

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

CONFIDENTIAL

DEVELOPMENT OF BANGLADESH BOILER CODE	Project number/ cost centre: G-011550-001 Tender number 10011003
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0. List of abbreviations

ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AVB	General Terms and Conditions of Contract for supplying services and work
BS	British Standard
CloB	Office of Chief Inspector of Boilers
EN	European Norm
ILO	International Labour Organization
ISO	International Organization for Standardization
MoInd	Ministry of Industries
NDT	Non-Destructive Testing
RSC	RMG Sustainability Council
STIE	Short Term International Expert
STNE	Short Term National Expert
ToRs	Terms of reference
WTO	World Trade Organization

1. Context

Bangladesh is the world's second largest textile and garment producing country after China with a global market share of 7.4 percent in 2023, according to the World Trade Organisation report titled 'World Trade Statistics 2023: Key Insights and Trends' (WTO 2024). Bangladesh exported textile goods worth 38 billion USD (2023) which accounted for 82% percent of total export in 2023. These figures clearly illustrate the importance of the textile and garment industry for Bangladesh and draw attention to the dependence on this sector. Furthermore, the sector employs around 4 million people, mostly un- or low-skilled, and has created income opportunities for around 60 percent of women (ILO). Although the Ready-Made-Garment (RMG) and textile sector is a key contributor to the economic growth of Bangladesh, compliance with social and environmental standards needs to be improved. Workers' rights are in particularly neglected, and wages are low. Gaps in the environmental regulation and in law enforcement and the lack of effective sanctions allow the industry to use outdated technologies and implement obsolete production practices that lead to the discharge of hazardous waste and chemicals. This puts workers' lives at risk and pose a significant threat to the environment and to the communities. The RMG Sustainability Council (RSC), which is an unprecedented private national tripartite initiative to carry forward the significant accomplishments made in workplace safety in Bangladesh. The RSC was set up by three incorporating members representing each of the three constituents from Industry, Global Fashion Brands and Global and Local Trade Unions. The RSC conducts structural, electrical, fire & life safety and boiler safety inspections, supports and monitors remediation, conducts OSH training programme and operates an independent occupational safety & health complaints mechanism available to workers in RSC covered RMG factories. The mandate and the structural organisation of the Accord on Fire and Building Safety in Bangladesh (ACCORD) were transitioned to the RSC on May 2020 to carry forward the workplace safety accomplishments made after the Rana Plaza building collapsed in 2013. Although the RSC adopted the mandate and organisational structure of the Bangladesh Accord, it seeks to extend the Bangladesh Accord's scope of work. The RSC's scope of work covers building, fire, electrical, and boiler safety, along with remediation, training programmes, and a complaints mechanism. Work on boiler safety began with a pilot inspection project conducted by the Accord in 2018. Following this, the RSC carried out visual inspections of 2,589 boilers across covered factories. Currently, the RSC is conducting comprehensive safety assessments of boilers in 1,476 factories.

On the other hand, the Office of the Chief Inspector of Boilers (CloB), under the Ministry of Industries (MoInd), is responsible for administering boiler regulations in Bangladesh, which includes the inspection and licensing of boilers to ensure their safe manufacturing, operation, and use. The strategic vision of CloB are to ensure the use of legally compliant and quality boilers in the country, enhance the institutional capacity of the CloB, improve performance efficiency and service quality, increase transparency and ensure accountability in official activities and improve financial and resource management.

RSC maintains close coordination with CloB providing regular updates on its activities, inspection results, the overall safety status of inspected boilers, and any critical issues identified. This exchange of information takes place through emails, phone communications, and meetings, including bi-monthly coordination meetings.

Now CloB is keen to develop the country's very first boiler code which would be name as 'Bangladesh Boiler Code'. The 'Boiler Code' by definition are a set of standards that should

regulate the materials, design, construction, inspection, testing & commissioning of boilers and boiler components in Bangladesh by law. This code will be based on applicable local rules, regulations, requirements, guidelines, and recommendations including the Boiler Act of 1923 (as amended in 2022), the Boiler Rules of 1928 (as amended in 2025), and the Boiler Regulations of 1951 (as amended in 2007). This code hereby can also incorporate applicable regional and international standards and best practices. 'Boiler Code' is expected to deliver significant benefits to industry, which include but not limited to establishment of minimum safety requirements, bringing alignment among designers, manufacturers (local and international), users, local authorities, and other stakeholders and harmonizing local standards with international codes and best practices to ensure equivalency. The 'Boiler Code' will also complement and strengthen the work of the RSC mainly by enhancing workplace safety in RSC-covered RMG factories exporting to international markets, introduction of globally recognized inspection, testing, and maintenance practices and finally fostering harmonization with the local authority.

Recently, the CloB requested GIZ to provide technical assistance in developing the 'Bangladesh Boiler Code'. In response and building on the existing collaboration framework between RSC and CloB, GIZ has agreed to the proposal and is now seeking a qualified contractor (Local and International) to undertake the development of the 'Bangladesh Boiler Code'.

It is envisaged that the overarching output, development of 'Bangladesh Boiler Code' will be carried out jointly by an international expert (STIE) and a local contractor comprising of a group of national experts (STNEs), where the international expert will serve as team leader and providing overall guidance and direction to the local team of STNEs. There is a separate tendering process for engaging a contractor (national) but that will not be part of this ToR.

This implies that the scope of this ToR will be confined to the contracting of an international expert (STIE) who will take the role of Team Leader.

2. Tasks to be performed by the contractors

The contractor (in cooperation and collaboration with national contractor/experts/STNEs) is responsible for providing the following tasks, critical for the development of 'Bangladesh Boiler Code'. Here the international expert will contribute to the development of the code by carrying out the specific tasks as detailed out Chapter 4. A preliminary outline of the envisaged Boiler Code is attached herewith in annex. However, this document is intended to serve as a starting point and to indicate the general expectations regarding the structure and content of the code. It should not be regarded as final. The contractors are expected to review, adapt, and further develop the document during the course of the assignment.

The contractor is responsible for providing the following services:

Assessment of current situation

- Review all existing laws, acts, policies, regulations, and guidelines related to boilers in the country.
- Assess the institutional framework for boiler licensing, certification, inspection, and enforcement.
- Identify gaps, overlaps, and inconsistencies compared to international practices.

- Evaluate the capacity of government institutions, inspection agencies, and industry stakeholders in relation to boiler regulation.

Conduction of benchmarking study

- Examine relevant international boiler regulations and standards, including but not limited to the Indian Boiler Regulations, ASME Boiler and Pressure Vessel Code (BPVC), BS/BS EN standard.
- Identify best practices, transferable elements, and lessons learned from these frameworks.
- Provide recommendations on which international elements are most suitable for national adaptation, considering local context, industry needs, and enforcement capacity.

Develop draft technical standards

- Define technical specifications for materials, fabrication, welding, testing, and installation.
- Establish standards for pressure parts, safety valves, control systems, and auxiliary equipment.
- Set minimum requirements for energy efficiency, emissions, and environmental performance of boilers.
- Ensure alignment with global best practices while maintaining feasibility for local industries.

Development of operational and maintenance guidelines

- Draft detailed procedures for safe boiler operation under different load and pressure conditions.
- Define mandatory maintenance schedules, inspection checklists, and record-keeping requirements.
- Provide technical guidance on water treatment, fuel handling, and pollution control measures.
- Define critical boiler safety issues that are unsafe for operation.
- Include emergency response and shutdown protocols.
- Regulations for rental, portable boilers.

Formulation of boiler safety and inspection requirements

- Define procedures for hydrostatic testing, non-destructive testing, and performance testing.
- Develop risk assessment criteria for identifying hazards in boiler operation.

- Specify qualifications and roles of certified boiler inspectors and operators.
- Draft standard forms, certificates, and documentation templates for inspections.

Formulate compliance, certification, and licensing mechanisms

- Recommend a streamlined process for boiler registration, licensing, and renewal.
- Define roles and responsibilities of government authorities, inspection bodies, and industry stakeholders.
- Propose enforcement mechanisms, including penalties for non-compliance and incentives for good performance.
- Suggest a training and accreditation system for boiler operators and inspectors.

Engaging stakeholders throughout the drafting process

- Organise consultations with government ministries, inspection agencies, workers' unions, boiler manufacturers, boiler users, business chambers etc.
- Conduct industrywide technical workshops to validate draft provisions and gather practical insights.
- Periodic result sharing, update, consultation, and exchange session with expert panel.
- Ensure buy-in and ownership of all relevant stakeholders, including public and private sector actors.

Preparation of a consolidated draft boiler code/regulation

- Integrate all technical, safety, operational, and compliance sections into a single structured document.
- Provide explanatory notes, examples, diagrams, and annexes to aid interpretation and implementation.
- Ensure the code is written in clear and enforceable legal-technical language.

Cooperation and Collaboration

- Provide technical advice on the establishment of an expert panel by engaging relevant local experts from the public and private sectors, business associations, civil society, industry, academia, and consultancy.
- Ensure regular updates to the expert committee, systematically collect their feedback, and incorporate relevant input into the development of the boiler code.
- Cooperate closely with CloB, RSC, and GIZ on all aspects of the work related to the boiler code to ensure coherence, coordination, and alignment.

Review and finalization of Draft

- Present the draft code to government authorities and stakeholders for review.
- Incorporate feedback and technical comments into the final version.
- Support the government in preparing an implementation roadmap, including timelines, capacity needs, and resource requirements.

Deliver final outputs and capacity building recommendations

- Submit the final boiler code/regulation document in print (5 copies) and digital formats.
- Provide a guidance manual for inspectors, operators, and regulators.
- Deliver a final presentation to government authorities summarizing the key provisions.

In addition to above

- The contractor provides equipment and supplies (consumables) and assumes the associated operating and administrative costs. The contractor manages costs and expenditure, accounting processes and invoicing in line with the requirements of GIZ
- The contractor is responsible for selecting, preparing, training and steering the international and national, short and long-term experts assigned to perform the advisory tasks.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.
- The contractor reports regularly to GIZ in accordance with the current AVB of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

In addition to the reports required by GIZ in accordance with the AVB, the contractor submits the following reports:

- Inception Report
- Final report along with the Bangladesh Boiler Code.

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
Inception report	2 weeks following the start of the contract / Online/ Team leader
Stakeholder analysis and context assessment is concluded, and outcome is presented to GIZ/CIOB/RSC	6 weeks following the start of the contract /Onsite in Bangladesh /Team Leader/Key Experts
1 st expert group meeting is completed where the skeleton of the code is presented, and feedback is collected	8 weeks following the start of the contract /Online / Team Leader/Key Experts
2 nd expert group meeting is completed where the mid-term progress is reviewed, and feedback is collected	16 weeks following the start of the contract /Online / Team Leader/Key Experts

The first full-fledged draft of 'Bangladesh Boiler Code' is shared with expert group and presented to a wider group of stakeholders	22 weeks following the start of the contract / onsite/ Team leader/ Key experts
Final report along with the finalized version of 'Boiler Code of Bangladesh' is shared with GIZ The 'Boiler Code of Bangladesh' should be approximately 400-500 pages	24 weeks following the start of the contract / online / Team leader

Period of assignment: from. **July until 15.12.2026**

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).

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**.

Further requirements (1.7)

Consideration of cross-cutting themes (e.g. gender equality, gender ratio).

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.

Team leader

Tasks of the team leader

- Lead the inception phase mainly through finalizing the methodology, detailed work plan, and task allocation among team members.
- Supervise the review of national laws, regulations, and institutional arrangements related to boiler safety.
- Guide international benchmarking analysis, ensuring relevance to national needs.
- Lead the drafting of regulatory and compliance frameworks, including licensing, certification, and enforcement mechanisms.
- Ensure coherence and consistency across all technical and safety sections drafted by the key experts.
- Coordinate stakeholder consultations, facilitate workshops, and engage directly with government authorities, industry associations, and inspectorates.
- Integrate technical and safety inputs from key experts into the consolidated draft boiler code.
- Oversee preparation of explanatory notes, annexes, and guidance materials for regulators and industry.
- Lead final presentations to the government and facilitate the validation process.
- Provide strategic recommendations for capacity building, institutional strengthening, and implementation roadmap.

Qualifications of the team leader

- Education/training (2.1.1): university degree (German ‘Diplom’/Master) in Mechanical or Electrical Engineering
- Language (2.1.2): C1-level language proficiency in English
- General professional experience (2.1.3): 15 years of professional experience at International level in the boiler sector focused on boiler design, design review & approval
- Specific professional experience (2.1.4): 10 years of experience working directly with national and international regulatory bodies such as EN, ASME, ISO, ASTM etc.
- Leadership/management experience (2.1.5): 7 years of management/leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 5 years of experience in projects in asia (region), of which 2 years in projects in Bangladesh (country)
- Development cooperation (DC) experience (2.1.7): 3 years of experience in DC projects
Other
- (2.1.8): 3 years of experience of performing Non-Destructive Testing (NDT)

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
Team Leader	1	60	60	Cost of upto two round-trip economy class airfare for the STIE (Team leader) for travelling from his/her home country to the country of assignment (Bangladesh). Each time the duration of stay will be upto 10 days, in total upto 20 days. Team leader to travel from his/her country of residence to Bangladesh on these two occasions, primarily to support the on-site implementation of Milestones #2 and #5
Travel expenses	Quantity	Number per expert	Total	Comments
Total travel budget	1	1	10.350€	All travel-related costs are covered by the total travel budget of EUR 10,350 and will be reimbursed against evidence, with the exception of per diem allowances, which

				are paid on a lump-sum basis. These costs must not be included in the financial offer.
Per-diem allowance in country of assignment – reimbursed on a lump-sum basis (in line with applicable regulations). Covered by the total travel budget; not to be priced separately.	20	1	20	For the STNE's stay in the country of assignment.
Overnight allowance in country of assignment Covered by the total travel budget (EUR 10,350); reimbursed against evidence. Not to be priced separately.	20	1	20	Overnight stays abroad: Note: Under the BMF travel expense regulations, overnight allowances not exceeding 100% of the lump sum amounts can be submitted for reimbursement against evidence. Up to 75% of the maximum rates specified in the travel expense regulations can be submitted for reimbursement on a lump-sum basis. Please indicate in the price schedule whether your offer is on a lump-sum basis or against evidence.
Transport	Quantity	Number per expert	Total	Comments
International flights Covered by the total travel budget (EUR 10,350); reimbursed against evidence. Not to be priced separately.	2	1	2	Travel to the place of service delivery Bangladesh. Cost of upto two round-trip economy class airfare for the STIE (Team leader) for travelling from his/her home country to the country of assignment (Bangladesh). Each time the duration of stay will be upto 10 days, in total upto 20 days. Team leader to travel from his/her country of residence to Bangladesh on these two occasions, primarily to support the on-site implementation of Milestones #2 and #5

CO₂ compensation for air travel	4	1	360	A fixed budget of EUR 360 (2 round trips or 4 one-way flights), for the team leader and experts is earmarked for settling carbon offsets against evidence.
Travel expenses (train, car) <ul style="list-style-type: none"> • Rented vehicle • Taxi • Train • Uber Covered by the total travel budget (EUR 10,350); reimbursed against evidence. Not to be priced separately.	1	1	1	Travel within the country of assignment for the experts for trainings, meetings, site visits, and other assignment-related purposes, including airport transfers. This also covers relevant local travel in the expert's home country in connection with international travel.
Other travel expenses Covered by the total travel budget (EUR 10,350); reimbursed against evidence. Not to be priced separately.	1	1	1	Visa fees, cost of mobile SIM cards for voice calls, internet package, data package, text messaging, and any other additional travel related costs.
Other costs	Number	Price	Total	Comments
Flexible remuneration	1	6500	6500	A budget of EUR 6500 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, events and trainings

Kick-off meetings and jour fixes will be organized as needed to ensure timely monitoring and smooth project implementation. These jour fixes will take place on a bi-weekly or monthly basis, depending on project progress. As part of milestone #2, meetings, interviews, KILs, and FGDs will be conducted to meet the requirements for milestone achievement. Most of these are expected to take place in person during the visits of the Team Leader. For milestones #3 and #4, online meetings with the 'expert group' are planned. An 'expert group' is a team of carefully chosen members, who are subject matter experts and the group should consist of no more than 10 members. The duration of these expert meetings should be 1 -2 hours maximum. However, in the first expert meeting the contractors will share the skeleton of the 'Bangladesh Boiler Code' and collect feedback on the same and in the second meeting the midterm progress reflecting the feedback from the expert group in the first meeting. Here no in-person workshops are foreseen. Should such a workshop become necessary, GIZ will be responsible for all workshop-related logistical arrangements, including venue, catering, and other related costs. And the contractors will be responsible for planning and implementation of the workshop which should include but not limited to development of agenda, content preparation, moderation, presentation etc. An industry-wide in-person

workshop is foreseen under milestone #5, with an expected 25–30 participants mainly from the government, public and private sector, industry, academia, business associations, practitioners, manufacturers etc. This will be a half-day, or it could be a full-day event as well, taking place in person in Bangladesh. The contractor will be responsible for preparing the training content, developing the moderation plan, delivering the content in the workshop, and conducting monitoring, evaluation, and reporting as required. As mentioned above, GIZ will be responsible for all workshop-related logistical arrangements, including venue, catering, and other related costs.

The contractors implement the following meeting/workshop:

- Two expert group meetings (online)
- An industrywide workshop on the ‘Bangladesh Boiler Code’. It could be half day or a full day event engaging 25-30 participants from different stakeholders.

6. Inputs of GIZ or other actors

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

- Transportation on site with own project vehicle
- Logistics for workshops: GIZ will organize venue, meals and other training related logistics.

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 CV shall not exceed 4 pages. That must clearly show the position and job the proposed person held in the reference project and for how long. The CV must 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.

8. Annexes

A preliminary outline of the envisaged Boiler Code