



METEOROLOGICAL, CLIMATOLOGICAL, AND GEOPHYSICAL AGENCY

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REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES – FIRM SELECTION)

BADAN METEOROLOGI, KLIMATOLOGI DAN GEOFISIKA
THE METEOROLOGY, CLIMATOLOGY AND GEOPHYSICS AGENCY
INDONESIA DISASTER RESILIENCE INITIATIVE PROJECT (IDRIP)

Loan No./Credit No./ Grant No.: 89800-ID

Assignment Title: Procurement of Construction Management Consultant InaTEWS Operational System Development (Building) Jakarta-Bali
Reference No.: ID-BMKG-287147-CS-CQS

The Government of Indonesia has received financing in the amount USD160 million from the World Bank toward the cost of the Indonesia Disaster Resilience Initiative Project, and intends to apply part of the proceeds for Firm consulting services namely Procurement of Construction Management Consultant InaTEWS Operational System Development (Building) Jakarta-Bali.

The scope of work for Construction Management Consultancy Services of New Building Construction of BMKG in Jakarta and Bali under the supervision of the General Affair & Human Resources Bureau as follows:

1. The purpose of Construction Management Consultancy Services is to provide a detailed description of the scope of work, hence the Construction Management consultant are able to carry out his duties and functions properly, including holding regular coordination meetings and periodic supervision as well as coordination for the fulfillment of licensing registration documents as well as Functional Eligibility Certificates and other licensing requirements from environmental permits in accordance with the Regulation of the Minister of Public Works for Public Housing Number 22/PRT/M/2018 concerning the Construction of State Buildings and other recent regulations such as Government Regulation Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings.

2. Scope of Works

The scope of work includes, but is not limited to, the following duties:

- a. Preparation Stage
- b. Demolition Stage
- c. Planning Stage
- d. Tender Stage
- e. Implementation Stage

3. Requirements for Consultants

A. Company Qualifications

- 1) Participant is a business entity, has administrative documents and work experience that will be submitted by the procurement service unit in the procurement process.
- 2) Not enlisted in the Black List, their participation does not cause a conflict of interest of the parties concerned, is not under court supervision, is not bankrupt, does not have its business activities terminated, who acts for and on behalf of the Business Entity is not currently undergoing criminal sanctions; and/or the administrator/employee does not have the status of a State Civil Apparatus, unless the person concerned takes leave outside the State's responsibility;
- 3) All experts involved in this activity must have good knowledge and experience in the design of earthquake-resistant structures, smart buildings and green buildings and have knowledge in building criteria for servers / high performance computer.
- 4) Has the ability to carry out job with a value of over IDR 2,500,000,000.- (Two And A Half Billion Rupiah) and in the last 5 (five) years have similar experience (construction management consultant) for buildings with over IDR 2,500,000,000.- (Two And A Half Billion Rupiah) value;
- 5) At least in the last 8 (eight) years have similar experience (construction management consultant) for buildings that have data room / data center / server room / high performance computer / computing room / command center;
- 6) Preferably has experience in similar work that is financed other than state budget or pure rupiah (loans / grants / other schemes);
- 7) Attach the latest financial data with minimum value of 30 (thirty) percent of budget plan.

B. Requirements for Consultants

The requirements for consultants is divided into three, which is experts, supervisors and support staff, where the educational background adjusts to the needs and the level of expertise is also adjusted to the minimum cumulative experience required as follows:

NO	DESCRIPTION	QTY
A	Experts	
1	Project Manager (S2 Construction Management)	1
2	Architect (S1 Architectural Engineer)	1
3	Structure/Construction Engineer (S1 Civil Engineer)	1
4	Mechanical Engineer (S1 Mechanical Eng.)	1
5	Elektrical Engineer (S1 Elektrical Eng.)	1
6	Interior Designer (S1 Interior Design Eng.)	1
7	Cost Estimator (S1 Architectural/Civil Engineer)	1
8	Environmental Specialist (S1 Environmental Engineering)	1
9	Tenaga Ahli K3 Konstruksi 1 (S1 Teknik Sipil)	1
10	IT Expert (S1 Elektrical Eng.)	1
B	Supervisors	
1	Site Manager/Inspector (S1 Civil Engineering)	2
2	Architectural Inspector (S1 Architectural Engineering)	2
3	Structure Inspector (S1 Civil Engineering)	2
4	Mechanical/Electrical Inspector (S1 Mechanical Eng./S1 Elektrical Eng.)	2
5	Interior Inspector (S1 Interior Design)	1
6	Surveyor	3
C	Personal Supports	
1	CAD Drafter	2
2	Computer Operator (D3)	2
3	Administrator (D3)	2
4	Driver	2

4. Time Allocation for Activities

Based on the Regulation of the Public Works and Housing Minister Number 22/PRT/M/2018 concerning the Construction of State Buildings, the following is the work of the Constitutional Court consultant to be carried out along with the estimated time allocation:

- a. With the Planning consultant, for 5 (five) months reviewing the technical plan until the planning and physical tender documents are submitted;
- b. Assist the job providers and users in the physical tender process for 3 (three) months;
- c. Full supervision to the physical implementation for 10 (ten) months in Jakarta and 8 (eight) months in Bali;
- d. Periodic supervision during the maintenance period for at least 6 (six) months.

The attention of interested Consulting Firm is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" July 2016, revised November 2017, August 2018 and November 2020 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

The Consulting Firm will be selected in accordance with the Consultant Qualification Selection (CQS) method described in the Procurement Regulations.

Further information can be obtained at the address below during office hours at 09.00 to 16.00 hours.

Expressions of interest (include supporting documents) must be delivered in a written form to the address below (by e-mail) by August 11st, 2022 at the latest.

Badan Meteorologi, Klimatologi dan Geofisika-BMKG

The Meteorology, Climatology and Geophysics Agency

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**TERM OF REFERENCE (TOR)
AND
BUDGET PLAN**

**PROCUREMENT OF CONSTRUCTION MANAGEMENT
CONSULTANT SERVICES
InaTEWS OPERATIONAL SYSTEM DEVELOPMENT (BUILDING)
Jakarta - Bali**

Fiscal Year 2022 - 2024



**METEOROLOGY, CLIMATOLOGY AND GEOPHYSICS AGENCY
DEPUTY OF GEOPHYSICS**

TERM OF REFERENCES (TOR)

Ministry/Institutions	:	Meteorology Climatology and Geophysics Agency
Echelon 1 Unit	:	Deputy for Geophysics
Program	:	Meteorology, Climatology and Geophysics Program
Program Target	:	Quality improvement of geophysical information
Program Target Indicator	:	1. Geophysical Information Accuracy 2. Average User Satisfaction Index of Geophysical Information Services (Likert Scale)
Echelon 2 Unit	:	Earthquake and Tsunami Center
Activity	:	BMKG Earthquake and Tsunami Management
Target Activity	:	Quality improvement of Earthquake Information and Tsunami Early Warning Services
Activity Performance Indicators	:	Speed of Earthquake Information Processing Analysis Speed of Processing Analysis of Tsunami Early Warning Information 1. Number of Locations for Earthquake and Tsunami Monitoring System Equipment able to Provide Data Availability for Earthquake Information and Tsunami Early Warning 2. Speed of Submission of Earthquake

Information to Stakeholders

3. Speed of Delivery of Earthquake Tsunami Early Warning Information to Stakeholders
4. Percentage of Completeness of Tsunami Early Warning System due to Tectonic Earthquake Disaster
5. Satisfaction Index of Earthquake and Tsunami Early Warning Data and Information Services (Likert Scale)

Output Details Classification	:	Facilities for Agriculture, Forestry, and Environment
Output Details	:	Earthquake and Tsunami Monitoring Equipment through the Indonesia Disaster Resilience Initiatives Project (IDRIP)
Component	:	Development and Strengthening of Earthquake and Tsunami Monitoring Systems and Equipment through the Indonesia Disaster Resilience Initiatives Project (IDRIP)

INTRODUCTION

1. BACKGROUND

The Republic of Indonesia is a land of fire rings located above the confluence of three tectonic plates, the Indo-Australian Plate, the Pacific Plate, and the Eurasian Plate. Therefore, Indonesia is an area that is very vulnerable to earthquake and tsunami disasters and also the various impacts afterward. Indonesia is also one of the regions which have the highest frequency of earthquakes in the world.

The Meteorology, Climatology, and Geophysics Agency is a Non-Ministerial Government Institution that is under and is responsible reports directly to the President. BMKG has government duties in the fields of Meteorology, Climatology, and Geophysics, where the Deputy for Geophysics is an echelon I work unit in charge of formulating, implementing, and controlling the implementation of technical policies, as well as carrying out data and information services in the fields of Geophysics. One of the functions of the Deputy for Geophysics is data and information services as well as the delivery of information and early warnings to relevant agencies and parties as well as the public regarding the conditions, events, and/or potential for earthquakes and tsunamis.

To accelerate the BMKG's performance services for earthquake and tsunami information, BMKG has collaborated with the National Disaster Management Agency to implement the Indonesia Disaster Resilience Initiative Project (IDRIP), where BMKG acts as the supporting or implementing agency and Indonesian National Board for Disaster Management itself as the leader of this project or executing agency.

This IDRIP activity is funded by the Foreign Loans, precisely from the World Bank with a value of US\$85 million out of a total US\$160 million until 2024, which is used by the BMKG to strengthen and add networks for operational equipment, supporting equipment and also increase the capacity of human resources as well as to conduct studies for managing Geophysical operations, where IDRIP activity is included in the 2020-2024 RPJMN Major Project.

One of the components in supporting operational equipment is to prepare a better workplace, facilities, and infrastructure than before for technical operations and also the secretariat of the Deputy for Geophysics. Through the InaTEWS OPERATIONAL SYSTEM DEVELOPMENT (BUILDING) activity, the IDRIP activity will carry out the construction of 2 Geophysical Operational Buildings located at the BMKG Jakarta head office and the MKG Regional III Office Bali.

This IDRIP activity will add new monitoring, processing, and dissemination equipment system since the existing operational space infrastructure will not be able to accommodate all of them therefore a new, larger operational room is needed and able to specifically facilitate equipment that will support the existing and new system, therefore the provision of such facilities and infrastructure will automatically maintain speed in activity performance indicators (numbers 1, 2, 4, and 5) and will increase the accuracy of data and information as well as increase the Satisfaction Index (indicator number 7).

The construction implementation in Bali is a step forward for BMKG in maintaining operational continuity where a place outside of Java will be built as a back-up for the Central Jakarta operations, both backing up data for monitoring, processing, dissemination, and other operational requirements therefore if paralysis occurs in the Center

Jakarta operations, operations in Bali will automatically take over because InaTEWS operations are not allowed to have a power failure, and the construction in Bali represents a reinforcement of the Regional Earthquake Center (PGR) III.

The construction in Jakarta, besides providing an operational infrastructure better than before, is also an effort to provide work infrastructure that is better, more appropriate, benefit accurate, and better functions compared to the existing building currently being used where this development will later accommodate operational Warning System requirements which have been aligned with the latest technological developments in operational equipment held from IDRIP activities and other operational equipment whose sustainability has been calculated with projected requirements for the next 20 years.

In this IDRIP activity, generally, BMKG is reinforced with earthquake monitoring system equipment in the form of a Seismograph, Accelerograph, and Intensitymeter which is useful for recording earthquake waves then processing system equipment to process data recorded by monitoring system equipment to produce earthquake information and tsunami early warnings as well as dissemination equipment that is useful for sending earthquake information and tsunami early warnings to stakeholders and the community as well as communication network system equipment and databases where these equipment systems can no longer be accommodated in the current location, thus requiring a larger operational space.

To achieve a world-class BMKG vision, it is necessary to increase more representative space with world-class levels such as the Pacific Tsunami Warning Center (PTWC), Japan Meteorological Agency (JMA),

United States Geological Survey (USGS), and The China Earthquake Administration (CEA).

While in terms of operational support, there will also be rooms for leaders and their staff in this building, such as the Deputy room, the Head of the Center room up to the secretariat staff as well as technical functionalities staff which of course the placement of leader in 1 activity location will have a significant impact in supporting the target of this activity is to increase the quality of earthquake information and tsunami early warning services whereas the placement of leaders in the same location will also improve the quality of operational planning, operational observations, processing quality, dissemination, and of course quality service to the community, which in general means that the success of an operational sustainability project is not able to be separated from quality leadership decisions.

Based on the things mentioned above, it is ensured that the construction in the 2 locations is interconnected, has the same characteristics, is a unit of the main functions of the buildings, classified as 2 buildings that are typical in terms of materials and criteria for space requirements.

As a general description of the Jakarta building requirements, the current existing building is a 1998 BMN acquisition building with construction materials generally made of steel (H-beam), and due to the location of the office is in the northern area of Jakarta (close to the sea, drawn in a straight line ± 3.5 Km), there are several points on the steel construction that are corroded, and also the condition of the ground floor level is at the lowest floor level of the building in the Jakarta BMKG office area, therefore the risk of puddles from heavy rain encourages the BMKG to carry out a more feasible construction of the new operational buildings.

According to the BMN data, the existing building has an area of 700m² per floor with a total of 5 layers of floors and a net height from floor to ceiling of less than 2.5m. This building was built in 1998, therefore it is quite old and it is considered time to make adjustments to the operational workplace and mainly to show the Indonesian people and the international community that the BMKG operational building has also entered the world-class BMKG stage, in line with the BMKG Vision in the 2020-2024 Strategic Plan, such as the World Class BMKG with a Socio-entrepreneur Spirit to achieve a developed Indonesia that is Sovereign, Independent, and strong cooperation character.

2. OBJECTIVES

The planned construct activities in Jakarta will build operational buildings as infrastructure facilities for the Indonesia Tsunami Early Warning System (InaTEWS) and for the construction in Bali as a backup for InaTEWS itself and operational updates for the Regional III Bali Earthquake Center, while for the exact requirements of the area and height of the building will continue to refer to the Government Regulation Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings through coordination with the Ministry of PUPR.

Therefore the purpose of this TOR is to be used as material for tender documents for the procurement of Construction Management Consultant services for the construction work of InaTEWS OPERATIONAL SYSTEM DEVELOPMENT (BUILDING) which includes the stages of preparation, planning, construction supervision, and maintenance. In addition, if during the demolition period a

Construction Management consultant has been obtained, the consultant will also assist the activity manager in carrying out the existing demolition to review the demolition and post-disassembly processes.

The purpose of the TOR is to provide a detailed description of the scope of work hence the Planning consultant is able to carry out his duties and functions properly, including holding regular coordination meetings and periodic supervision as well as coordination for the fulfillment of licensing registration documents as well as Functional Eligibility Certificates and other licensing requirements from environmental permits under the Regulation of the Minister of Public Works for Public Housing Number 22/PRT/M/2018 concerning the Construction of State Buildings and other recent regulations such as Government Regulation Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings to facilitate.

The purpose of implementing this Construction Management consultant is for the construction of the state buildings carried out from this IDRIP activity be able to run well, per statutory regulations, while still taking into account the management of environmental and social risks and impacts under the ESMF guidelines and of course can be completed according to the target and the available time while prioritizing the value of quality, economy, operational feasibility, and zero accident to produce buildings with the concept of smart buildings, green buildings, healthy and hygienic buildings and safe buildings.

3. TARGET

The target of this activity still refers to the BMKG Strategic Plan 2020-2024 document stated in the Work Plan, which is the Improvement of Quality Earthquake Information and Tsunami Early Warning Services with financing from foreign loans from the World Bank.

4. ACTIVITY LOCATION

NO	LOCATION	ADDRESS	DESCRIPTION
1	Jakarta	Kantor BMKG Pusat Jakarta, Jl. Angkasa I no.2, Kemayoran Jakarta Pusat	<ul style="list-style-type: none">• BMKG Head Office• Total area ± 3 ha• Owned by BMKG
2	Bali	Kantor Balai Besar BMKG Wilayah III Denpasar, Jl. Raya Tuban, Kuta	<ul style="list-style-type: none">• BMKG Regional III Office• Total area ± 6.000m²• Owned by BMKG

5. SOURCE OF FUNDING

The funding source for this consulting service activity is financed by the World Bank's Foreign Loans and the overall work value of InaTEWS OPERATIONAL SYSTEM DEVELOPMENT (BUILDING) for Jakarta and Bali based on the IDRIP planning document is IDR 235,000,000,000 (Two Hundred Thirty-Five Billion Rupiah).

From this value, it is estimated that the planning consultant's requirements are based on real necessities consisting of direct personnel costs and non-personnel direct costs, whereas direct personnel costs require experts, as well as supervisory staff, and non-personnel direct costs are for supporting necessities such as

stationery, communication, reporting, value engineering, and etc with the Budget Plan according to the attachment to this TOR.

The billing rate used in the assignment of this Construction Management consultant under the Decree of the Minister of Public Works and Public Housing Number 897/KPTS/M/2017 concerning the Minimum Remuneration for Construction Workers at the Expert Level for Construction Consultancy Services and following with the Minimum Standard Guidelines for the Year 2021 from INKINDO, as attached in the Budget Plan.

6. NAME AND ORGANIZATION OF COMMITTING OFFICER

- A. Name of Commitment Making Officer: InaTEWS Operational System Development (Building)
- B. Working Unit: Earthquake and Tsunami Center
- C. Project Implementation Unit (PIU): General Affair and HR Bureau

This activity report will be reported by the consultant to the PPK and through PIU it will be reported to the Project Director.

SUPPORTING DATA

7. BASIC DATA

Based on the PUPR Ministerial Regulation No. 22/PRT/M/2018 that in general the duties of a Construction Management Consultant are divided into several stages as follows:

A. Preparation Stage

- 1) Studying and following up on the Needs Assessment of Operational Buildings in Jakarta and Bali as well as the

Environmental and Social Risk Screening Documents for Building Construction that already exist as part of the documents for planning.

2) Following up on the initial description of the concept design contained in the Needs Assessment Document for the Construction of Operational Buildings in Jakarta and Bali as well as the Environmental and Social Risk Screening Document for Building Construction which is then processed into a planning document which contains:

- a) Data, information and analysis requirements, which includes organizational development, and operational needs of the building to be built;
- b) Site analysis – includes geotechnical, topographical, initial hydrological fieldwork, test investigations, and analyses are required to determine the depth and type of foundation; as well as access and movement studies, traffic analysis, existing structures/infrastructure, rainwater/drainage, etc. to help determine the optimal building orientation and overall site/building design. Initial analysis of potential environmental and social risks and impacts. The process of preparing the concept design, especially for the demolition of old buildings and construction of new buildings, must meet the medium risk category according to the requirements for activities which can be funded by IDRIP. The initial risk analysis refers to the guidelines in the IDRIP project ESMF document and includes OHS (Occupational Health and Safety) risks for construction workers and the community, and the risk of

gender-based violence due to labor influx (entry of construction workers to the construction site);

- c) "Clean and clear" status documentation of the land to be built is accordingly to the ESMF;
 - d) rationale and design considerations, including agreed of a set on design principles and criteria with BMKG for the proposed building (including structural performance, green building design, universal access, resilience standards, etc.);
 - e) spatial program and spatial management relations;
 - f) overall financing plan;
 - g) schematic design or sketch idea, including for IT equipment, etc.;
 - h) allocation of time for the Jakarta and Bali projects implementation;
- 3) Following up on the initial timeline concept contained in the Operational Building Development Needs Study Document in Jakarta and Bali as well as the Environmental and Social Risk Screening Document for Building Construction which has referred to the IDRIP project ESMF document which is for mitigating potential risks in terms of K3 (occupational health & safety), public health including the KBG, and other risks deemed relevant to those already in the document, are used as the basis for the risk mitigation components contained in the Terms of Reference (TOR) and Procurement documents (both for demolition and construction).
- 4) Assist activity managers in carrying out construction planning service providers procurement, including preparing Terms of Reference (TOR), providing advice, timing, and procurement

strategies, as well as assistance in evaluating the procurement process.

- 5) Assist the Activity Manager in preparing and compiling the implementation program for the construction planning service providers selection.
- 6) Assist the procurement of goods and service unit, the working group, or procurement officials in disseminating the construction planning service provider's selection announcement, either through bulletin boards, print media, or electronic media.
- 7) Assist the procurement of goods and service unit, the working group or the procurement official to pre-qualifying the candidates for construction planning service provider's selection.
- 8) Help provide job descriptions explanation at work meetings.
- 9) Assist the procurement of goods and service unit, the working group or procurement officials in compiling the Self Calculation Price or Owner's Estimate (OE) for the work plan.
- 10) Assist in the opening and evaluation of technical proposals and also costs of incoming bids.
- 11) Assist in preparing a draft of a construction planning work agreement.
- 12) Assist the activity manager in preparing a construction work plan agreement.

B. Demolition Stage

If at the demolition stage a Construction Management consultant is appointed, the consultant will assist the activity manager to carry out a review of the demolition and post demolition process while

still referring to the PUPR Ministerial Regulation NO.18/2021 which includes:

- 1) Assist the activity manager to conduct an initial demolition review.
- 2) Assist in preparing the Demolition Technical Plan.
- 3) Provide input to the manager regarding the demolition implementation schedule, procurement of demolition service providers, contract formats, and demolition implementation strategies so that the overall project schedule is on time and under the allocation of available funds.
- 4) Assist activity managers to obtain approval to carry out demolition including the abolition of state property.
- 5) Assist in supervising demolition activities.

C. Planning Stage

- 1) Evaluating the implementation program of planned activities made by the construction planning service provider, which includes the provision program and use of resources, strategies, and stages of tender documents preparation.
- 2) Provide consultation on planning activities, which include research and examination of planning results from the point of view of resource and cost efficiency, as well as the possibility of construction implementation.
- 3) Controlling the planning program, through program evaluation activities on planning results, environmental changes, technical and administrative deviations from problems that arise, as well as proposing program corrections.
- 4) Coordinate with parties involved at the planning stage, including identified occupants/users of the building to ensure

interior design that suits the purpose and workplace planning is developed which will help improve geophysical early warning services at BMKG (for example, developing spatial planning interior for the proposed building function in consultation with the building occupants to determine optimal spatial/room relationships and synergies).

- 5) Prepare monthly reports on construction management consulting activities at the planning stage, formulate status evaluations and technical corrections in case of deviations.
- 6) Examine the completeness and quality of planning documents, including ensuring the conformity of the plan with earthquake and flood resistant building standards, universal accessibility, green buildings (efficient in the use of energy and construction materials), and other applicable standards.
- 7) Make a design review report at each stage of the technical plan preparation as a reference for service user approval.
- 8) Examining tender documents, compiling an auction implementation program with construction planning service providers, and participating in providing job descriptions at the time of the auction, as well as assisting the activities of the procurement of goods and service unit, the work group or procurement official.
- 9) Prepare reports and minutes for the work progress and work plan installment payments.
- 10) Holding and leading planning coordination meetings, compiling reports on the results of coordination meetings, and making progress reports on construction management work.

D. Tender Stage

- 1) Assist activity managers in preparing and compiling programs for the implementation of physical construction work tender.
- 2) Assist the procurement working group (Pokja Pemilihan IDRIP), or procurement officials in disseminating tender announcements, either through bulletin boards, print media, or electronic media.
- 3) Assist the procurement of goods and services unit, the working group or the procurement official to pre-qualify prospective bidders (if the tender goes through prequalification).
- 4) Assist in providing job descriptions explanation at pre-bid meetings.
- 5) Assist the procurement working group or procurement officials in compiling the Self Calculation Price or Owner's Estimate (OE) for the physical construction work.
- 6) Assist in the opening and evaluation of incoming bids.
- 7) Assist in preparing a draft agreement for the physical construction work.
- 8) Prepare reports on tender activities.

E. Implementation Stage

- 1) Evaluating the physical implementation activities program prepared by the construction service provider, which includes programs for achieving physical targets, providing and using resources in the form of: manpower, equipment and supplies, building materials, information, funds, Quality Assurance or Quality Control program, and occupational health and safety (K3) programs.

- 2) To take control of the physical construction implementation program, which includes resource control programs, cost control, time control, physical target control (quality and quantity) of construction results, job change control, administrative order control, occupational health and safety control. Assist activity managers in preparing, and compiling programs for the implementation of physical construction work tenders.
- 3) Conduct program evaluations on technical and managerial deviations that arise, propose program corrections and actions to intervene, as well as make technical corrections if deviations occur.
- 4) Coordinate between parties involved in the implementation of physical construction.
- 5) Carry out supervisory activities consisting of:
 - i. Examine and study documents for construction implementation which will be used as the basis for supervising work in the field.
 - ii. Supervise the use of materials, equipment and implementation methods, as well as monitor the timeliness and cost of construction work.
 - iii. Supervise the implementation of construction work in terms of quality, quantity, and rate of volume achievement or physical realization.
 - iv. Carry out on-site health and safety monitoring.
 - v. Collect data and information in the field to solve problems that occur during construction work.
 - vi. Organizing regular field meetings, making weekly and monthly reports on construction management work, with

input on the results of field meetings, daily, weekly and monthly reports on physical construction work made by construction service providers.

- vii. Prepare reports and minutes (including photo documentation) in the context of progress of work and payment of installments for construction work.
- viii. Examining the shop drawings submitted by the construction service provider.
- ix. Certification of work quality conformity with specifications and drawings, including review of working drawings submitted by contractors, providing instructions to contractors, additional details and clarification of contract documents if required.
- x. Examining the drawings that are in accordance with the implementation in the field (As Built Drawing) before the handover I.
- xi. Compile a list of defects or damage before handover I, and supervise repairs during the maintenance period.
- xii. With the construction planning service providers, prepare instructions for the maintenance and use of buildings.
- xiii. Prepare minutes of work progress approval, first handover, minutes of maintenance and second handover of construction work, as completeness for payment of construction work installments.
- xiv. Conduct inspections and declare the function of the building constructed in by the IMB.
- xv. Assist activity managers in compiling Registration Documents.

- xvi. Assist the activity manager in preparing the completeness of the Function Feasibility Certificate (*Sertifikat Laik Fungsi - SLH*) document from the local government.
- 6) Prepare a final report on construction management work.

In obtaining this Construction Management consultant, using an open tender contractual, and considering the timeframe available, in general the procurement of a Construction Management consultant will be parallel with \pm 1 month difference with the procurement of planning consultant services, so that later when the Constitutional Court service provider has been appointed, the minimum estimate will be no later than 1 (one) months later, the Construction Management consultant will carry out his work with assistance to the planning process and provide technical input to PPK and PRC, therefore not all scope of work is carried out by this Construction Management consultant, there are some adjustments so that the task of Construction Management consultants in general in this project are:

- i. Review of technical plans and handover of planning documents;
- ii. Auction of physical contractor services;
- iii. Technical supervision of the physical construction implementation up to the first handover (Provisional Hand Over);
- iv. Technical supervision of the physical construction implementation up to the first handover (Provisional Hand Over);

All of these processes are contained in reports starting from weekly, monthly and also final reports whose financing for making reports has been listed in the future Budget Plan contract.

For the maintenance phase, under Article 54 of the Public Works and Housing Minister Number 22/PRT/M/2018, is planned for a maximum of 12 months from the first handover of construction work.

8. DATA AND SUPPORTING FACILITIES

Data and facilities provided by the Committing Officer which can be used and must be maintained by the service provider:

A. Reports and Data

- 1) Technical data on existing and current buildings in the land area of the BMKG Head office.
- 2) Data on the number of employees or building users as well as the organizational structure and hierarchy of positions.
- 3) Other data needs related to room criteria, mechanical electrical requirements criteria, and other technical requirements related to the room.

B. Accommodation and Office Space (if any)

There is no accommodation and special room provided for the Construction Management consultant to carry out his work at BMKG, but there is a possibility that it would be possible to be provided based on temporary conditions and needs with the approval of the Head of General Affair & the HR Bureau for those in Jakarta and the approval of the Head of the MKG Region III Bali Center for those who in Bali.

The service provider must provide and maintain all facilities and equipment used for the smooth work implementation but not limited to the following:

- 1) Cost of communication, reporting, stationery, coordination meeting.
- 2) Accommodation and transportation costs for survey and visitation Jakarta – Bali (Round trip).
- 3) Rent Computers and Servers with the network (if required).
- 4) Rent four-wheeled vehicles for operations.
- 5) Rent two-wheeled vehicles for operations.
- 6) Rent a full furnished office.
- 7) Rent a Color A-3 Deskjet Printer
- 8) Rent an A-4 Deskjet Printer
- 9) Rent documentation equipment
- 10) Rent a photocopy machine

9. CALCULATION OF CONSTRUCTION MANAGEMENT COSTS

Construction Management Fee refers to Government Regulation of the Republic of Indonesia Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings in table IV.18. Percentage of State Building Construction Cost Components Simple Classification and calculated based on the need for personnel and non-personnel amounting to IDR 5,973,921,893.- (Five Billion Nine Hundred Seventy Three Million Nine Hundred Twenty One Thousand Eight Hundred Ninety Three Rupiah).

The billing rate used in the assignment of this Construction Management consultant is under the Decree of the Ministerial of Public Works and Housing Number 524/KPTS/M/2022 concerning the Minimum Remuneration for Construction Workers at the Expert Level for Construction Consultancy Services and also following the Minimum Standard Guidelines 2021 from INKINDO, as attached in the Budget Plan.

10. TECHNICAL STANDARD

A. Company Qualifications

- 1) Participant is a business entity, has administrative documents and work experience that will be submitted by the procurement service unit in the procurement process.
- 2) Not enlisted in the Black List, their participation does not cause a conflict of interest of the parties concerned, is not under court supervision, is not bankrupt, does not have its business activities terminated, who acts for and on behalf of the Business Entity is not currently undergoing criminal sanctions; and/or the administrator/employee does not have the status of a State Civil Apparatus, unless the person concerned takes leave outside the State's responsibility;
- 3) All experts involved in this activity must have good knowledge and experience in the design of earthquake-resistant structures, smart buildings and green buildings and have knowledge in building criteria for servers / high performance computer.
- 4) Has the ability to carry out job with a value of over IDR 2,500,000,000.- (Two And A Half Billion Rupiah) and in the last 5 (five) years have similar experience (construction management consultant) for buildings with over IDR 2,500,000,000.- (Two And A Half Billion Rupiah) value;
- 5) At least in the last 8 (eight) years have similar experience (construction management consultant) for buildings that have data room / data center / server room / high performance computer / computing room / command center;

- 6) Preferably has experience in similar work that is financed other than state budget or pure rupiah (loans / grants / other schemes);
- 7) Attach the latest financial data with minimum value of 30 (thirty) percent of budget plan.

B. Requirements for Consultants

The requirements for consultants is divided into three, which is experts, supervisors and support staff, where the educational background adjusts to the needs and the level of expertise is also adjusted to the minimum cumulative experience required as follows:

NO	DESCRIPTION	QUALIFICATION	MINIMUM EXPERIENCE (YEARS)	TOTAL
A	Experts			
1	Project Manager (S2 Construction Management)	Senior Expert (SKA Ahli Manajemen Konstruksi Utama)	5	1
2	Architect (S1 Architectural Engineer)	Associate Architect (SKA Ahli Arsitek Madya)	5	1
3	Structure/Construction Engineer (S1 Civil Engineer)	Associate Civil Engineer (SKA Ahli Sipil Madya)	5	1
4	Mechanical Engineer (S1 Mechanical Eng.)	Associate In-house Transportation (SKA Ahli Transportasi Dalam Gedung Madya) and Associate Plumbing and Mechanic Pump (SKA Teknik Plambing dan Pompa Mekanik Madya)	5	1
5	Electrical Engineer (S1 Electrical Eng.)	Associate Electrical Expert (SKA Ahli Teknik Tenaga Listrik Madya)	5	1
6	Interior Designer (S1 Interior Design Eng.)	Junior Expert of Interior Design (SKA Ahli Desain Interior Muda)	3	1
7	Cost Estimator (S1 Architectural/Civil Engineer)	Junior Expert (SKA Ahli Muda)	3	1
8	Environmental Specialist (S1 Environmental Engineering)	Env. Junior Expert (SKA Ahli Teknik Lingkungan Muda)	3	1

NO	DESCRIPTION	QUALIFICATION	MINIMUM EXPERIENCE (YEARS)	TOTAL
9	Tenaga Ahli K3 Konstruksi 1 (S1 Civil Engineering)	HSE Junior Expert (SKA Ahli K3 Muda)	3	1
10	IT Expert (S1 Electrical Eng.)	Hold a certificate ATD, AOS, CTIA, STDC dan DCDA	3	1
B Supervisor				
1	Site Manager/Inspector (S1 Civil Engineering)	Associate Construction Expert (SKA Ahli Manajemen Konstruksi Madya atau Ahli Bangunan Gedung Madya)	3	2
2	Architectural Inspector (S1 Architectural Engineering)	Junior Architect (SKA Ahli Arsitek Muda)	3	2
3	Structure Inspector (S1 Civil Engineering)	Junior Expert of Building Development (SKA Ahli Bangunan Gedung Muda)	3	2
4	Mechanical/Electrical Inspector (S1 Mechanical Eng./S1 Elektrical Eng.)	Junior Expert Mechanical (SKA Ahli Mekanikal Muda)	3	2
5	Interior Inspector (S1 Interior Design)	Junior Architect or Junior Interior Designer (SKA Arsitek Muda atau Desain Interior)	3	1
6	Surveyor	-	5	3
C Personnel Support				
1	CAD Drafter	-	-	2
2	Computer Operator (D3)	-	-	2
3	Administrator (D3)	-	-	2
4	Driver	-	-	2

C. Time Allocation for Activities

The Construction Management Consultant must attach a schedule and estimated timeframe for the work execution until the completion of the physical work using the "S" curve with a special program containing information including:

1. Able to compile project information with activity code;
2. Develop work methods;
3. Carry out actual monitoring of activities through the S. curve

Based on the Regulation of the Public Works and Housing Minister Number 22/PRT/M/2018 concerning the Construction of State Buildings, the following is the work of the Constitutional Court consultant to be carried out along with the estimated time allocation:

1. With the Planning consultant, for 5 (five) months reviewing the technical plan until the planning and physical tender documents are submitted;
2. Assist the job providers and users in the physical tender process for 3 (three) months;
3. Full supervision to the physical implementation for 10 (ten) months in Jakarta and 8 (eight) months in Bali;
4. Periodic supervision during the maintenance period for at least 6 (six) months.

TIMELINE

No	Activity	Time (Months)	2022				2023			2024	Information Details
			2-4	5	6-10	11-12	1	2-11	12	1-5	
1	Tender for Construction Management Consultant	3									
2	Tender for Planning Consultant	3									Starting no later than 2 weeks after the tender of the Construction Management
3	Technical review & DED	5									
4	Tender of Construction	3									
5	Building construction in Jakarta	10									
6	Building construction in Bali	8									Implemented simultaneously with Jakarta but the implementation period is 8 months
7	Periodic monitoring - Jakarta	6									
8	Periodic monitoring – Bali	6									

11. PREVIOUS STUDIES

In the process of carrying out this work, there are not many previous studies which can be used as lessons. There are several building construction works within the scope of BMKG, but there is only 1 activity that is roughly in line or similar, namely during the construction of Building A which has up to 13 floors and the construction is carried out for 2 (two) years.

From this previous experience, it is hoped that this will be a lesson in the project implementation. Including in managing supporting documents such as environmental documents.

12. LEGAL REFERENCE

- 1) Law Number 1 of 2017 concerning Construction Services;
- 2) Law Number 31 of 2009 concerning Meteorology, Climatology, and Geophysics;
- 3) Government Regulation Number 46 of 2012 concerning Observation and Management of Meteorological, Climatological and Geophysical Data (Republic of Indonesia's State Document of 2012 Number 139, Supplement to the Republic of Indonesia's State Document Number 5304);
- 4) Republic of Indonesia's Government Regulation Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings;
- 5) Presidential Regulation Number 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018 concerning Procurement of Government Goods and Services;
- 6) The Republic of Indonesia's President Regulation Number 61 of 2008 concerning the Meteorology, Climatology and Geophysics Agency;
- 7) Regulation of the Head of the Meteorology, Climatology, and Geophysics Agency Number KEP.003 of 2009 concerning the

Organization and Work Procedure of the Meteorology, Climatology and Geophysics Agency;

- 8) Regulation of the Head of the Meteorology, Climatology and Geophysics Agency Number 9 of 2015 concerning the Strategic Plan of the Meteorology, Climatology and Geophysics Agency for 2015-2019;
- 9) Regulation of the Republic of Indonesia's Public Works and Housing Minister Number 22/PRT/M/2018 concerning the Construction of State Buildings.
- 10) Decree of the Public Works and Housing Minister Number 897/KPTS/M/2017 concerning the Minimum Remuneration for Construction Workers at the Expert Level for Construction Consultancy Services;
- 11) Regulation of the Republic of Indonesia's Government of Goods/Services Procurement Policy Institute No. 12 of 2021 concerning Guidelines for the Implementation of Government Procurement of Goods/Services through Providers;
- 12) Indonesian Governing Council of the National Association of Indonesian Consultants Decision Number 55/SK.DPN/XII/2020 concerning Direct Non-Personnel Costs (Direct Costs) for the Preparation of the Budget Plan and the Self-Estimated Price of Consulting Services Business Activities.