

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

CONFIDENTIAL

Development and Implementation of a Water Allocation Model in the Hillah River System, Iraq	Project number/ cost centre: G-012530-001 / 12530020000
	Tender number 10033521

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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
KZFK	Short-term expert
ToRs	Terms of reference

1. Context

Iraq is facing an intensifying water crisis, driven by a combination of environmental and human-induced factors. Climate change is placing increasing pressure on water availability, while declining discharge from the Euphrates and Tigris rivers is further exacerbated by upstream water flow regulation in neighbouring countries, significantly reducing the volume of water reaching Iraq. Lower river discharge also affects water quality. When flows are low, pollutants become more concentrated; in years with higher discharge, pollutants may be diluted to some extent. As a result, reduced flows contribute to deteriorating water quality and increased pollution risks. At the same time, rising water demand and unsustainable consumption practices are placing additional pressure on the country's already limited water resources.

In response to these pressing challenges, the Government of Iraq has initiated efforts to strengthen climate resilience and promote sustainable water resources management. However, it faces challenges in prioritizing and mobilizing the investments. In recognition of the urgent need for a climate-resilient approach to managing water resources in Iraq, the implementation of a new project has been agreed between the Federal Governments of Iraq and Germany.

This project is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH with the Ministry of Water Resources (MoWR). Hillah River System has been designated as a pilot region for enhancing climate-resilient water resources management in Iraq. This vital watercourse, branches off from the Euphrates River, traverses the provinces of Babylon, Diwiniya, and Muthanna, and is confronted with considerable challenges related to water allocation and distribution.

The primary objective of this consultancy is to develop and apply the Ribasim 2026 water allocation model in the Hillah River System. This model will be instrumental in planning and managing water resources effectively across different sectors and users. The consultancy aims to bolster the technical capabilities of the MoWR and local stakeholders through comprehensive training, technical support, and capacity-building initiatives.

2. Tasks to be performed by the contractor

The consultancy is crucial for addressing key challenges in water resources planning and allocation within the Hillah River System. By enhancing water allocation modeling capabilities and improving the use of water allocation data, the project will contribute to more informed decision-making processes. The consultancy will also help bridge existing information gaps, particularly related to water supply data, and ensure that local stakeholders are equipped with the necessary skills and knowledge to utilize the latest version of the Ribasim model effectively.

The contractor is responsible for providing the following services:

1. To support the development and application of the Ribasim water allocation model for the Hillah River System.
2. To provide technical support and capacity-building activities for MoWR staff and other relevant stakeholders.
3. To conduct a training session on the application and use of the Ribasim 2026 model, ensuring sustainable knowledge transfer and model utilization.

Scope of Work

The consultancy firm will undertake the following work packages:

Work Package 1: Training and Capacity Building

Tasks

a. Design Training Program:

- Develop a comprehensive training curriculum covering general Ribasim principles, tailored sessions for the Hillah River System, and applied hands-on sessions.
- Integrate rainfall–runoff components as part of the Ribasim training module, ensuring participants understand how hydrological inputs are generated and integrated into the model.
- Integrate the development of a skeleton Ribasim model tailored to the Hillah River System and conduct initial calibration and validation of the model to ensure it meets the basic functional requirements.
- Coordinate training programme with the CWRM team and MoWR representatives. This should cover the full training cycle, including pre-training capacity assessment, training plan development, design and preparation of training materials, delivery of the training, and post-training evaluation

b. Conduct Training:

- Organize and facilitate a 5-day training workshop for MoWR staff and local stakeholders.
- Provide all necessary training materials and resources.
- Ensure active participation and engagement through interactive sessions and practical exercises.

Work Package 2: Support for Interpretation of Results

Tasks

a. Result Analysis:

- Assist MoWR staff in analyzing and interpreting the results generated by the Ribasim model.
- Write the final Technical Report, including interpretation of Ribasim model results, scenario analysis, and key findings.
- Provide detailed feedback and guidance on report preparation and presentation.

Work Package 3: Ongoing Technical Support

Tasks

Technical Assistance to provide continuous technical support through calls, email, and periodic model reviews:

- Ensure the model remains aligned with the evolving requirements of the Hillah River System.
- Regularly review the model's performance and suggest improvements or updates as necessary.
- Review the calibration and Verification of Model Inputs and Outputs and support to best fit between simulation and observation

Certain milestones, as laid out in the table below, are to be achieved during the contract term:

Milestones/process steps/partial services	Deadline/place/person responsible
D1.1: Detailed training curriculum and materials	to be delivered 2 weeks before the training workshop
D1.2: Completion of the 5-day training workshop.	to be delivered 3 months after contract start
D1.3: A skeleton Ribasim model for the Hillah River System is fully developed and all scenarios checked	to be delivered 6 months after contract start
D1.4: Training evaluation report, including feedback from participants and recommendations for future training.	to be delivered 2 weeks after the training workshop
D2.1: Detailed technical reports on Ribasim model results, scenario analysis, and key findings	to be delivered 10 months after contract start
D2.2: Practical manual or user guidance document for independent continuation of model development and application by MoWR	to be delivered 3 months after contract start (to be shared during the 5-day training)
D3.1: Log of technical support interactions and resolutions for responding to user inquiries, reviewing models, and providing detailed feedback and guidance.	ongoing, to be delivered quarterly: Up to 4 hours of group calls per month and up to 24 hours per month
D3.2: Periodic model review reports with recommendations for improvements	to be delivered every 3 months

Period of assignment: from 18.09.2026 until 30.09.2027.

3. 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).

Project management of the contractor (1.6)

N.A.

Further requirements (1.7)

N.A.

4. 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 7), 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.

Key expert 1: Training Expert

Tasks of key expert 1

- Development and delivery of a 5 day training program for local stakeholders.
- Capacity building and knowledge transfer to ensure sustainability of the water allocation model.
- Technical support and advisory services during the implementation phase.
- Coordination with the Ministry of Water Resources and other relevant entities for effective training outcomes.
- Regular reporting on training progress and outcomes.

Qualifications of key expert 1

- Education/training (2.2.1): University qualification (Master's degree) in Hydrology, Water Resources Management, or a related field.
- Language (2.2.2): C1 -level language proficiency in English
- General professional experience (2.2.3): 7 years in the water resources management sector.
- Specific professional experience (2.2.4): 5 years in water allocation modelling, specifically with Ribasim or similar models of which 3 years in developing and delivering training programs related to water resources management.
- Leadership/management experience (2.2.5): N.A.
- Regional experience (2.2.6): N.A.
- Development Cooperation (DC) experience (2.2.7): N.A.
- Other (2.2.8): N.A.

Key expert 2: Modelling Specialist (Ribasim)

Tasks of key expert 2

- Support the development and application of the Ribasim 2026 water allocation model in the Hillah River System.
- Conducting technical analysis and simulations using the Ribasim model.
- Providing technical support and advisory services for model implementation.
- Training local technical staff on the use and maintenance of the Ribasim model.
- Documentation and reporting of modelling outcomes and recommendations.

Qualifications of key expert 2

- Education/training (2.3.1): University qualification (Master's degree) in Hydrology, Water Resources Management, or a related field.
- Language (2.3.2): C1 -level language proficiency in English
- General professional experience (2.3.3): 7 years in the water resources management sector.
- Specific professional experience (2.3.4): 5 years in water allocation modelling, specifically with Ribasim or similar models.
- Leadership/management experience (2.3.5): N.A.
- Regional experience (2.3.6): N.A.
- Development Cooperation (DC) experience (2.3.7): N.A.
- Other (2.3.8):

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

5. Costing requirements

Assignment of personnel and travel expenses

Per diem 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 from the [German Federal Ministry of Finance – tax treatment of travel expenses and allowances for international business travel as of 1 January 2026 \(GERMAN ONLY\)](#)).

Accommodation allowances are reimbursed as detailed in the specification of inputs below.

With special justification, additional Accommodation costs up to a reasonable amount 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 has undertaken an obligation to reduce greenhouse gas emissions (CO₂ 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 CO₂ efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

CO₂ emissions caused by air travel must 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 key expert 1	1	40	40	Including 5 days training and 2 days workshop in Iraq (without traveling days)
Designation of key expert 2	1	65	65	Including 5 days training and 2 days workshop in Iraq (without traveling days)
Travel expenses	Quantity	Number per expert	Total	Comments
Per-diem allowance in country of assignment	2	7	14	5 days training and 2 days workshop in Iraq (without traveling days) Accommodation, meals and transport in Iraq provided by GIZ
Overnight allowance in country of assignment	2	7	14	5 days training and 2 days workshop in Iraq (without traveling days) Accommodation, meals and transport in Iraq provided by GIZ
Transport	Quantity	Number per expert	Total	Comments
International flights	2	1	2	Return flight to Iraq, Baghdad in economy class (against evidence)
CO ₂ compensation for air travel	4	1	4	A fixed budget of EUR 200 is earmarked for settling carbon offsets against evidence.

<u>Guidance for GIZ service providers on avoiding, reducing and offsetting GHG emissions</u>				
Travel expenses (train, car)	2	1	2	Transfer to/from airport in home country. Travel within Iraq, incl. transfer to/from airport etc. is provided by GIZ.
Other travel expenses	2	1	2	e.g. visa costs against evidence
Other costs	Number	Price	Total	Comments
Flexible remuneration	1	10.000	10.000	A budget of EUR 10.000 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.

6. Inputs of GIZ or other actors

GIZ and/or other actors are expected to make the following available:

- Accommodation in Iraq with full board at GIZ compound / whitelisted location
- Transportation in Iraq
- Logistics for meetings and workshops in Iraq

7. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToR. 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 (language).

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 4 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 can also be submitted in English (language).

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.