

**Title:** Statistician  
**Domain:** Natural Sciences  
**Grade:** Junior expert  
**Organizational Unit:** Division for Science Policy and Capacity-building  
**Primary Location:** Paris, France  
**Type of contract:** Consultancy Contract  
**Deadline (midnight, Paris time):** 6 June 2019  
**Duration:** 11 months in a calendar year (with possibility of extension up to 19 months, subject to satisfactory service)  
**Application to be sent to:** s.schneegans@unesco.org

## OVERVIEW OF THE FUNCTIONS OF THE POST

UNESCO is looking for a junior consultant to support the provision of data for the *UNESCO Science Report 2020*, which is due for release on 10 November 2020. The junior consultant will work under the direct supervision of the Editor-in-Chief of the report and will interact with the UNESCO Institute for Statistics and other data providers.

### BACKGROUND

The *UNESCO Science Report* series enables governments, academia, the private sector, the media and other science watchers to monitor the evolution of science governance over time. Each quinquennial report provides a snapshot of the situation worldwide at a given time.

The series also enables countries to study other approaches to fostering knowledge societies and compare their own situation with that of others around the world. This can help policy-makers to identify emerging trends, issues and good practices and, thereby, stimulate a debate at the national and regional levels on future directions for science, technology and innovation (STI). In this way, the report serves as a resource for foresight studies.

The first report in the series was published by UNESCO in 1993. Since 2005, the global report has been released every five years on World Science Day for Peace and Development (10 November).

The 2020 edition will be examining science governance in the broad sense, paying attention not only to STI policies but also to other relevant policies and strategies: industrial policies, higher education policies, poverty reduction strategies, environment policies, climate change adaptation strategies, national strategies for specific fields of research, such as artificial intelligence, etc.

The 2020 edition of the *UNESCO Science Report* is very timely, as it will serve as a key monitoring tool for the United Nations' Sustainable Development Goal 9.5 (SDG 9.5), in particular, which relates to research and innovation. These include SDG targets 9.5.1 and 9.5.2 for raising research intensity (the share of domestic research expenditure in GDP) and researcher density (the number of full-time equivalent researchers per million inhabitants) by 2030. Whereas the 2015 edition provided baseline information and data on the

*UNESCO is committed to promote geographical distribution and gender equality within its Secretariat. Therefore, women candidates are strongly encouraged to apply, as well as nationals from non- and under-represented Member States. Persons with disabilities are equally encouraged to apply. Worldwide mobility is required as staff members have to serve in other duty stations according to UNESCO's geographical mobility policy.*

**UNESCO DOES NOT CHARGE A FEE AT ANY STAGE OF THE RECRUITMENT PROCESS.**

development path countries were following at the time, the 2020 edition will be assessing the progress made by countries towards their development targets since 2015.

The UNESCO Institute for Statistics (UIS) is the United Nations' designated custodian for SDG 9.5.1 and 9.5.2. The relevant data are available on the UIS' open access portal. The consultant hired by UNESCO will be responsible for gathering these and other data for use in the UNESCO Science Report 2020.

## REQUIRED QUALIFICATIONS

### EDUCATION

- Advanced university degree in statistics or in a closely related numeric discipline (such as demography, economics or statistics) or in a field of social science with a substantial applied statistics component or equivalent knowledge.

### WORK EXPERIENCE

- At least 2 years of relevant professional experience required;
- Knowledge of STI indicators and related statistics required.
- Experience of working for the United Nations would be an asset.

### LANGUAGES

Proficiency in English is required (both written and oral), as is a good working knowledge of the French language. Knowledge of another official UN language would be an asset.

## SKILLS

- Proficiency in MS Office, as well as in relevant statistical software.
- Data visualization skills.

## DELIVERABLES

### 1. Data submissions

This entails submitting datasets on R&D, innovation and higher education<sup>1</sup>, as well as socio-economic indicators<sup>2</sup>, ICT indicators<sup>3</sup>, high-tech trade data<sup>4</sup>, etc., for a range of indicators determined in agreement with the Editor-in-Chief of the USR that will closely mirror those used in the last UNESCO Science Report (2015). See here: <https://en.unesco.org/unesco-science-report>. These data will be used by the authors and by the editorial team to draft the chapters of the USR.

### 2. Bibliometric and patent data

Contributing to obtaining bibliometric and patent data from an external company engaged in bibliometric/patent statistics by helping to determine the terms of reference for the contractor and organize the call for tenders for the company to be hired by UNESCO to analyse the data and arrange it in Excel sheets by indicator.

### 3. Data visualization design

This relates to designing initial versions of figures/graphs/data charts and maps etc., using Excel and other relevant software and agreed templates, and making sure of their consistency throughout the report. Authors will be supplied with this graphic material. The consultant will create webpages to host the Excel tables used by the UIS to draw graphics in the report, to enable readers to access the original

<sup>1</sup> The UIS collects and releases R&D and Higher education data annually. However, biennial UIS Innovation survey is on hold for the moment due to lack of resources, and it is not clear when the next survey will be conducted.

<sup>2</sup> These will be downloaded/compiled from World Bank's World Development Indicators.

<sup>3</sup> These will be extracted from International Telecommunications Union (ITU)/ICT database.

<sup>4</sup> These will be compiled from UN COMTRADE database.

datasets via hyperlinks from the report to the relevant Excel table. Final graphic design should be done by a professional graphic designer.

#### 4. Proofreading chapters

Once each chapter has been edited (sequentially), the Editor will share it with the UIS for review. The consultant will correct any errors in the data submitted by UIS and provide comments on related analysis and update the data as necessary and in such a way as to alert the Editor and author to the changes.

#### 5. Respond to regular requests and other related businesses

This refers to responding various regular correspondence related to the data submitted by the UIS, other related matters with the editor of the USR, which may arise during the USR production cycle as well as other related businesses.

### TIMEFRAME

The consultancy will last 11 months, with the possibility of an extension at the end of this period. The contractor will be based in the Natural Sciences Sector at UNESCO headquarters in Paris for the duration of the contract. Some travel to the UNESCO Institute for Statistics in Montréal, Canada, may be required. The contractor will not be expected to cover the cost of this travel, which will be decided by the Editor-in-Chief. The consultant will maintain regular communication and exchanges with the UNESCO Institute for Statistics during the course of the work assignment.

The contractor must be available to begin the consultancy by **Monday 17 June 2019**.

The data support will be provided according to the following timeline:

- June 2019
  - Define the indicators with the Editor-in-Chief and UIS;
  - Establish full Excel datasets for socio-economic, R&D input indicators, using previously agreed sources (Comtrade database, UIS database, etc.);
- July-September/2019
  - Supply data tables and propose suitable data visualization graphs for the first chapters;
  - Upon receipt of bibliometric and patent data from a provider contracted by UNESCO, provide tables on R&D output for the first batch of chapters and propose suitable data visualization graphs;
  - create webpages in the supplied templates to host Excel sheets with data for drawn graphs throughout report to enable readers to access the datasheets behind graphs in the report.
- October-December/2019
  - Produce tables and graphs for the next batch of commissioned chapters;
  - Check data and the related analysis in the first chapters for accuracy during the editing process, verify drawing of graphics in same;
  - Manage and update the webpages created to host the data for drawn graphs.
- January-May 2020
  - Produce tables and graphs for all the remaining chapters, using updated data whenever these are available;
  - Check data and the related analysis in edited chapters, updating data as necessary;
  - verify the accuracy of drawing and labelling of graphics in all submitted chapters.
  - Manage and update the webpages created to host the data for drawn graphs.

## COMPENSATION

A first contract would cover a period of 11 months for a fee of US\$3,480 (about 3,000 euros) per month. The contractor shall be expected to work full-time for UNESCO over this period. He/She shall receive the corresponding payment at the end of each calendar month. The contractor shall be expected to submit a regular activity report.

## HOW TO APPLY

The application must be in English and must contain the following information:

- Curriculum vitae
- A list of previous similar assignments
- At least two professional referees.
- Interested consultants to indicate ability and availability to undertake the terms of reference within the timeframe outlined above.

**Please submit your electronic application by 6 June 2019 at the latest to: [s.schneegans@unesco.org](mailto:s.schneegans@unesco.org)**

**Please indicate your name and “Consultancy – USR 2020 – Assignment 1” in the subject line.**