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

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Visual Rendering and Postproduction of BRT infrastructure Design in Batam, Semarang, and Surabaya **Project number/ 12.9097.2-135.03**

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0. List of abbreviations

APBN	National budget
AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2018
BRT	Bus Rapid Transit
FS	Feasibility Study
GHG	Greenhouse gas
GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit
GoI	Government of Indonesia
INDOBUS	Indonesian Bus Rapid Transit Corridor Development Project
MOT	Ministry of Transportation
NAMA	National Appropriate Mitigation Action
SECO	The State Secretariat of Economic Affairs of Switzerland
SUTRI	Sustainable Urban Transport Programme Indonesia
TOR	Terms of Reference
UNFCC	The United Nations Framework Convention on Climate Change

1. Context

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is an international cooperation enterprise for sustainable development with worldwide operations. Its corporate objective is to improve people's living conditions sustainably.

The Sustainable Urban Transport Programme Indonesia (SUTRI), a Nationally Appropriate Mitigation Action (NAMA) registered with the UNFCCC, aims to tackle the challenges of growing urban traffic congestion and increasing urban transport-related greenhouse gas emissions by transforming urban transport in Indonesia with a mix of technical advisory services, capacity-building and investment, provided through a national sustainable urban transport programme. Implementation of SUTRI NAMA commenced in December 2017, funded by the Mitigation Action Facility, with GIZ as the implementing agency.

A technical assistance component, the Indonesian Bus Rapid Transit Corridor Development Project (INDOBUS), is to particularly support the Bus Rapid Transit (BRT) corridors in Indonesia's selected pilot cities and improve BRT's national framework conditions. It addresses local and national levels through planning, project management, operations management, funding plans, and the private minibus sector reform. The INDOBUS component is financed by the State Secretariat of Economic Affairs of Switzerland (SECO). At the national level, INDOBUS supported the Ministry of Transportation in establishing the necessary regulatory framework and policies for BRT systems in Indonesian cities and coordinating efforts of all other line ministries to effect substantial progress, e.g., through initiating high-level policy dialogues. At the local level, INDOBUS assists selected pilot cities, namely Bandung, Semarang, Makassar, Pekanbaru, Batam, and Surabaya, in developing (constructing) the BRT corridors and supporting the setting up of BRT management and operations, including human capacity development through selected training activities.

Further information regarding the project can be accessed here: https://tuewas-asia.org/project/sustainable-urban-transport-programme-indonesia-sutri-nama-and-the-project-component-indonesian-bus-rapid-transit-corridor-development-project-indobus/.

The INDOBUS component of the SUTRI program is committed to continuing its support for the realization of Bus Rapid Transit (BRT) systems in Indonesia. The project aims to not only provide the necessary technical assistance, planning, and investment, but also to make a lasting impact by providing a foundation for future BRT development. This is achieved by producing a basic design in the feasibility study document that can be used as a tool for future projects.

GIZ SUTRI NAMA and INDOBUS (the project) recognises the importance of effective communication and dissemination of the project's outputs. One of the key points for socialisation and dissemination of the feasibility study (FS) is to create a visual representation of the BRT design that can be endorsed by high-level officials. This is why the project considers the production of overall visualization art of BRT design in Batam, Semarang, and Surabaya to be a crucial aspect of the project. The project aims to produce visual materials that can effectively communicate the benefits and potential impact of BRT systems in the selected cities.

To achieve this goal, The project intends to procure a consultant firm that will produce the overall visualisation art of BRT design in Batam, Semarang, and Surabaya. This is seen as a key step forward in the implementation of the project and a way to ensure the long-term success of the project. By creating a visually appealing representation of the BRT design, GIZ

SUTRI NAMA and INDOBUS hopes to engage a wider audience and generate greater support for the implementation of BRT systems in Indonesia.

2. Tasks to be performed by the contractor

Within this contract, GIZ SUTRI NAMA & INDOBUS will need a consultancy service to conduct a Development of Visualisation, including 3D modelling, image rendering, and video of Bus Rapid Transit Infrastructure in Batam, Semarang, and Surabaya.

The contractor is responsible for providing the following services:

Task 1 Develop improvisation on visual 3D modelling on BRT stations infrastructure and surrounding environment

Including, but not limited to:

a. Conducting research and analysis of existing BRT station designs model that had been developed in Feasibility stage: This could involve conducting a thorough review of current BRT station designs in order to identify areas for improvement and potential design trends.
b. Creating a detailed 3D rendered image model of the proposed BRT station design. The model should take into account some factors such as accessibility, functionality, and aesthetics. This detailed 3D model should also include the additional 3D component such as BRT buses, regular traffic, passengers, sidewalk access, pedestrian bridges (if any), vegetation, utilities infrastructure, and landmark of the area.

   Please refer to table below:

City Name	Location
Batam	Up to 3 area/ locations: Area in Nagoya-sungai jodoh, Jalan Pembangunan, and surround Batam Centre.
Semarang	Up to 3 area/ locations Area in Jalan Padanaran, Simpang Lima, and Jalan Pemuda
Surabaya	Up to 3 area/ locations: area in jalan tunjungan, Jalan Jenderal Ahmad yani, Jalan Mayjen Sungkono

   Please refer to these conceptual drawing below for the detail, these drawings were created during the feasibility stage and serve as guidelines for developing the 3D model

or making improvements to it. GIZ will provide the raw 3D model file (.skp) and a design guideline for the BRT station in the form of a 2D CAD drawing.

Figure 1 : Conceptual BRT station in Jalan Pembangunan, Batam

Figure 2 : Conceptual design BRT Nagoya Area, Batam

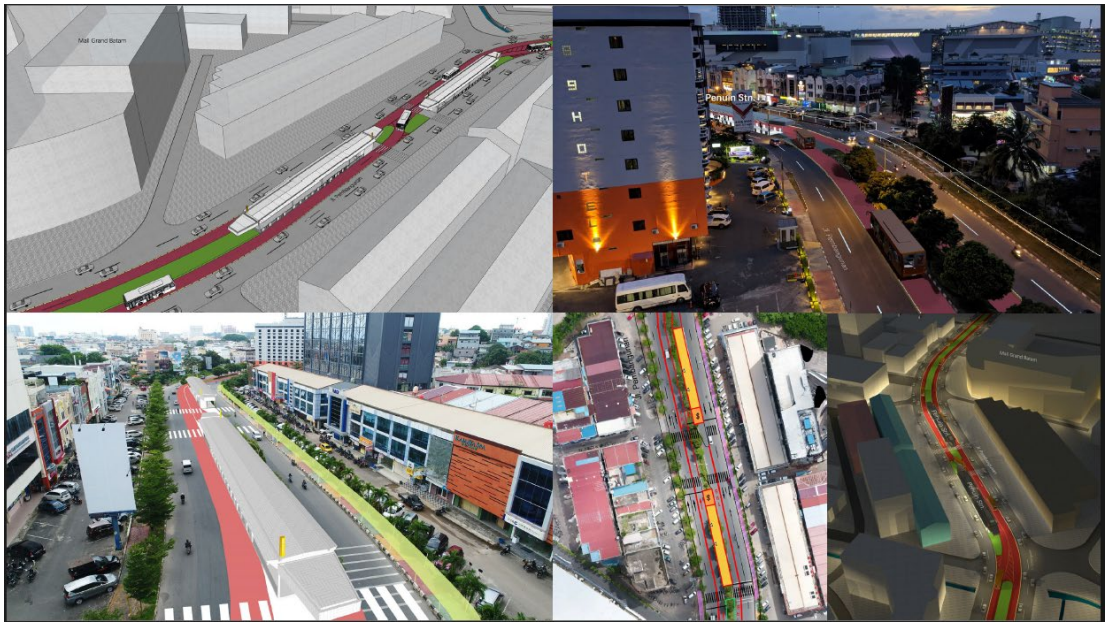

Figure 3 : BRT Station in Jalan Pembangunan (Batam)

Figure 4 : Example of Rendered Output on Elevated BRT station in Jalan Perintis Kemerdekaan, Makassar

Figure 5 : Example Rendered image on Improvement of area Surrounding BRT Station

Figure 6 CAD Drawing on tipycal BRT station

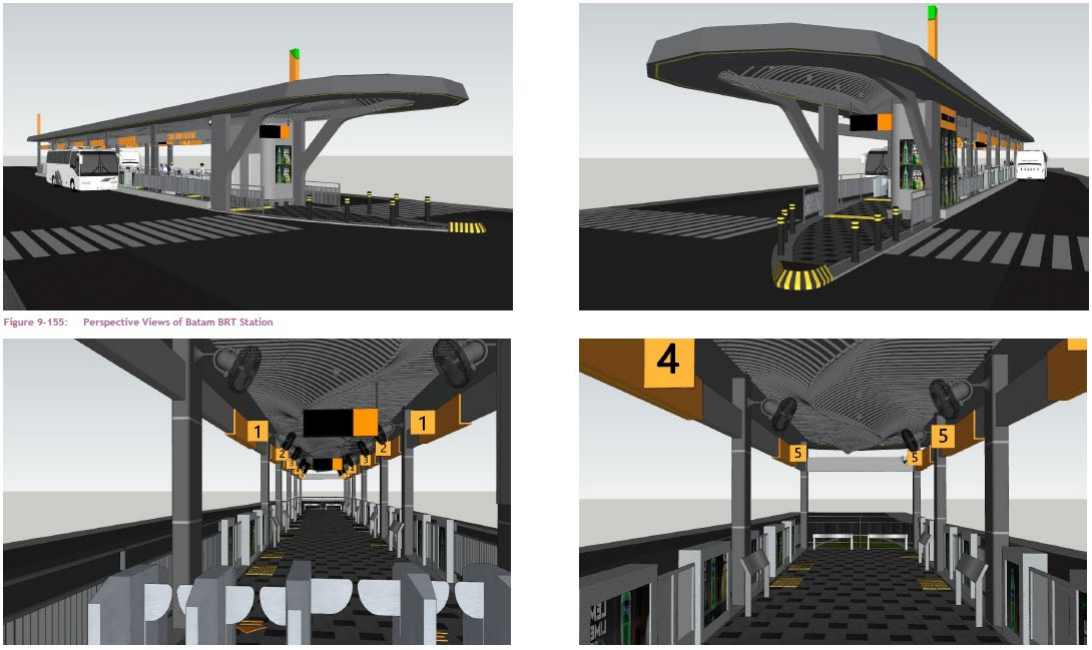

Figure 7 BRT Station Design (Batam)

Figure 8 : BRT station layout

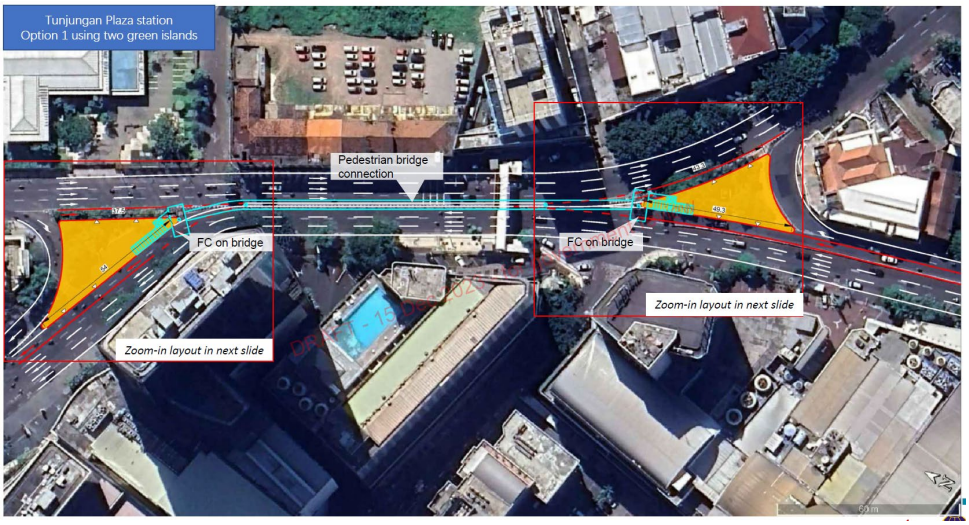

Figure 9 Example of Cad Drawing Layout in Tunjungan Area (Surabaya)

c. Renderings and visualisation: This sub-task would involve creating photorealistic renderings of the BRT station design in order to provide a better visual representation of the final product. 3D architecture rendering of a BRT station project should typically include the following perspectives:

- Exterior view: Showcasing the overall design and architecture of the BRT station from a distance.
- Interior view: Presenting the interiors of the station, including waiting areas, ticket counters, and platforms.
- Platform view: Highlighting the platform design, including seating arrangements, shelters, and signage.
- Street-level view: Depicting the street-level entrance to the station and surrounding area.
- Aerial view: Offering a bird's-eye perspective of the BRT station and its surroundings including the emphasize of the landmark nearby the BRT station area, providing context for its location in the city.
- Night view: Showcasing the lighting design and how the station looks in the evening.

d. Refinement and finalisation: Based on the feedback received, this sub-task would involve making any necessary refinements to the design and finalising the overall visual 3D design for the BRT station infrastructure. The finalisation could also be presented both in night-time / day time
e. Conducting site visit to the assigned area (if necessary)

Task 2 Develop Dynamic 3D Videos of the Area of BRT Station Design

Including but not limited to:

a. Conceptualisation: This phase involves determining the overall style, tone, and aesthetic of the video with a primary focus on showcasing the Bus Rapid Transit (BRT) mode as the central theme. The concept should highlight how BRT effectively addresses traffic congestion, offers high-quality passenger access and services, and delivers fast and reliable transportation solutions. This may include creating

storyboards, sketches, and other visual aids to vividly convey the BRT's impact and benefits, guiding the production of the video towards emphasizing its key features and contributions.

b. Animation: This phase involves bringing the 3D models to life through animation, which includes movements of characters/passengers, vehicles, and other elements. The animation process should not only showcase dynamic interactions but also emphasize the significance of the Bus Rapid Transit (BRT) system. This entails integrating the 3D model seamlessly with a virtual drone to capture bird's-eye view footage, offering a comprehensive perspective. Furthermore, the animation should strategically highlight the location of the BRT station. This can be achieved by placing emphasis on landmark models nearby, providing visual cues for viewers. Additionally, the animation should depict overall movement within the environment, encompassing the dynamic activity of BRT buses, passenger boarding and alighting processes, as well as the regular flow of traffic (project will deliver technical specification of bus in 2D). This comprehensive approach aims to offer a holistic and engaging representation of the BRT system in action.

For the detail location/area, please refer to table below:

City Name	**Location**
Batam	Video that covers improvement of BRT station area in Nagoya-sungai jodoh, Jalan Pembangunan, and surround Batam Centre.
Semarang	Up to 3 area/ locations Area in Jalan Padanaran, Simpang Lima, and Jalan Pemuda
Surabaya	Up to 3 area/ locations: area in jalan tunjungan, Jalan Jenderal Ahmad yani, Jalan Mayjen Sungkono

c. Lighting and Rendering: This involves adding lighting and special effects to the 3D models and animation, in order to create a visually appealing and engaging final product. This may involve using specialised software or techniques to add reflections, shadows, and other effects.
d. Editing and Post-Production: This involves editing the video to create a final product that is polished and professional, including cutting the video into scenes, adding transitions and special effects, adding background music, and creating the final video output.
e. Quality Assurance and Testing: This involves reviewing the final video to ensure that it meets all technical requirements, such as resolution, frame rate, and compatibility with target platforms. This may involve conducting testing and debugging to resolve any technical issues.
f. Conduct site visit to the assigned area (if necessary)

Task 3 Conduct Knowledge Management on the preparation stage

Including but not limited to:

a. Provide licensed 3D (up to 1 year) modelling software for the project to be able in giving input and recommendation while on the design stage
b. License for rendering software

c. Presentation and review: This would involve presenting the final design to the project and reviewing feedback to ensure that the design meets their needs and requirements.

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

Milestone	**Deadline**
Kick-off	Week 1
Inception Report (Timeline, implementation strategies)	Week 4 (First Payment upon approval of the submission)
First Draft (still image on 3D concept, story board on video, site visit post-review)	Week 12
Second Draft (3D concept in all locations, draft video for 3 cities in several areas)	Week 17
Final Report	Week 24 (Final Payment - upon approval of the submission)

Period of assignment: From 4 March 2024 until 18 October 2024

Place of Assignment: Jakarta, Batam, Semarang, and Surabaya.

Please see the attached table for a summary of the information on the deliverables.

No.	**Type**	**City**	**Amount**
1	Rendered Still Image (2D) with different perspective	Batam	18 still rendered images (see Task 1 point C for reference)
		Semarang	18 still rendered images (see Task 1 point C for reference)
		Surabaya	18 still rendered images (see Task 1 point C for reference)
2	3D Motion Video	Batam	1 Video that cover 3 area mentioned (Nagoya,Jalan Pembangunan, Batam Centre)
		Semarang	1 Video that cover 3 Area (Simpang Lima, jalan padanaran, Jalan Pemuda)
		Surabaya	1 Video that cover in 3 Area, Tunjungan Area, Jalan Mayjen Sungkono, Jalan Ahmad Yani)

Deliverables shall be in electronic format, following the procedures and format defined by GIZ, and shall be submitted in Bahasa Indonesia with the executive summary in Bahasa Indonesia and English.

3. Concept

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

Technical-methodological concept

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

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

The bidder 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 bidder 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 bidder s 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).

Project management of the contractor (1.6)

The bidder 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 contractor is responsible for selecting, preparing, and steering the experts assigned to perform the advisory tasks.
- The contractor makes available equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.

The bidder 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.

The bidder is required to describe its backstopping concept. The following services are part of the standard backstopping package, which (like ancillary personnel costs) must be factored into the fee schedules of the staff listed in the tender in accordance with Section 3.3.1 of the GIZ AVB:

- Service-delivery control
- Managing adaptations to changing conditions
- Ensuring the flow of information between the bidder and GIZ
- Assuming personnel responsibility for the contractor's experts
- Process-oriented steering for implementation of the commission
- Securing the administrative conclusion of the project

Further requirements (1.7)

The bidder needs to have the following experience:

a. Consulting firm with legal entity and licensed to operate in Indonesia
b. Tertiary qualification in engineering or design
c. At least 5 years of consultancy experience in undertaking similar works or projects
d. Project management experience and expertise suitable to a project of this scale and complexity to ensure superior coordination and consultation and high quality and timely deliverables
e. Excellent verbal and written communication skills in English and Bahasa Indonesia across the team, ensuring all correspondence and reporting are of a published standard.
f. Relevant work with attachment of portfolio

4. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, based on their CVs the range of tasks involved and the required qualifications.

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

Team Leader

<u>Tasks of Team Leader</u>

- 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
- Personnel management, as well as planning and steering assignments
- Regular reporting in accordance with deadlines.

<u>Qualifications of Team Leader</u>

- Education/training (2.1.1): University qualification (postgraduate) in Architecture, Urban Design, Project Management, Business Management, or other related fields
- Language (2.1.2): A2-level language proficiency in English, and Native speaker of Bahasa Indonesia
- General professional experience (2.1.3): 10 years of professional experience in architecture consultancy

- Specific professional experience (2.1.4): 7 years of professional experience in building or infrastructure visualisation
- Leadership/management experience (2.1.5): 5 years of management/leadership experience as a project team leader or manager in a company
- Regional experience (2.1.6): 5 years of experience in urban or infrastructure projects in Indonesia

Expert Pool 1: Architect (3 people)

Tasks of Expert Pool 1

- Overall responsibility for the advisory packages of the contractor (quality and deadlines) with coordination with the Team Leader
- Ensuring communication with GIZ, partners, and others involved in the project
- Regular reporting in accordance with deadlines
- Developing the draft of image rendering
- Producing post production image based on the specification mentioned in the ToR

Qualifications of Expert 1

- Education/training (2.5.1): University qualification (graduate degree) in Architecture, Landscape architecture, or Urban Design
- Language (2.5.2): A2-level language proficiency in English, and Native speaker of Bahasa Indonesia
- General professional experience (2.5.3): 7 years of professional experience in architecture consultancy
- Specific professional experience (2.5.4): 5 years of professional experience relared to urban planning, building design, or infrastructure visualisation
- Regional experience (2.5.5): 3 years of experience in urban or infrastructure projects in Indonesia

Expert Pool 2: 3D Modeller (3 people)

Tasks of Expert Pool 2

- Overall responsibility for the advisory packages of the contractor (quality and deadlines) with coordination with the Team Leader
- Ensuring communication with GIZ, partners, and others involved in the project
- Regular reporting in accordance with deadlines
- Developing 3d model and environment for assigned area

Qualifications of Expert 2

- Education/training (2.6.1): University qualification (graduate degree) in Architecture, landscape architecture, visual graphic, urban design, or other related fields
- Language (2.6.2): A2-level language proficiency in English, and Native speaker of Bahasa Indonesia
- General professional experience (2.6.3): 7 years of professional experience in architecture or design consultancy
- Specific professional experience (2.6.4): 5 years of experience in 3D modelling for urban area, building, or landscape
- Regional experience (2.6.5): 3 years of experience in urban or infrastructure projects in Indonesia

Expert Pool 3: Video developer (3 people)

Tasks of Expert 3

- Overall responsibility for the advisory packages of the contractor (quality and deadlines) with coordination with the Team Leader
- Ensuring communication with GIZ, partners, and others involved in the project
- Regular reporting in accordance with deadlines
- Developing the storyboard for video
- Editing the final video based on specification mentioned in the ToR

Qualifications of Expert Pool 3

- Education/training (2.7.1): University qualification (undergraduate) in Communication, media, animation, journalistic, fine arts, visual design, or other related fields
- Language (2.7.2): A2-level language proficiency in English, and Native speaker of Bahasa Indonesia
- General professional experience (2.7.3): 7 years of professional experience in design and media sector
- Specific professional experience (2.7.4): 5 years of professional experience in developing video or animation

5. 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_2 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_2 efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

If they cannot be avoided, CO_2 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 TL/key expert/short-term expert pool	1	60	60	Against timesheet
Expert Pool 1	3	24	72	against timesheet
Expert Pool 2	3	30	90	Against timesheet
Expert Pool 3	3	24	72	Against timesheet
Travel expenses	**Quantity**	**Price**	**Total**	**Comments**
Per-diem allowance in country of assignment				
• Per diem in Batam	15 (5 experts x 3 days)	400.000	6.000.000	Based on GIZ regulation
• Per diem in Semarang	15 (5 experts x 3 days)	400.000	6.000.000	Based on GIZ regulation
• Per diem in Surabaya	15 (5 experts x 3 days)	400.000	6.000.000	Based on GIZ regulation
Overnight allowance in country of assignment				
• Accommodation in Batam	10 (5 experts x 2 nights)	1.200.000	12.000.000	Maximum cost, reimbursed against the evidence
• Accommodation in Semarang	10 (5 experts x 2 nights)	1.200.000	12.000.000	Maximum cost, reimbursed against the evidence
• Accommodation in Surabaya	10 (5 experts x 2 nights)	1.200.000	12.000.000	Maximum cost, reimbursed against the evidence.

Transport	**Quantity**	**Price**	**Total**	**Comments**
Domestic flights				Flights within the country of assignment during service delivery
• Jakarta – Batam (return)	5 experts	3.200.000	16.000.000	Maximum cost, reimbursed against the evidence
• Jakarta – Semarang (return)	5 experts	2.500.000	12.500.000	Maximum cost, reimbursed against the evidence
• Jakarta – Surabaya (return)	5 experts	2.800.000	14.000.000	Maximum cost, reimbursed against the evidence
Travel expenses (train, car)				
• Car rental in Batam	3 (1 unit x 3 days)	1.300.000	3.900.000	Maximum cost, reimbursed against the evidence
• Car rental in Semarang	3 (1 unit x 3 days)	1.300.000	3.900.000	Maximum cost, reimbursed against the evidence
• Car rental in Surabaya	3 (1 unit x 3 days)	1.300.000	3.900.000	Maximum cost, reimbursed against the evidence
• Airport transfer	30 (5 people x 6 times)	300.000	9.000.000	Maximum cost, reimbursed against the evidence
Other costs	**Number**	**Price**	**Total**	**Comments**
Flexible remuneration	1	80.000.000	80.000.000	A budget of IDR 80.000.000 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.
Other costs				The budget contains the following costs.
• 3D software license	1	10.000.000	10.000.000	Maximum cost, reimbursed against evidence
• Rendering software license	1	10.000.000	10.000.000	Maximum cost, reimbursed against evidence

• Drone rental	3 (1 drone x 3 locations)	20.000.000	60.000.000	Maximum cost, reimbursed against evidence

6. Requirements on the format of the bid

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 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.

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.

7. Organisational Matters

Payment modalities: Payment of the assignment will be made in 3 terms. The final payment will be made after the completion of the assignment, considering a satisfactory result, evidence and timesheet provided by the contractor.

Failure to complete work: GIZ reserves the right to cancel the remainder of the contract if the deliverable output does not meet ToR requirements and standards of quality e.g. if Task 1 is completed unsatisfactorily, GIZ is only liable to pay for Task 1 and can cancel the contract for the remaining Tasks.