

**Terms of reference (ToRs) for the procurement of services below the EU threshold**

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| <b>IMPLEMENTATION OF GREEN HYDROGEN TRAINING COURSES AT UNIVERSITY LEVEL IN SOUTH AFRICA</b> | <b>Project number/<br/>cost centre:<br/>21.2230.7-003.00</b> |
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## **0. List of abbreviations**

|      |  |
|------|--|
| AG   | Commissioning party  |
| AN   | Contractor   |
| AVB  | General Terms and Conditions of Contract for supplying services and work |
| FK   | Expert   |
| FKT  | Expert days  |
| GH2  | Green Hydrogen   |
| KZFK | Short-term expert  |
| PtX  | Green hydrogen based products  |
| ToRs | Terms of reference   |

## 1. Context

In the context of a rapidly decreasing global carbon budget and urgency to identify adequate solutions for decarbonizing the so-called hard-to-abate sectors, the demand for green hydrogen (GH<sub>2</sub>) and green hydrogen-based products (PtX), such as ammonia and synthetic fuels, is steadily increasing. Many off-takers (e.g., Germany, the EU, Japan, etc.) are willing to pay a premium price and to sign supply agreements to stimulate H<sub>2</sub>/PtX market development. Green hydrogen, however, also offers domestic use opportunities to countries like South Africa, which are characterised by favourable solar and wind energy conditions, sufficient mineral resources and existing hydrogen value chains and industries. Given this potential, several initiatives are underway in the field of green hydrogen and power-to-X (PtX) in South Africa.

H2.SA is a project of the German Development Cooperation with South Africa. It is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH* in close cooperation with The Presidency of South Africa. H2.SA's main objective is to promote a South African green and sustainable hydrogen economy. Working closely with its partners from Government, private sector, and civil society, H2.SA provides expertise, resources, and builds capacity for a secure and sustainable energy future that holds opportunities for all South Africans. The programme is organised in four workstreams:

- WS 1: Strategy Development and Regulatory Framework
- WS 2: Private Sector Engagement and Support
- WS 3: Training, Research and Innovation
- WS 4: Sustainability and Just Transition

Despite the promising conditions for the development of a GH<sub>2</sub> economy in South Africa, certain challenges persist. A serious capacity and knowledge deficit exist in South Africa on GH<sub>2</sub> and PtX as it is a very new topic. Training and skills development is required at all levels, including University level to ensure that engineering graduates have the pre-requisite knowledge regarding green hydrogen and PtX or to provide access to graduates to accredited short-term training courses for further professional development. H2.SA wishes to appoint a South African University to implement three accredited, green hydrogen focussed short courses as a measure for continued professional development and training. Note that the request is for implementation of the training courses and the budget excludes material and course development. The ultimate aim of the project is to ensure the availability of accredited short-courses at a South African University.

The following ToR will outline the requirements, tasks and deliverables of the training service provider.

## 2. Tasks to be performed by the contractor

The service provider should host a series of up to four (4) blocks of training courses, consisting of 3 separate short courses each, over the course of the project period (2 years). Note that each short course should last 5 days per training course. The aim is to offer the 3 short-courses at least twice per year in a specific training block. The frequency may be adapted according to the demand as well as the academic calendar. Typical course titles can be:

- Hydrogen in the energy system
- Green hydrogen technology, distribution and storage

- Green hydrogen project engineering

Alternative topics may be suggested by the service provider. All training courses must be duly registered and accredited. Participants must provide feedback on the training courses, based on an evaluation methodology agreed with GIZ.

GIZ has specific targets relating to the participation of women in training courses and the service provider shall ensure that at least 30% of participants are women. Of the participating women, 50% must rate the training as useful or very useful for their work. The participation numbers as well as training course evaluations must be substantiated by appropriate data collection and reporting measures.

The service provider shall be responsible for all activities related to the implementation of the training courses, including but not limited to marketing, communication, selection of participants, logistics, preparation and printing of material, evaluation, post-training communication and liaison and communication with GIZ. Participation in the training courses can be virtual or physical, however, only physical attendance and completion of assessment will qualify for the issuing of an accredited certificate of completion. The budget will allow for travel and course fee support to participants that will benefit from the training but may not be able to afford it.

GIZ shall contract the service provider for the anticipated contract term, from **November 2023** to **15 November 2025**

The contractor is responsible for providing the following services:

- Selecting, preparing, training and steering the project team and experts assigned to perform the advisory tasks.
- Ensure registration and accreditation of all training courses.
- Implement an appropriate marketing and advertising campaign to advertise the training courses and to ensure adequate participants, especially women (30%).
- The contractor provides equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- Ensure the selection of suitable participants and ensure clear and efficient communication with participants.
- Present 4 training blocks, consisting of three accredited short courses each over the contract period.
- Collect feedback on the training through a pre-designed GIZ supplied questionnaire. The service provider may be expected to provide input into GIZ reports, presentations and monitoring and evaluation system.
- Submit a progress report to GIZ after every training block, i.e. twice per year. After submission of the progress report, participate in a de-briefing session with GIZ to review the training events.
- Submit a final report, containing a summary of the training activities to GIZ.

- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at particular locations:

| <b>Milestone</b>   | <b>Deadline/place/person responsible</b> |
|--|--|
| Presentation of implementation plan at kick-off meeting with GIZ                           | 20 November 2023                         |
| Presentation of first block of accredited short courses and submission of progress report  | By June 2024                             |
| Presentation of second block of accredited short courses and submission of progress report | By November 2024                         |
| Presentation of third block of accredited short courses and submission of progress report  | By June 2025                             |
| Presentation of fourth block of accredited short courses and submission of progress report | By October 2025                          |
| Submission of final report   | 15 November 2025                         |

Period of assignment: From 1 October 2023 until 15 November 2025.

### **3. Eligibility Criteria**

The bidder should fulfil following minimum eligibility criteria:

3.1 Commercial register entry

3.2 Average annual turnover for the last three financial years of at least EUR 500,000.00/ZAR10,108,500.00

3.3 Average number of employees and managers for the past three calendar years: At least 20 persons

3.4 The bidder must also provide examples of four (4) projects (accredited green hydrogen training) with a minimum commission value of EUR 10,000.00/ZAR 202,170.00 in the past 3 years through a brief description of the project, the dates and who the services were provided for.

### **4. Concept**

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

## Technical-methodological concept

**Strategy (1.1):** The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation**.

## Project management of the contractor (1.6)

The tenderer is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

The tenderer is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert months) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

## Further requirements (1.7)

The contractor is required to outline a sustainability concept, clearly describing the institutionalisation of the training into the organisation's activities and present a concept for training delivery beyond the project period and not dependent on GIZ support.

## 5. Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 8), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points in the technical assessment.

## **Team leader**

### Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor (quality and deadlines).
- Coordinating and ensuring communication with GIZ, partners and others involved in the project.
- Project implementation. The team leader is responsible for the successful implementation of the project and the completion of all deliverables.
  - Personnel management, within the available budget;
  - Assuring logistics (booking of venues, participant selection and communication, printing of manuals and name tags, ensuring evaluation);
  - Assigning qualified lecturers and trainers to deliver the training courses.
- The team leader may also act as a lecturer/trainer for the course implementation.
- The team leader in conjunction with the course co-ordinator selects participants who qualify for travel and subsistence support.
- Formulates and implements a sustainability concept to ensure the implementation of training beyond the project life-span.
- Regular reporting in accordance with deadlines.
- Budget monitoring and management.

### Qualifications of the team leader

- Education/training (2.1.1): university degree (PhD) in Engineering OR Science OR Economics OR Business Management.
- Language (2.1.2): C1-level language proficiency in English
- General professional experience (2.1.3): 10 years of professional experience in the South African training sector
- Specific professional experience (2.1.4): 5 years in implementing renewable energy training offerings
- Leadership/management experience (2.1.5): 5 years of management/leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 10 years of experience in projects in southern Africa (region), of which 5 years in projects in South Africa
- Development cooperation (DC) experience (2.1.7): 2 years of experience in DC projects
- Other (2.1.8): Knowledge and experience with the implementation of green hydrogen training offerings at University level.

## **Key expert 1: Course co-ordinator**

### Tasks of key expert 1

- Participating in the coordinating and communication with GIZ, partners and others involved in the project
- Support the implementation of the training courses (administratively and logistically)
- Support regular reporting in accordance with deadlines
- Participation in de-briefing sessions with GIZ, PtX Hub and partners
- Ensure logistics (booking of venues, participant selection and communication, printing of manuals and name tags, ensuring evaluation)
- The expert, in conjunction with the team leader selects participants who qualify for travel and subsistence support
- Supporting the team leader in co-ordination and communication with GIZ and partners.
- Attend the training courses and assist students with additional learning (tutorial role)

#### Qualifications of key expert 1

- Education/training (2.2.1): university degree (first degree) in Engineering OR Science OR Economics
- Language (2.2.2): C1 -level language proficiency in English
- General professional experience (2.2.3): 3 years of studentship at an appropriate South African academic institution
- Specific professional experience (2.2.4): 1 year course coordination OR tutorship experience
- Leadership/management experience (2.2.5): N/A
- Regional experience (2.2.6): 1 year in an academic training environment in South Africa
- Development Cooperation (DC) experience (2.2.7): N/A
- Other (2.2.8): N/A

#### Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Socio-cultural skills
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

#### **Short-term expert pool with minimum 3, maximum 6 members**

For the technical assessment, an average of the qualifications of all specified members of the expert pool is calculated. Please send a CV for each pool member (see below Chapter 7 Requirements on the format of the bid) for the assessment.

#### Tasks of the short-term expert pool

- Participating in the coordinating and communication with GIZ, partners and others involved in the project
- Delivery of training by acting as lecturer/s in the training courses
- Participating in relevant conferences and exchange visits to ensure up to date subject matter knowledge on green hydrogen.
- Input into regular reporting in accordance with deadlines
- Participation in de-briefing sessions with GIZ, PtX Hub and partners

#### Qualifications of the short-term expert pool

- Education/training (2.6.1): 3 experts with a Masters degree university qualification in engineering OR economics.
- Language (2.6.2): 3 experts with C1-level language proficiency in English
- General professional experience (2.6.3): 3 experts with 5 years of professional experience in lecturing at an academic institution.
- Specific professional experience (2.6.4): 3 experts with 5 years of professional experience in lecturing at an academic institution in engineering, energy studies, renewable energy or green hydrogen.
- Regional experience (2.6.5): 3 experts with 5 years of experience in southern Africa (region), 3 experts with 5 years of experience in South Africa
- Development cooperation (DC) experience (2.6.6): N/A
- Other (2.6.7): N/A



The tenderer must provide a clear overview of all proposed short-term experts and their individual qualifications.

## 6. Costing requirements

### Assignment of personnel and travel expenses

Per-diem and overnight accommodation allowances are reimbursed as a lump sum up to the maximum amounts permissible under tax law for each country as set out in the country table in the circular from the German Federal Ministry of Finance on travel expense remuneration (downloadable at <https://www.bundesfinanzministerium.de>).

Accommodation costs which exceed this up to a reasonable amount and the cost of flights and other main forms of transport can be reimbursed against evidence

All business travel must be agreed in advance by the officer responsible for the project.

### Sustainability aspects for travel

GIZ would like to reduce greenhouse gas emissions (CO<sub>2</sub> emissions) caused by travel. When preparing your tender, please incorporate options for reducing emissions, such as selecting the lowest-emission booking class (economy) and using means of transport, airlines and flight routes with a higher CO<sub>2</sub> efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

If they cannot be avoided, CO<sub>2</sub> emissions caused by air travel should be offset. GIZ specifies a budget for this, through which the carbon offsets can be settled against evidence.

There are many different providers in the market for emissions certificates, and they have different climate impact ambitions. The [Development and Climate Alliance \(German only\)](#) has published a [list of standards \(German only\)](#). GIZ recommends using the standards specified there.

### Specification of inputs

| Fee days                              | Number of experts | Number of days per expert | Total | Comments  |
|---------------------------------------|-------------------|---------------------------|-------|---|
| Designation of Team Leader            | 1                 | 20                        | 20    | Based on an allocation of 5 days per training block (2 training blocks per year), two years in total.                     |
| Designation of Key Expert             | 1                 | 40                        | 40    | Based on an assumption of 10 days per training block (2 training blocks per year =20), two years =40                      |
| Designation of short-term expert pool | 6                 | 20                        | 120   | Based on 1 course consisting of 5 days, 3 courses per year (15 days) twice per year = 30 days and over 2 years (60 days), |

| Travel expenses   | Quantity                  | Price (ZAR)         | Total           | Comments   |
|---|---------------------------|---------------------|-----------------|--|
| Per-diem allowance in country of assignment   | 30                        |                     |                 | Based on an assumption of 3 guest lecturers per year (1 per training course, total 6 lecturers, 30 days)                       |
| Overnight allowance in country of assignment  | 30                        |                     |                 | Based on an assumption of 3 guest lecturers per year (1 per training course, total 6 lecturers, 30 days)                       |
| Transport   | Quantity                  | Price (ZAR)         | Total           | Comments   |
| International flights   | 8                         |                     |                 | 1 international flight per project team member over the course of the project.   |
| Domestic flights  | 24                        |                     |                 | Based on 2 participants per course requiring travelling assistance = 2 participants*3 training courses*twice per year*2 years) |
| CO <sub>2</sub> compensation for air travel   | 8 (intl)<br>24 (domestic) | 2800 (intl)<br>2400 | 22400<br>57 600 | A budget is earmarked for settling carbon offsets against evidence.  |
| <p><b>Travel expenses (private car mileage, car rental, e-hailing services, airport transfers)</b></p> <ul style="list-style-type: none"> <li>• Mileage at R3,55 per km</li> <li>• Car rental</li> <li>• E-hailing services</li> <li>• Airport transfers</li> </ul> | 1                         |                     |                 | Travel within the country of assignment, transfer to/from airport etc.   |
| Other travel expenses   | 8                         |                     |                 | Visa costs   |
| Other costs   | Number                    | Price               | Total           | Comments   |
| Flexible remuneration   | 1                         | 150000              | 150000          | A budget of ZAR 150 000 is foreseen for flexible remuneration. Please incorporate this budget into the price schedule.         |

|  |  |  |  |   |
|--|--|--|--|---|
|  |  |  |  | Use of the flexible remuneration item requires prior written approval from GIZ. |
|--|--|--|--|---|

## Workshops and training

Please describe in your concept how you implement GIZ's minimum standards for sustainable event management (see annexes to the terms of reference).

The contractor implements the following training courses:

- 3 training courses, of 5 days duration each, twice per year for two years
- Presenting pre-designed green hydrogen and PtX training courses
- An estimated 2 participants per training workshop may require transport and accommodation support
- All training courses will be held at the service provider's premises/facilities.

## 7. Inputs of GIZ or other actors

N/A

## 8. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The tender must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English.

The complete tender must not exceed 10 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g. links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 5 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs must also be submitted in English.

Please calculate your financial tender based exactly on the parameters specified in Chapter 5 Quantitative requirements. The contractor is not contractually entitled to use up the days, trips, workshops or budgets in full. The number of days, trips and workshops and the budgets will be contractually agreed as maximum limits. The specifications for pricing are defined in the price schedule.

## 9. Option

N/A

## 10. Outsourced processing of personal data

The successful service provider will handle and store contact details of participants. No other personal data will be collected or stored. The service provider shall outline in the company data protection policy in the proposal.

## 11. Annexes

- Minimum standards for sustainable event management at GIZ
- H2.SA Fact sheet
- H2.SA training evaluation form

## 12. Other Requirements

- Please submit your proposal (technical and price proposal) in separate files/folder to [ZA\\_Quotation@giz.de](mailto:ZA_Quotation@giz.de) no later than 6<sup>th</sup> **October 2023** all documents must be in PDF.
- **Submission to any other email address may invalidate your bid.**
- Please do not mention any price for this measure on your cover letter/Technical proposal.
- Please submit your tax clearance certificate with the bidding documents.
- Please submit your price proposal in **ZAR**.
- Our General Terms of Conditions (attached) shall not be changed/amended should you be the winner of this tender. These General Terms and Conditions will form part of the contract should you be awarded this contract. By submitting your proposal, we will conclude that you have read and accepted these terms and conditions.
- Participating more than once in same tender is not allowed and it will lead to your proposal as well as that of the company where you appear more than once being disqualified. The responsibility rests with the companies to ensure that their partners/experts are not bidding/participating more than once in same tender.
- **Bidders are not allowed to communicate directly with any other person regarding this bid other than the procurement official/s. Failure to comply with this requirement may lead to your bid being disqualified.**
- Bidders must strictly avoid conflicts with other assignments or their own interests. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this EOI and tender process, if they:
  - a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by GIZ or the Interim Supply Chain Management

Council to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the services in this selection process;

- b) were involved in the preparation and/or design of the programme/project related to the services requested under this EOI and tender;
- c) are serving or have been serving in the past three months in the structures of the Interim Supply Chain Management; or
- d) are found to be in conflict for any other reason, as may be established by, or at the discretion of GIZ.

#### Scientific data

In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to GIZ, and seek GIZ's confirmation on whether or not such a conflict exists.

- Similarly, the Bidders must disclose in their proposal their knowledge of the following:
  - a) if the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel are family members of GIZ staff involved in the procurement functions and/or the Interim SCM Council or any Implementing partner receiving services under this EOI or tender; and
  - b) all other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.
- **Failure to disclose such an information may result in the rejection of the proposal or proposals affected by the non-disclosure.**
- **Bids sent via Dropbox and WeTransfer will not be accepted.**