UNESCO Institute for Statistics

Contract for

Development of a Statistical Quality Assurance Framework

Terms of Reference

1 Context

UIS

The UNESCO Institute for Statistics (UIS) is the official and trusted source of internationally-comparable data on education, science, culture and communication. As the official statistical agency of UNESCO, the UIS produces a wide range of state-of-the-art databases to fuel the policies and investments needed to transform lives and propel the world towards its development goals. The UIS provides free access to data for all UNESCO countries and regional groupings from 1970 to the most recent year available.

The UIS encourages developers and researchers to build websites and applications that make rich use of UIS disseminated data. In addition to a powerful standards-based API, the UIS supports a data browser and a bulk data download service (BDDS)

Over 5000 indicators are available. They are created through numerous statistical processes, many of which are based on questionnaires sent to UNESCO member countries.

Problem to be addressed

There are some concerns about the quality of UIS data, both regarding their accuracy and their relevance. Whilst there is an existing statistical quality assurance framework, it does not provide sufficient guidance in addressing these concerns

2 Objectives of Contract

The general objective is to develop a comprehensive Statistical Quality Assurance Framework (SQAF) for the UIS (hereafter referred to as the Client).

Specific objectives are:

• to develop a general approach for ongoing monitoring of the quality and performance of a statistical process as it proceeds;

• to design a general approach for quality evaluation of a statistical process and its outputs, including quality concepts and checklist; and
• to develop a programme for implementation of monitoring and evaluation activities based on the above approaches.

3 Deliverables

There will be three deliverables as specified below.

Inception Report
The Inception Report will contain:
• confirmation and/or elaboration of the Terms of Reference for the Contract;
• list of activities and schedule for their implementation; and
• listing and review of relevant documentation.

Statistical Quality Assurance Framework – First Draft
The first draft of the SQAF will cover the following:
• quality context and concepts;
• approach to quality governance and awareness;
• approach to quality monitoring; and
• approach to quality evaluation approach; and
• quality evaluation checklist

Statistical Quality Assurance Framework – Final
SQAF Final will be an updated version of the First Draft that has been revised to take account of suggestions and additional requirements arising from Client review of the First Draft.

Statistical Quality Assurance Dashboard
The dashboard will allow UIS to monitor compliance and progress against the SQAF and will inform statistical quality improvement plans.

4 Conduct of Contract

Communications
The contract will be undertaken entirely offsite using e-mail and videoconferencing (typically ZOOM or Skype), supplemented, if needed for large datasets, by data exchange using the Cloud (typically Dropbox or One Drive).

Responsibilities of the Client
• Confirmation and/or elaboration of requirements and expectations.
• Provision of all relevant documentation.
• Provision of suggestions and/or additional requirements as they may arise.
• Provision of responses to questions from the Contractor.
• Review of deliverables and provision of feedback.

Responsibilities of the Contractor

• Timely submission of deliverables.
• Revision of deliverables in accordance with suggestions and requirements provided by the Client.
• Take full advantage of quality assurance documentation that already exists and may be relevant, including the draft Generic Data Quality Assurance Framework for a UN Agency, also the United Nations National Quality Assurance Frameworks Manual for Official Statistics, which although intended for national statistical offices has much material pertinent to international statistical units.
• Identify and base the quality assurance framework on an appropriate business model such as the Generic Statistical Business Process Model of the UNECE High Level Group for the Modernisation of Official Statistics.

5 Plan, Timetable and Working Days

It is envisaged that the Contract will be undertaken in four phases, aligned with the deliverables, as indicated in the following table.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start Date</th>
<th>Finish Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQAF Inception</td>
<td>Week W</td>
<td>Week W+3</td>
</tr>
<tr>
<td>SQAF First Draft</td>
<td>Week W+4</td>
<td>Week W+8</td>
</tr>
<tr>
<td>SQAF Final Version</td>
<td>Week W+9</td>
<td>Week W+11</td>
</tr>
<tr>
<td>SQA Dashboard</td>
<td>Week W+13</td>
<td>Week W + 15</td>
</tr>
</tbody>
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6 Payment Schedule

Three payments- at the successful completion of each of the phases

Minimum qualifications and competencies

Education
Minimum master’s degree in Statistics or other related fields (relevance to statistical quality assurance/control is an advantage) – PhD is preferable.

Work experience
• Minimum 10 years’ experience working with official statistics (working in a national statistics bureau is an advantage.)
• Experience in designing and reviewing of AQA forms;
• Experience in the execution of quality official statistics according to DQAF, GDDS and SDDS published by the IMF.
• Experience in using statistical computer programs, and excellent computer skills with MS. Office (Word, Excel, Power Point).

Language
• Fluency in oral and written English

How to Apply:
Interested and suitable candidates should submit the following documents:
• Duly accomplished Letter of Confirmation of Interest and Availability;
• Personal CV and UNESCO CV, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;
• Brief description of why the individual considers him/herself as the most suitable for the assignment, and a methodology, if applicable, on how they will approach and complete the assignment.
• Financial Proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs.