shown that a) there is insufficient population and other statistical data available and b) data analysis requires constant development of data tables and graphs manually from published statistical reports. Over the years, statistical institutions in the WB sub-region have largely aligned their data collection processes (guided by UN agencies and Eurostat) that enable comparison within the countries (at sub-national level) or between the countries themselves. Agenda 2030 and the development of a set of SDG indicators have further strengthened the development of methodologies and data collection processes. However, statistical data (especially when it comes to population data) is not readily available to external stakeholders and require official requests to be sent in paper form and statistical officers to respond to such requests on daily basis, hence consuming a significant portion of their work hours.</p> <p>In view of this, UNFPA is looking for a web programmer for development of population data platform that will serve as a repository for all national and sub-national disaggregated population data. Population data platform will contain data for indicators presented in Annex 1 to this ToR (along with all available data at the time of data platform development). Besides tabular data presentation, the platform will enable graphic presentation of data as per available levels of disaggregation. This process is envisaged in two phases, first for the development of national/subnational data platform for Bosnia and Herzegovina (in four languages) and second for the development of regional data platform that will use national statistical data for several countries in the region and enable data comparison between those countries. This ToR defines only first phase of the initiative, while new ToR will be developed once a sufficient number of countries in the region adopts the national data platform.</p>

<p>Scope of work: (Description of services, activities, or outputs)</p>	<p>The consultant will develop a national data platform in line with indicators presented in Annex 1 of this ToR. The platform will be developed based on the OpenSDG platform (open source libraries and tools available at https://open-sdg.readthedocs.io/en/latest/) with the following adjustments:</p> <ul style="list-style-type: none"> • SDG icons will be replaced with new icons (to be designed by the Consultant) in line with indicator groups as specified in Annex 1; • Indicators will be presented as text links (no need to design icons for each indicator); • The platform will have a menu bar with links such as FAQ, Publications, News etc. The links will be discussed and agreed as the platform is developed; • The web page News should be designed to show only authors and titles of individual articles (in a 3x3 or 4x4 matrix) while full articles will be designed to resemble a blog style with a photo of the author and author's personal data on the left hand side and article centred to the web page; • The platform will be developed in 4 languages (English, Bosnian, Serbian and Croatian). Translation of all indicators and articles in all 4 languages will be provided by UNFPA at later stages; • Data tables and charts (as selected by users) could be exported in a format that enables editing and data analysis; • Upon finalisation the Consultant will provide the platform in two forms, one without data and the other one with data entered into the platform. This is because the platform without data will be offered to statistical institutions out of Bosnia and Herzegovina for their use while the one with data will be given to in-country statistical institutions for their publication, maintenance and use. <p>Besides the afore mentioned, the Consultant will organise a one-day training for representatives of statistical institutions in Bosnia and Herzegovina aimed at explaining the main functions of the platform and the process of future data/indicator entry. The Consultant is also responsible for the development of brief guidelines that will explain main functions and new data/indicator entry in writing. The guidelines will graphically show all steps in this process.</p> <p>The Consultant will save the platform at a public domain where it will be hosted (upon finalisation) for a period of at least 1 year so that it could be presented to relevant stakeholders and partners in the region. If the public domain requires payment for this period, it is the responsibility of the Consultant to cover for those costs. The Consultant will be obliged to upload the platform to a domain of any partner upon UNFPA request by the end of 2022 even if official contract expired. This will be done at no additional cost to UNFPA.</p> <p>If statistical institutions in the region adopt the platform for their use, UNFPA may expand this scope of work of the Consultant to provide other statistical institutions with needed support. In this case, additional services will be contracted and paid separately.</p>
<p>Duration and working schedule:</p>	<p>50 work days from 1.4.2021 – 30.6.2021</p>
<p>Place where services are to be delivered:</p>	<p>Home based for platform development (The training will be held in BiH. The venue will be determined at later date)</p>
<p>Delivery dates and how work will be delivered (e.g. electronic, hard copy etc.):</p>	<p>The consultant will inform UNFPA of a domain in which the platform (with data) will be temporarily hosted. The domain should preferably be named in a way that associates viewers to its content (such as www.popdata.net or similar).</p> <p>Empty platform will be saved at any domain and the address shared with UNFPA. Empty platform will be available for upload to a domain used by partner institutions upon request from UNFPA.</p>
<p>Monitoring and progress control, including reporting requirements, periodicity format and deadline:</p>	<p>UNFPA CO BiH PD and M&E Programme Analyst will monitor the work of the Consultant and act as a focal point for any inquiries in relation to this assignment.</p>
<p>Supervisory arrangements:</p>	<p>The Consultant will work under the overall supervision of the UNFPA Bosnia and Herzegovina Representative</p>

Expected travel:	If the Consultant lives out of Sarajevo, it might be necessary to travel to Sarajevo or other location in BiH for the provision of requested training. In this case, the costs of travel and accommodation of the Consultant will be covered separately.
Required expertise, qualifications and competencies, including language requirements:	<p>Education: At least a Bachelor's degree in information technologies (or a web programming certificate from any accredited institution);</p> <p>Work Experience: At least 3 years of professional experience in the areas of web programming (preferably experience in OpenSDG platform development or similar open source solution);</p> <p>Skills and knowledge areas: Possession of graphic design skills in addition to web programming.</p> <p>Competencies and values:</p> <p>Competencies: Focuses on impact and results and responds positively to feedback; Approaches work with energy and a positive, constructive attitude.</p> <p>Values: Demonstrates integrity and fairness by modelling UN values and ethical standards; Demonstrates professional competence and is conscientious and efficient in meeting commitments, observing deadlines and achieving results;</p> <p>Displays cultural, gender, nationality, religion and age sensitivity and adaptability.</p>
Inputs / services to be provided by UNFPA or implementing partner (e.g support services, office space, equipment), if applicable:	UNFPA will provide data values for all indicators to be presented. Data series will depend on the availability of data on official sites of statistical and public health institutions. Upon request from these institutions, data might be altered to show updated values. UNFPA will also provide translation of all indicators and articles in all 4 languages, as well as logos of all relevant partners to be integrated into the platform.
Other relevant information or special conditions, if any:	N/A
Signature of Requesting Officer in Hiring Office:	
Date: 10 March 2021 	

ANNEX 1: LIST OF INDICATORS [WITH DISAGGREGATION DETAILS]

Group 1: Population data

1. Number of population by age and sex [state and entity level; sex; age]
2. Number of population by age groups and sex [state and entity level; sex; age group]
3. Number of population by municipality, age and sex [municipal level; sex; age]
4. Number of live births and deaths by sex [state and entity level; sex]
5. Natural growth rate [state and entity level]
6. Dependency ratios by type and sex [state level; total, young age, old age and older persons to youth; sex]
7. Crude birth rate [state and entity level]
8. Fertility rate by type [state level; total and age specific]
9. Sex ratio at birth [state and entity level]
10. Average age of mothers at first birth [state and entity level]
11. Number of births by teenage mothers by age group [state and entity level; age 13-14 and 15-19]
12. Average age of population by sex [state and entity level; sex]
13. Crude death rate [state and entity level]
14. Average age at death by sex [state and entity level; sex]
15. Life expectancy at birth by sex [state and entity level; sex]
16. Number of infant (children up to 12 months of age) deaths by sex [state and entity level; sex]
17. Infant mortality rate by sex [state and entity level; sex]
18. Number of marriages [state and entity level]
19. Marriage rate [state and entity level]
20. Average age at first marriage by sex [state and entity level; sex]
21. Number of divorces [state and entity level]
22. Divorce rate (per 1,000 marriages) [state and entity level]
23. Number of households [state level; household size]

Group 2: Population projections 2020-2070

24. Projected number of population by age and sex [state level; sex; age]
25. Projected number of population by age groups and sex [state level; sex; age group]
26. Projected population change to base year (2018) by age group [state level; age group]

27. Projected share in total population by age group [state level; age group]
28. Projected dependency ratios by type and sex [state level; total, young age, old age and older persons to youth; sex]
29. Projected average age of population [state level]
30. Projected number of live births and deaths [state level]
31. Projected crude birth rate [state level]
32. Projected crude death rate [state level]

Group 3: Health data

33. Number of deaths by cause of death and sex [state level; ICD-10 classification; sex]
34. Number of deaths by cause of death per 100,000 population [state level; ICD-10]
35. Number of stillbirths by sex [state and entity level; sex]
36. Stillbirth rate (per 1,000 live births) [state and entity level]
37. Number of new cases of cervical cancer [state and entity level]
38. Number of new cases of cervical cancer per 100,000 female population [state and entity level]
39. Number of new cases of breast cancer [state and entity level]
40. Number of new cases of breast cancer per 100,000 female population [state and entity level]
41. Number of new cases of syphilis [state and entity level]
42. Number of new cases of gonorrhoea [state and entity level]
43. Number of new cases of AIDS clinically diagnosed [state and entity level]
44. Number of new cases of HIV [state and entity level]
45. Number of new cases of HIV per 100,000 population [state and entity level]
46. Number of caesarean sections [state and entity level]
47. Number of caesarean sections per 1,000 live births [state and entity level]
48. Number of beds in hospitals [state and entity level]
49. Number of beds in hospitals per 100,000 population [state and entity level]
50. Number of medical doctors providing health care in public institutions [state and entity level]
51. Number of medical doctors providing health care in public institutions per 100,000 population [state and entity level]
52. Number of general practitioners [state and entity level]
53. Number of population per general practitioner [state and entity level]
54. Number of midwives [state and entity level]
55. Contraceptive prevalence rate (total) [state and entity level]
56. Contraceptive prevalence rate (traditional methods) [state and entity level]
57. Contraceptive prevalence rate (modern methods) [state and entity level]
58. Percentage of unmet need for family planning [state and entity level]
59. Percentage of satisfied demand for family planning [state and entity level]
60. Percentage of deliveries with skilled attendant at delivery [state and entity level]
61. Percentage of institutional deliveries [state and entity level]
62. Percentage of women 15-49 who married before age 15 [state and entity level]
63. Percentage of women 20-49 who married before age 18 [state and entity level]
64. Percentage of young women 15-19 who are currently married or in union [state and entity level]
65. Percentage of women 15-49 who believe husband/partner has the right to hit or beat his wife/partner [state and entity level]
66. Percentage of women 15-49 who have comprehensive knowledge about HIV prevention [state and entity level]
67. Percentage of women 15-49 who have accepting attitudes towards people living with HIV [state and entity level]
68. Percentage of women 15-24 who had sex with non-regular partners [state and entity level]
69. Percentage of women 15-24 who used condom with non-regular partners [state and entity level]

Group 4: Education data

70. Number of population per educational attainment and sex [state level; type of education; sex]
71. Percentage of population in total population per educational attainment and sex [state level; type of education; sex]
72. Number of children enrolled in public educational institutions per type of institution and sex [state level; type of educational institution; sex]
73. Percentage of young people 15-24 who are not in employment, education or training (NEET) by sex [state level; sex]

Group 5: Economic and poverty data

74. GDP (BAM) per type [state and entity level; total and per capita]
75. GDP per foreign currencies and type [state level; EUR and USD; total and per capita]
76. Percentage of households living in relative poverty [state and entity level]
77. Percentage of population living in relative poverty by sex [state and entity level; sex]

Group 6: Labour force data

78. Labour force participation rate (Percentage of active population (labour force) in working age population (15-64) by age group and sex) [state level; sex; age group]
79. Employment-to-population ratio (Percentage of employed population in working age population (15-64) by age group and sex) [state level; sex; age group]
80. Unemployment rate (Percentage of unemployed population in active population (labour force) by age group and sex) [state level; sex; age group]