



# 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 Planning Consultant Services InaTEWS Operational System Development (Building) Jakarta-Bali

**Reference No.:** ID-BMKG-287351-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 Planning Consultant Services InaTEWS Operational System Development (Building) Jakarta-Bali.

The scope of work for Planning 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 Planning Consultancy Services is to provide a detailed description of the scope of work, hence the Planning 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 and Drafting of Design Concept
- B. Pre-Design preparation stage and technical design concept
- C. Stage of Implementation of Value Engineering (VE) Workshop
- D. Design Development Drafting Stage
- E. Detailed Design Stage

- F. Preparation and Auction Stage
- G. Implementation and Monitoring Stage
- H. Other Stages/Activities

### 3. Requirements for Consultants

#### A. Company Qualifications

- 1) Participant is a business entity, has administrative documents and work experience which will be submitted by ULP in the procurement process.
- 2) Not listed 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 (planning 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 (planning 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. Needs for Consultants

The need 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
<b>A</b>	<b>EXPERTISE PERSONNEL</b>	
1	Project Manager - Senior Expert in Architecture/Building Engineering (Ahli Utama)	1
2	Associate Expert in Architecture (Ahli Madya)	1
3	Associate Expert in Civil Engineering (Ahli Madya)	1
4	Junior Expert in Interior (Ahli Muda)	1
5	Junior Expert in Landscape (Ahli Muda)	1
6	Air Conditioning and Refrigeration Mechanical Expert	1
7	Mechanical Engineer - Plumbing and Mechanical Pumps (Ahli Muda)	1
8	Mechanical Engineer – In-Building Transportation (Ahli Muda)	1
9	Mechanical Engineer - Fire Protection (Ahli Muda)	1
10	Electrical Engineer – Electricity (Ahli Muda)	1
11	Electrical Engineer - In-Building Information Communication Technology / ICT (Ahli Muda)	1
12	Quantity Surveyor (Ahli Muda)	1
13	Cost Estimator (Ahli Muda)	1
14	Environmental Engineer (Ahli Muda)	1
<b>B</b>	<b>SUB-PROFESSIONAL PERSONNEL/SUPERVISOR</b>	
1	Architectural Surveyor	1
2	Structural Surveyor	1
3	Mechanical/Electrical Surveyor	1
<b>C</b>	<b>SUPPORTING PERSONNEL</b>	
1	CAD Operators/ Drafters	3
2	Computer operator	2
3	Administrator	2
4	Driver	1

#### 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 construction management consultant, for 5 (five) months finishing detail engineering design 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. Conduct a review of the implementation of construction development 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 and August 2018 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

The Terms of Reference (TOR) for the primary procurement stage for the assignment are attached to this request for expressions 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.

The Meteorology, Climatology and Geophysics Agency (*Badan Meteorologi, Klimatologi dan Geofisika-BMKG*) now invites eligible consulting firm ("Consultants") to indicate their interest in providing the Services.

Expressions of interest (include supporting documents) must be delivered in a written form to the address below (by e-mail) by August 11<sup>th</sup>, 16.00 (Jakarta Time) at the latest.

*Badan Meteorologi, Klimatologi dan Geofisika-BMKG*

The Meteorology, Climatology and Geophysics Agency

Attn: Pokja Pemilihan IDRIP BMKG

Jalan Angkasa I No.2 Kemayoran, Jakarta Pusat, DKI Jakarta 10610, Indonesia

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

**PROCUREMENT OF PLANNING 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 of Geophysics
Program	:	Meteorology, Climatology and Geophysics Program
Program Target	:	Quality improvement of geophysical information
Program Target Indicators	:	<ol style="list-style-type: none"><li>1. Geophysical Information Accuracy</li><li>2. Average User Satisfaction Index of Geophysical Information Services (Likert Scale)</li></ol>
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	:	<ol style="list-style-type: none"><li>1. Speed of Earthquake Information Processing Analysis</li><li>2. Speed of Processing Analysis of Tsunami Early Warning Information</li><li>3. Number of Locations for Earthquake and Tsunami Monitoring System Equipment able to Provide Data Availability for Earthquake Information and Tsunami Early Warning</li><li>4. Speed of Earthquake Information Submission to Stakeholders</li><li>5. Speed of Tsunami Early Warning Information Submission Due to Earthquake to Stakeholders</li><li>6. Percentage of Tsunami Early Warning System Completeness due to Tectonic Earthquake Disaster</li><li>7. Satisfaction Index for Earthquake and Tsunami Early Warning Data and Information Services (Likert Scale)</li></ol>
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 Equipment Monitoring Systems through the Indonesia Disaster Resilience Initiatives Project (IDRIP)

## **1. BACKGROUND**

The Republic of Indonesia is a land of fire rings located above the confluence of three tectonic plates, called 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 afterwards. Indonesia is also one of the regions which has the highest frequency of earthquakes in the world.

The Meteorology, Climatology, and Geophysics Agency as a Non-Ministerial Government Institutions which is under and is responsibly 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.

In order to accelerate the BMKG's performance services for earthquake and tsunami information, BMKG has collaborated with the National Disaster Management Agency (BNPB) to implement the Indonesia Disasted Resilience Initiative Project (IDRIP), where BMKG acts as the supporting or implementing agency and BNPB 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 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 work place, 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 can specifically facilitate equipment that will support the existing and new system, subsequently 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 needs therefore if paralysis occurs in the Center Jakarta operations, operations in Bali will automatically take over because InaTEWS operations are not allowed to have power failure, and the construction in Bali represent a reinforcement of the Regional Earthquake Center (PGR) III.

The construction in Jakarta, besides providing an operational infrastructure better than before, it also an effort to provide work infrastructure that is better, more appropriate, benefitly accurate and better functions compared to the existing building currently being used where this development will later accommodate operational Warning System needs which has 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 needs 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 a 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 staffs 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 where as 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 cannot 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 for the Jakarta building needs, 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 that is in the northern area of Jakarta (close to the sea, drawn in a straight line  $\pm 3.5$  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 700m<sup>2</sup> 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 in age 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 mutual cooperation character.

## **2. PURPOSE AND OBJECTIVE**

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 needs 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 Planning Consultant services for the construction work of InaTEWS OPERATIONAL SYSTEM DEVELOPMENT (BUILDING) which includes the design preparation

stage, tender stage and periodic supervision in the implementation and maintenance.

The purpose of the TOR is to provide a detailed description of the scope of work, hence the Planning 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 to facilitate.

The purpose of organizing this consultant Planning is for the construction of the state buildings carried out from this IDRIP activity to be able to run well, in accordance with the laws and regulations, and still paying attention to the risk management also social and environmental impacts in accordance with the ESMF guidelines and of course be able to complete it in accordance with the target and available time while prioritizing the value of quality, economy, operational feasibility, and zero accident in order to produce buildings with the concept of smart, green, healthy, hygienic and safe buildings.

### 3. TARGET

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

### 4. ACTIVITY LOCATION

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

## **5. SOURCE OF FUNDING**

The source of funding for this consulting service activity is financed by the World Bank's Foreign Loans and for 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 needs are based on real needs consisting of direct personnel costs and non-personnel direct costs, where as for direct personnel costs requires experts, as well as supervisory staff and non-personnel direct costs are for supporting needs such as stationery, communication, reporting, value engineer etc with the Budget Plan according to the attachment to this TOR.

The billing rate used in the assignment of this planning consultant is in accordance with 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 also in accordance 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 Government Regulation No. 16 of 2021 and PUPR Ministerial Regulation No. 22/PRT/M/2018 that in general the duties of a PRC consultant are divided into several stages as follows:

- A. Preparation Stage and Drafting of Design Concept
  - 1) initial land measurement and identification, including: measurement of site area, site boundaries, traffic patterns around the site.

- 2) analysis of the City Plan Description.
- 3) collect field data and information including soil investigation, sondir and drilling tests accompanied by laboratory tests.
- 4) Compose an interpretation outline of the Term of reference (TOR).
- 5) consultation with local the government regarding local regulations or building permits.
- 6) create a planning and design program which is a limitation of development goals or objectives and development provisions or requirements as a result of data and information analysis from service users and other parties assisting activity managers in carrying out the procurement of construction planning service providers, including preparing a Terms of Reference (TOR), providing advice on timing and procurement strategies, as well as assistance in evaluating the procurement process.

The design planning program is in the form of a report that includes:

- a) work plan program, explaining the plan for managing the work design plan.
- b) room space program, explaining the arrangement of needs, size and type of space and analysis of spatial function relationships.
- c) Green Building program.
- 7) develop ideas and interpretations of the planning and design program as the basis for planning and designing embodied in written descriptions, diagrams and/or drawings.
- 8) sketching ideas is a sketch of an adequate scale that describes a clear planning and design idea about the pattern of space distribution and building form. Assisting the Activity Manager in preparing and compiling the implementation program for the selection of construction planning service providers.

#### B. Pre-Design preparation stage and technical design concept

- 1) analysis of the initial design data and information;
- 2) develop ideas and interpretations of the TOR as the basis for thinking and planning considerations;
- 3) [prepare and compile environmental instrument documents such as AMDAL or UKL/UPL in accordance with existing Environmental and Social Risk Screening Documents;](#)
- 4) composing the building mass composition showing the position of the building mass on the site along with the contours of the land based on the provisions of the KRK;

- 5) design of site plan drawings;
- 6) preparation of a space program with floor plans which describe the spatial arrangement, the relationship between spaces in the building on each floor and explaining the detail/height of the floor;
- 7) design of floor plans, views, sections showing the outline of the cross section, structural systems and utilities in an adequate scale and size for clarity of information;
- 8) creation of sketch images and 3D visualizations;
- 9) preparation of technical reports in the form of descriptions and drawings regarding the estimated floor area, information on the use of materials, selection of building structure systems, selection of utility systems, buildings, selection of environmental planning concepts as well as estimates of costs and construction time;
- 10) preparation of completeness of documents for the management of Building Approval (PBG/IMB) in accordance with the provisions stipulated by the local government.
- 11) create a drawing plan of the building mass which shows the position of the building mass on site and to the surrounding environment along with the contours of the land based on the City Planning and Green Building (BGH) program.
- 12) compose a Site Plan drawing showing the relationship between the floor plan of the building and the Outer Spatial Planning or reforestation within the site area.
- 13) create a floor plan which describes the spatial arrangement and the relationship between the spaces in the building on each floor and explains the detail or floor height.
- 14) make a visible image of the building which shows a view to the four sides or directions of the building.
- 15) create a cross-sectional and longitudinal drawings of the building to show an outline of the cross-section and structural systems and utilities of the building.
- 16) create a three-dimensional visualization images in the form of images and/or computer animation.
- 17) create a 1:500 scale regional model.
- 18) make the picture above in a scale of 1:500 (one to five hundred), 1:200 (one to two hundred), 1:100 (one to one hundred) and/or adequate along with the size for the clarity of the information to be achieved.
- 19) calculate the functional value of the building and display it in the form of a diagram.
- 20) create technical reports in the form of descriptions and drawings regarding estimated floor area, information on the use of materials, selection of building structure systems, selection of utility systems

evaluating the implementation program of planning activities made by construction planning service providers, which include programs for the provision and use of resources, strategies and stages of preparation of tender documents.

- 21) administering permits until obtaining information on city or district plans, information on building and environmental requirements, and preparing the complete application for a Building Permit (IMB) in accordance with the provisions set by the local government.

C. Stage of Implementation of Value Engineering (VE) Workshop

Carry out VE activities by inviting several resource persons to obtain maximum review results.

D. Design Development Drafting Stage

- 1) develop the architecture of the building in the form of an architectural plan that shows the relationship between the floor of the building and the outer layout of the building boundary lines, roads and other provisions of the urban planning plan as well as the integration of the outer space and conformity with the KRK.
- 2) create a floor plan showing the floors in the building, the layout of the interior, the coordinates of the building, the floor plan, and the dimensions of the building elements and the types of materials used.
- 3) making the building visible, which shows a clear view of the four directions of the building and the materials used along with a description of the concept and visualization of two-dimensional and three-dimensional designs if needed.
- 4) develop a structural system, in the form of a sectional drawing of the building, transversely and longitudinally which explains the structural system, size and detail of building elements (foundations, floors, walls, ceilings and roofs) as a whole along with a description of the concept and calculations.
- 5) develop an electrical mechanical system, in the form of detailed mechanical electrical drawings including IT, environmental planning and calculations for green buildings along with a description of the concept and calculations.
- 6) making the above picture in a scale of 1:500 (one to five hundred), 1:200 (one to two hundred), 1:100 (one to one hundred), 1:50 (one to fifty) and/or adequate along with the size for the clarity of the information to be achieved.

- 7) prepare specifications for the materials used or Outline Specifications by considering the value of benefits, availability of materials, construction, economic value, and supply chain.
- 8) prepare construction cost estimates, assist activity managers in preparing and compiling programs for the implementation of physical construction work tenders.

#### E. Detailed Design Stage

- 1) Preparation of detailed architectural drawings, structural details, utility and landscape details as well as interior furniture needs;
- 2) Compiling the Work Plan and Conditions, includes:
  - a) General Requirements;
  - b) Administrative Requirements; and
  - c) Technical Requirements including Technical Specifications;
- 3) Preparation of volume work implementation details and the Budget Plan of construction work (Engineering Estimate);
- 4) Application of the BIM application on the detailed design
- 5) Preparation of planning reports, consisting of:
  - a) Architecture report;
  - b) Structural Calculation Report, including soil test report;
  - c) Calculation reports on mechanical, electrical, and piping/plumbing systems;
  - d) Information and Technology calculation report;
- 6) Environmental and landscaping reports.

#### F. Preparation and Auction Stage

- 1) Prepare the final documents for the implementation of the auction in the form of:
  - a) Plan drawings along with implementation details; architecture, structure, mechanical and electrical, landscaping, spatial planning;
  - b) Work plan and administrative, general and technical requirements;
  - c) Budget Plan;
  - d) Details of work volume/ Bill of Quantity (BQ);
  - e) Planning Report;
- 2) Planning consultants must have submitted the appropriate documents as referred to in letter a) to letter d);
- 3) The documents referred to, will be used for the purposes of the construction work tender;



- 4) Construction Drawing Documents as part of completing the Tender Documents will be submitted at the end of the contract period.
- 5) Approval of the detailed design from the service user to be used as a technical document in the physical construction tender document.
- 6) Preparation of technical plans including design conception reports, pre-design, design development, and detailed design documents.
- 7) Assist the head of the work unit or the official making the commitment in preparing the tender document, and assist the service unit or the working group for the service unit for the procurement of goods and services or the procurement official in preparing the program and implementing the auction.
- 8) Assisting the goods and services procurement unit, the working group or procurement official at the time of job description, including compiling the Job Description Minutes, assisting the goods and services of the procurement service unit, unit working group or procurement officials in carrying out bid evaluations, rearranging tender documents, and carrying out the same tasks in the event of a re-auction.

G. Implementation and Monitoring Stage

- 1) Carry out periodic supervision, such as checking the suitability of the work implementation with the plan periodically, making adjustments to drawings and technical specifications for implementation if there are changes, providing explanations for problems arising during the construction period, providing recommendations on the use of materials, and making a final supervisory report periodically.
- 2) Prepare a final report on planning work consisting of initial technical planning documents, including changes to planning during the construction implementation, instructions for use, maintenance, and building maintenance, including instructions regarding building mechanical-electrical equipment and supplies, procurement reports for implementation service providers physical construction, reports on the implementation of value engineering workshop packages (Value Engineering), as well as guarantee letters for building failures from construction planning service providers and are not limited to other reports required by existing regulations such as Government Regulation No. 16 of 2021 or other regulations, both with funding or not.

#### H. Other Stages/Activities

Including other activities listed in the PUPR Ministerial Regulation Number 22/PRT/M/2018 and other World Bank regulations.

In obtaining this Planning Consultant, using an open auction contractual, and the regulations for implementing the auction refer to the World Bank regulations, for that the regulations used to conduct the auction of consultant services are also guided by the regulations from the World Bank.

Considering that the time frame is quite urgent, it is possible that the planning consultant will parallel the procurement of Construction Management consultant services, therefore the planning consultant will carry out his work with assistance from the Constitutional Court consultant based on Government Regulation No. 16 of 2021 and PUPR Ministerial Regulation No. 22/PRT/M /2018 in general for each stage as follows:

All reports in the stages of work mentioned above are also made in the form of Softcopy Files of Office format documents (Word, Exel, etc.), Image Files in CAD Format, and backed up in PDF format which is stored in 1 (one) Hard Disk unit and all official documents from each planning process must contain the signature of the employer (PIU/PPK/User) as well as the approval of the Constitutional Court consultant as well as from the PRC consultant himself and be included in official reports whose report costs are listed in the Budget Plan of the contract later.

For the periodic monitoring stage after BAST 1, it is carried out simultaneously with the maintenance period, which in accordance with Article 54 of the PUPR Ministerial Regulation Number 22/PRT/M/2018, it is planned for up to a maximum of 8 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 existing buildings in the land area of the Central BMKG 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 MK consultants to carry out their work at BMKG, but there is a possibility that it can be provided based on temporary conditions and needs with the approval of the Head of the General Bureau and HR for those in Jakarta and the approval of the Head of the MKG Regional III Bali Center for those in Bali.

The service provider must provide and maintain all facilities and equipment used for the smooth implementation of the work 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 (PP)
- 3) Rent computer and Servers with the network (if needed)
- 4) Rent a four-wheeled vehicle for operations
- 5) Rent a two-wheeled vehicle for operations
- 6) Rent an office with furniture facilities
- 7) Color A-3 Deskjet Printer Rental
- 8) Rent A-4 Laser Printer
- 9) Rental of documentation equipment
- 10) Rent a photocopy machine

## **9. COST CALCULATION OF PLANNING CONSULTANTS**

Planning Consultant 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 Rp 6,213,387,400.00 (Six Billion Two Hundred Thirteen Million Three Hundred Eighty Seven Thousand Four Hundred Rupiah).

The billing rate used in the assignment of this Planning Consultant is in accordance with the Decree of the Minister of Public Works and Public Housing Number 524/KPTS/M/2022 concerning the Minimum Remuneration for Construction Workers at the Expert Level for Construction Consultancy Services and also in accordance with the Minimum Standard Guidelines for the Year 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 which will be submitted by ULP in the procurement process.
- 2) Not listed 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 (planning 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 (planning 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. Needs for Consultants

The need 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.	PERSONNEL DESCRIPTION	EDUCATION & EXPERIENCE	QTY
<b>A</b>	<b>EXPERTISE PERSONNEL</b>		
1	Project Manager - Senior Expert in Architecture/Building Engineering (Ahli Utama)	Masters Degree in Architect/Civil Engineering, 5 years	1
2	Associate Expert in Architecture (Ahli Madya)	Bachelors Degree in Architecture, 3 years	1
3	Associate Expert in Civil Engineering (Ahli Madya)	Bachelors Degree in Civil Engineering, 3 years	1
4	Junior Expert in Interior (Ahli Muda)	Bachelors Degree in Interior Design, 3 years	1
5	Junior Expert in Landscape (Ahli Muda)	Bachelors Degree in Architecture Landscape, 3 years	1
6	Air Conditioning and Refrigeration Mechanical Expert	Bachelors Degree in Mechanical Engineering, 3 years	1
7	Mechanical Engineer - Plumbing and Mechanical Pumps (Ahli Muda)	Bachelors Degree in Mechanical Engineering, 3 years	1
8	Mechanical Engineer – In-Building Transportation (Ahli Muda)	Bachelors Degree in Mechanical Engineering, 3 years	1
9	Mechanical Engineer - Fire Protection (Ahli Muda)	Bachelors Degree in Mechanical Engineering, 3 years	1
10	Electrical Engineer – Electricity (Ahli Muda)	Bachelors Degree in Electrical Engineering, 3 years	1
11	Electrical Engineer - Building Information Communication Technology / ICT (Ahli Muda)	Bachelors Degree in Electrical Engineering, 3 years	1
12	Quantity Surveyor (Ahli Muda)	Bachelors Degree in Architecture/Civil Engineering, 3 years	1
13	Cost Estimator (Ahli Muda)	Bachelors Degree in Architecture/Civil Engineering, 3 years	1
14	Environmental Engineer (Ahli Muda)	Bachelors Degree in Environmental Engineering, 2 years	1
<b>B</b>	<b>SUB-PROFESSIONAL PERSONNEL/SUPERVISOR</b>		
1	Architectural Surveyor	Associate Degree, 3 years	1
2	Structural Surveyor	Associate Degree, 3 years	1
3	Mechanical/Electrical Surveyor	Associate Degree, 3 years	1

NO.	PERSONNEL DESCRIPTION	EDUCATION EXPERIENCE	QTY
<b>C</b>	<b>SUPPORTING PERSONNEL</b>		
1	CAD Operators/ Drafters	Senior High School Degree, 3 years	3
2	Computer operator	Senior High School Degree, 3 years	2
3	Administrator	Senior High School Degree, 3 years	2
4	Driver	Senior High School Degree, 3 years	1

### C. Time Allocation for Activities

The Planning Consultant must attach a schedule and estimated timeframe for the work implementation until the completion of the physical work using a special program which contains information including:

1. Able to compile information on the implementation of work with activity codes;
2. Develop work methods;
3. Carry out actual monitoring of work activities

Based on the Minister of Public Works and Public Housing Regulation No. 22/PRT/M/2018 concerning the Construction of State Buildings, the following is the Planning consultants job description to be carried out along with the estimated time allocation:

1. The DED Design and Preparation activity will take 180 (one hundred and eighty) calendar days or about 5 (five) months since the signing of the Work Start Order;
2. Assistance to PPK and the Procurement Service Unit in the auction process for physical implementers for 3 months;
3. Periodic supervision of physical implementation for a maximum of 8 months;

## TIMELINE

No	Activity	Time (Month)	2022				2023			2024	Detail Information
			2 - 4	5	6 - 10	11 - 12	1	2 - 11	12	1 - 5	
1	MK Auction	3									
2	PRC Auction	3									Starting no later than 2 weeks after the MK auction
3	Technical review & DED	5									
4	Physical auction	3									
5	Physical execution – Jkt	10									
6	Physical execution – Bali	8									Implemented simultaneously with Jakarta but the implementation period is 8 months
7	Periodic monitoring - Jkt	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, and that is during the construction of Building A which has up to 13 floors and construction is carried out for 2 years.

From this previous experience, it is hoped that this will be a lesson in the implementation of this project. Included in the management of 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 (State Document of the Republic of Indonesia of 2012 Number 139, Supplement to the State Document of the Republic of Indonesia Number 5304);
- 4) Government Regulation of the Republic of Indonesia 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/Services;
- 6) President Regulation of the Republic of Indonesia 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 Minister of Public Works and Public Housing of the Republic of Indonesia Number 22/PRT/M/2018 concerning the Construction of State Buildings;
- 10) 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;
- 11) Regulation of the Republic of Indonesia Government's Goods/Services Procurement Policy Institute No. 12 of 2021 concerning Guidelines for the Implementation of Government Procurement of Goods/Services through Providers;



- 12) Decision of the Indonesian Governing Council of the National Association of Indonesian Consultants 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.