# Expert technical inputs for data preparation, synthesis, analysis, visualization and reporting and for development of the GLAAS data portal

**Area of expertise:** Advanced quantitative and data skills; data analysis, synthesis and reporting; WASH and WASH finance; data visualizations for online interactive data portals

**Purpose of the TORs:** To provide technical inputs to the GLAAS 2024/2025 country survey and development partner survey; data preparation, quality assurance, synthesis, analysis, visualization and reporting; and to development of the GLAAS data portal and related data needs.

### Background

The WASH sector has two main tools for monitoring investments and WASH systems, which are hosted by the WHO Water, Sanitation, Hygiene and Health (WSH) unit:

- The Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), which provides
  policy- and decision-makers with a comprehensive global analysis of investments and the
  enabling environment for WASH; and
- The development of WASH accounts to track financing to WASH at the national and subnational levels based on the TrackFin methodology.

WHO has continued to expand activities related to GLAAS and WASH accounts in response to increasing demand from countries and global partners as well as monitoring needs of the Sustainable Development Goals (SDGs). In the last GLAAS cycle over 120 countries participated and more are expected for the next GLAAS cycle to be launched in April 2024. There are over 20 countries producing data on WASH financial flows through WASH accounts, and this number is expected to increase significantly in the next few years. The amount and complexity of GLAAS data and datasets is rapidly expanding, and the GLAAS data portal continues to evolve to improve access and use of GLAAS data.

#### **Deliverables**

#### Deliverable 1: Expert technical inputs to the GLAAS 2024/2025 cycle survey development

- 1.1: Provide expert technical inputs related to data and the finance section to the GLAAS 2024/2025 country survey
- 1.2: Develop content and provide expert technical inputs for the GLAAS 2024/2025 development partner survey and related guidance in collaboration with the GLAAS team
- 1.3: Develop, test and finalize fillable PDF versions of the GLAAS 2024/2025 country survey in at least five languages
- 1.4: Provide expert technical inputs to the eGLAAS version of the GLAAS 2024/2025 country survey
- 1.5: Develop, test and finalize the fillable PDF versions of the GLAAS 2024/2025 development partner survey in English and/or an eGLAAS version of the same

## Deliverable 2: Documented quality assurance of finance section and finance elements of completed GLAAS 2024/2025 surveys

- 2.1: Provide expert quality assurance/review for finance responses in up to 100 GLAAS 2024/2025 country surveys in up to five languages, comparing with historical GLAAS data and OECD data as relevant
- 2.2: Provide expert technical inputs to help address data issues identified by countries during review of country highlights
- 2.3: Document finance data quality issues for follow up with countries
- 2.4: Provide expert quality assurance/review for all finance responses in up to 35 GLAAS 2024/2025 development partner surveys, comparing with historical GLAAS data and OECD data as relevant
- 2.5: Document finance data quality issues for follow up with development partners

## Deliverable 3: Consolidated datasets of GLAAS data from GLAAS 2024/2025 country surveys, development partner surveys and WASH accounts and other relevant external data

3.1: Develop raw dataset templates and definitions for importing nearly 2,000 GLAAS country survey data points and GLAAS development partner survey data from fillable PDFs

- 3.2: Develop required mapping and coding for importing eGLAAS data from countries and development partners into the same dataset templates
- 3.3: Retrieve and map external datasets to support GLAAS country and development partner data analyses (e.g. OECD development aid data, World Development Indicators, etc.).
- 3.4: Regularly import data from GLAAS country surveys and GLAAS development partner surveys) and relevant external datasets into the datasets templates
- 3.5: Regularly clean and validate GLAAS 2024/2025 datasets
- 3.6: Compile and clean datasets from WASH accounts production tool (WAPT) studies from up to 40 countries on an ongoing basis

## Deliverable 4: Updated, expanded and formatted WASHmart database for the GLAAS data portal to meet requirements related to GLAAS data portal functionalities and content.

- 4.1: Perform transformations and updates necessary to convert raw and cleaned data from GLAAS 2024/2025 country surveys and highlights and development partner surveys to WASHmart data storage model (at least six tables), as well as into a single unpivoted data table (GLAAS\_EN) (in four languages) for use in the GLAAS data portal.
- 4.2: Regularly import new data from GLAAS 2024/2025 country surveys and highlights and development partner surveys into the WASHmart data storage model and perform quality assurance.
- 4.3: Update data table and methodology to import WAPT study data into an established WASHmart database for purposes of displaying the WASH accounts highlight and perform quality assurance by aligning with WAPT outputs.
- 4.4: Update data structure definition and SQL code as needed to pre-populate metadata for over 250 GLAAS indicators, as well as manual entry of information with significant historical modifications. Provide quality assurance for all metadata.

## Deliverable 5: Data analyses across topic areas as requests and content on WASH finance for the GLAAS 2024/2025 cycle report and other documents as requested

- 5.1: Develop a dynamic data analysis spreadsheet that summarizes and automatically updates information when adding or updating raw data for all 2024/2025 GLAAS country survey questions
- 5.2: Undertake requested analyses of GLAAS 2024/2025 cycle data to identify key messages and figures and tables for the GLAAS 2024/2025 report across all GLAAS topic areas (governance, monitoring, WASH workforce, finance)
- 5.3: Draft GLAAS report section on WASH finance including all figures and tables, circulate for review, incorporate comments and finalize content
- 5.4: Draft GLAAS report section on development partner WASH finance including all figures and tables, circulate for review, incorporate comments and finalize content

## Deliverable 6: Provide expert technical inputs and guidance and develop inputs for GLAAS data portal content and functionalities

- 6.1: Participate in regular meetings with GLAAS data portal developers
- 6.2: Provide technical inputs for development and improvements of features and requirements for the GLAAS data portal.
- 6.3 Complete development of metadata content to describe WASH indicators as presented in the GLAAS data portal.

## Deliverable 7: Data analyses, datasets and data reviews for specific purposes including SDG 6 reporting as requested

- 7.1: Develop requested SDMX data/datasets for annual SDG 6 reporting
- 7.2: Develop requested data/datasets for specific purposes as requested

### Qualifications, experience, skills and languages

### **Educational Qualifications:**

Essential: Minimum an advanced university degree in a relevant area.

### **Experience:**

#### Essential:

- Over fifteen years of relevant experience, including working with health or WASH data/datasets and large datasets
- Experience with country research/data collection, survey design, results analysis.
- Experience with data visualizations for online interactive data portals.
- Experience with WASH global actors and partners at a senior/expert level.

#### Desirable:

- Experience with WASHmart
- Experience with GLAAS surveys and GLAAS data
- Experience with WASH accounts and the TrackFin methodology and/or the WASH accounts production tool (WAPT) and/or Health accounts.

## Skills/Knowledge:

#### Essential:

- Knowledge of the global monitoring landscape including national, regional and global WASH monitoring mechanisms and instruments.
- Knowledge of WASH governance and policies, WASH financing and SDG6 monitoring.
- Advanced quantitative skills; expertise with data collection systems, building of complex data sets, data quality assurance, data compilation and data analysis, trend and historical analyses.
- Demonstrated ability to present, synthesize, and identify key data points of large data sets.
- Familiarity with WASH, WASH finance, health and socioeconomic data, OECD-CRS and other relevant datasets.
- Demonstrated ability to rapidly integrate technical knowledge.
- Excellent writing and reporting skills.
- Excellent organizational, team and interpersonal skills.

### **Desirable:**

Knowledge and experience with the GLAAS data portal or similar data portal.

### Languages and level required (Basic/Intermediate/Expert):

#### Essential:

Expert knowledge of English

#### Location

Off site: Home-based

#### Travel

The consultant is expected to travel to one or two selected GLAAS meetings per year

### Remuneration and level of effort

Remuneration: Payband level D (USD 626-720 per day)

Expected level of effort: 160 days per contract year (contract year for consultants is 11 months)