



# METEOROLOGICAL, CLIMATOLOGICAL, AND GEOPHYSICAL AGENCY

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## REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES – INDIVIDUAL SELECTION)

*BADAN METEOROLOGI, KLIMATOLOGI DAN GEOFISIKA*  
**THE METEOROLOGICAL, CLIMATOLOGICAL AND GEOPHYSICAL AGENCY  
INDONESIA DISASTER RESILIENCE INITIATIVE PROJECT (IDRIP)**

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

**Assignment Title: Individual Planning Consultant Services for Renovation of 24 Shelter/Bunker Building Sites for Upgrading Seismograph Broadband Sensor**

**Reference No.: ID-BMKG-301555-CS-INDV**

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 individual consulting services namely Individual Planning Consultant Services for Renovation of 24 Shelter/Bunker Building Sites for Upgrading Seismograph Broadband Sensor.

The scope of work for Individual Planning Consultant Services for Renovation of 24 Shelter/Bunker Building Sites for Upgrading Seismograph Broadband Sensor under the supervision of the PPK of Planning Bureau divided into several stages:

1. Preparation is preparing for the activity implementation, including coordinating with stakeholders, the technical team, other related parties to agree on work plans, work implementation methodologies and work outputs as well as drafting the concept of Planning Consultant Services for Renovation of 24 Shelter/Bunker Building Sites for Upgrading Seismograph Broadband Sensor IDRIP BMKG.
2. Scope of Works:
  - a. Reporting and Planning Analysis based on data and needs from Users regarding existing conditions and renovation limits
  - b. Prepare development plans, including making:
    - 1) Building block plan, site plan;
    - 2) Plans, views, and sections;
    - 3) Construction improvement plan and space layout.
  - c. Preparation of detailed plans, includes making:
    - 1) Detailed drawings of physical renovations along with technical explanations;

- 2) Work Plan and Conditions;
- 3) Details of the volume of work execution (BQ/Bill of Quantity);
- 4) Construction work budget plan.

3. Output:

In general, the output of the planning consultant is divided into several stages as follows:

- a. Planning Final Report
- b. Plan Development Stage
  - 1) Building block plan, site plan;
  - 2) Plans, views, and sections;
  - 3) Construction improvement plan and space layout.
- c. Detailed Plan Stage
  - 1) Complete and detailed technical drawings of the building;
  - 2) Work Plan and Conditions;
  - 3) Plan of activities and volume of work (BQ/Bill of Quantity);
  - 4) Budget Plan;

All reports in the above work stages are also made in the form of softcopy files of office format documents (Word, Excel, etc.), image files in CAD format, and backed up in PDF format which is stored in Flash Disk as much as 1 (one) unit.

The consultant will be assigned approximately for 90 (ninety) calendar days. The expected commencement of service is August 2022.

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

The Meteorological, Climatological and Geophysical Agency (*Badan Meteorologi, Klimatologi dan Geofisika-BMKG*) now invites eligible individual consultant (“Consultants”) to indicate their interest in providing the Services.

Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The shortlisting criteria are:

- 1) Architectural /Civil Engineering Bachelor degree with minimum 15 years experience of master degree with minimum 5 years experience;

- 2) Have the understanding and experience of technical expertise in handling the Design and Technical Engineering Work of building construction for the function of building facilities;
- 3) Have NPWP (applicable for local consultant);
- 4) Have ID card;
- 5) Have a Certificate of Expertise in related field, Senior Expert (Ahli Utama) classification;
- 6) Not included in the Black List, participation does not cause conflict of interest of the parties concerned, is not under court supervision, is not bankrupt, does not have business activities stopped, who acts for and on behalf of the Business Entity is not currently undergoing criminal sanctions; and/or their management/employees do not have the status of a Government Official, unless the person concerned takes leave outside the state's responsibility.

The attention of interested Consultants 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.

A Consultant 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 including curriculum vitae, pricing quote, and supporting documents must be delivered in a written form to the address below (by e-mail) by August 19<sup>th</sup>, 2022 at 16.00 local time.

*Badan Meteorologi, Klimatologi dan Geofisika-BMKG*

The Meteorological, Climatological and Geophysical Agency

Attn: Pokja Pemilihan IDRIP BMKG

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**TERM OF REFERENCE (TOR)**

**PROCUREMENT OF INDIVIDUAL PLANNING CONSULTANT SERVICES  
FOR RENOVATION OF 24 SHELTER/ BUNKER BUILDING SITES FOR  
UPGRADING SEISMOGRAPH BROADBAND SENSOR**

**INDONESIA DISASTER RESILIENCE INITIATIVES PROJECT  
WORLD BANK  
2022 – 2024 Fiscal Year**



**METEOROLOGY CLIMATOLOGY AND GEOPHYSICS AGENCY  
DEPUTY FOR GEOPHYSICS**

**JAKARTA, JULY 2022**

## DESCRIPTION INTRODUCTION

### 1. Background

The territory of the Unitary State of Indonesian Republic which is an archipelago in the equator and located between two continents and two oceans, meteorologically and climatologically makes Indonesia have variations in global weather and climate conditions, including variations in extreme weather and climate phenomena. The Republic of Indonesia is a ring of fire land which is above the collision of three tectonic plates, namely 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 as well as various post-earthquake and tsunami impacts. Indonesia is also one of the regions that has the highest frequency of earthquakes in the world.

In accordance with the Regulation of the Head of the Meteorology, Climatology and Geophysics Agency Number 3 of 2016 concerning the Organization and Work Procedure of the Meteorology, Climatology and Geophysics Agency, Meteorology Climatology and Geophysics Agency, hereinafter referred to as BMKG, is a Non-Ministerial Government Institution which is under and responsible to the President. BMKG has government duties in the fields of meteorology, climatology, and geophysics.

The main pressing challenge currently being faced by BMKG is the limitations of systems and equipment for monitoring, predicting and early warning of earthquakes, tsunamis or extreme weather, both in terms of quantity, level of technological progress or quality of performance. This limitation is increasingly evident in causing the risk of paralyzing the monitoring and early warning system, as the "lifetime" of most of the equipment has been exceeded, and the network density/number of equipment is very minimal compared to the area potentially affected by disasters. In the country's territory of approximately 6 million km<sup>2</sup>, the condition of the equipment installed is still limited, where the new seismic seismograph sensor equipment installed is 428 units. One of the main activities in the field of geophysics is the implementation of international cooperation in the fields of meteorology, climatology, and geophysics.

One of the activities in the Deputy for Geophysics that has been running in collaboration with the World Bank is the Improvement / Upgrading of Seismic Sensor Equipment that has been built / existing which is spread in almost all parts of Indonesia. Over time, there are 24 building locations in the form of shelters/bunkers scattered in a number of places in Indonesia which currently require the replacement of a new equipment system. Meanwhile, the existing 24 locations still use sensor equipment systems with old technology, so to improve the functionality and integration of seismic equipment operational systems, equipment replacement is required. Another problems found were the lack of suitability of the physical conditions of the 24 earthquake sensor locations, such as the need for construction adaptation, equipment operational layout conditions, tool holder effectiveness and functionality. Physical damage to the equipment room which is not safe for the surrounding environment, the need for connectivity of the equipment room with its supporting facilities, as well as a lot of physical damage to the shelter/bunker building that has been eaten by age requires construction handling.

Consideration and analysis of the problems at the 24 locations of the earthquake sensor equipment requires construction management with the option of replacing/removing old assets with new shelter buildings that are compatible with the new equipment system, but for the purpose of saving the state budget, the option is finally considered not to build or replace shelters, but by reconditioning the old construction and physically renovating 24 existing shelter locations with activities and job specifications in accordance with their respective current conditions with a description of construction improvement activities as follows:

1. Requirement of seismic equipment stand construction renovation on existing according to the conditions of each site at 24 locations.
2. Requirement of existing bunkers or shelters physical construction renovation for adjust the function of space and comfort and operational safety of using new equipment.
3. Requirement of site environment layout improvement, such as equipment positioning for supporting solar panels, VSAT antennas and improving access from external to internal site location, safety fence border, and other related things.

In order to support these activities, technical planning activities are needed that function as guidelines and Construction Technical Specification Documents for reference in the construction process which is carried out with the 2022 Planning Stage. The selection of consultant appointments is personal expert consultant, either Architects or Civil Engineer.

## **2. Purpose and Objectives**

The appointment of a Personal Expert is intended to be able to provide technical assistance, construction design solutions, as well as detailed planning in principle for the handling the renovation work on 24 existing bunkers/shelters spread across several regions in Indonesia. The purpose of this activity is to obtain Technical Document data that support the requirements for Physical Construction Auctions, as well as guideline data for Physical Construction Implementation, the personal consulting service provider will be responsible for the results of the Technical Document product to the Commitment Making Officer.

## **3. Target**

The construction of a Shelter building facility renovation or Bunker repair and development as many as 24 location sites in accordance with construction conditions and priority scales for operational support for new equipment/ upgrading of compatible seismic sensor equipment in accordance with the demands of the functions and benefits expected by the Deputy for Geophysics of BMKG.

#### 4. Job Location

The location of the activity is in 24 location points spread across several areas of Indonesia as follows:

1. KCSI, Geophysics Station of Aceh Selatan, Lintas Kecamatan Street, Lawe Gulo, Darul Hassanah, Aceh Tenggara, Aceh.
2. MLSI, Geophysics Station of Aceh Selatan, Betung Meulaboh Street, Babah Krueng, Beutong, Nagan Raya, Aceh Barat.
3. MASI, Geophysics Station of Kepahiang Bengkulu, Family Tengah Street, Nangai Tayau Village, Lebong Tengah, Muara Aman, Bengkulu.
4. UBSI, Geophysics Station of Kepahiang Bengkulu, Bengkulu University, WR Supratman Street, Kandang Limun, Bengkulu.
5. PPBI, MKG Regional Center of II - Ciputat, Bandara Depati Amir Street, Bangka, Pangkal Pinang.
6. STKI, MKG Regional Center of II - Ciputat, Meteorological Station Class III, Pramuka Street No. 1, Kapuas Kanan Hulu, Sintang, Sintang, Kalimantan Barat.
7. PKKI, MKG Regional Center of II - Ciputat, Bengaris Bukit Pinang Street, Tanjung Pinang, Pahandut, Palangkaraya, Kalimantan Tengah.
8. BBKI, Geophysics Station of Balikpapan, Trikora Street, Sei Besi, Banjarbaru Selatan, Banjarbaru, Kalimantan Selatan.
9. LWLI, Geophysics Station of Lampung Utara, Liwa Regional Government Office Complex, Balik Bukit, Balik Bukit, Lampung Barat, Lampung.
10. KASI, Geophysics Station of Lampung Utara, Teluk Semaka Street, Pekon Sukajaya Village, Semaka, Tanggamus, Lampung.
11. BLSI, Geophysics Station of Lampung Utara, Prof. Dr. Sumantri Brojonegoro Street No. 1, Gedong Meneng, Rajabasa, Bandar Lampung, Lampung.
12. NLAI, Geophysics Station of Karang Panjang Ambon, Meteorological Station of Namlea, Namlea Airport, Namlea, Buru, Maluku.
13. LBMI, Geophysics Station of Ternate, BMKG Complex, Oesman Sadik Airport, Labuha, Bacan, Halmahera Selatan, Maluku Utara.
14. GLMI, Geophysics Station of Ternate, Galela Airport Street, Galela Airport, Galela, Halmahera Utara, Maluku Utara.
15. TWSI, Geophysics Station of Mataram, Brang Rea Street, Temekan, Brang Rea, Sumbawa Barat, Nusa Tenggara Barat.
16. DBNI, Geophysics Station of Mataram, Manggalewa Village, Dompur, Dompur, Nusa Tenggara Barat.
17. MMPI, Geophysics Station of Angkasapura Jayapura, Meteorological Station of Mopah Merauke, PGT Merauke Street, Merauke, Merauke, Papua.

18. RAPI, Geophysics Station of Sorong, DPRD Housing Waisai Raja Ampat, Waisai, Waisai, Raja Ampat, Papua Barat.
19. MKS, Geophysics Station of Gowa, Malino Panggentungan Street, Tamarunang, Sumbaopu, Gowa, Sulawesi Selatan.
20. SISI, Geophysics Station of Padang Panjang, Saibi Samukop Village, Siberut Tengah, Kepulauan Mentawai, Sumatra Barat.
21. TRSI, Geophysics Station of Deli Serdang, Swadana Hospital, Tarutung Regional, Hutagalung Siwaluompu, Tarutung, Tapanuli Utara, Sumatra Utara.
22. SBSI, Geophysics Station of Deli Serdang, Aek Godang Street - Sibuhuan Km. 1,5 Aek Godang Airport (Janjimanahan Village, Batangonang, Padang Sidempuan, Sumatra Utara).
23. LHSI, Geophysics Station of North Lampung, Jati Village, Pulau Pinang, Lahat, Sumatra Selatan.
24. DSRI, MKG Regional Center of II - Ciputat, Garuda Bandara Street, Dabo, Singkep, Lingga, Riau.

## **5. Sources of funding**

This work is financed from World Bank funding sources with a value of a Personal Expert of Planning Consultant is 120,000,000.00 IDR (one hundred and twenty million rupiah). This value is intended for consulting service activities which consist of direct personnel and non-personnel costs such as reporting.

## **6. Base Data**

Survey data documents for each of the 24 locations existing, including land data, land and building status, and supporting documents explaining other existing conditions.

## **7. Technical Standard**

### **A. Personal qualifications of the Expert**

- 1) The person must have the understanding and experience of technical expertise in handling the Design and Technical Engineering Work of building construction for the function of building facilities with a bachelor's or master's degree in Architectural / Civil Engineering;
- 2) Have NPWP (applicable for local consultant);
- 3) Not included in the Black List, participation does not cause conflict of interest of the parties concerned, is not under court supervision, is not bankrupt, does not have business activities stopped, who acts for and on behalf of the Business Entity is not currently undergoing criminal sanctions; and/or their management/employees do not have the status of a State Civil Apparatus, unless the person concerned takes leave outside the state's responsibility.

## B. Personal Consultant Requirement

The need for consultants is used for needs of Experts, 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.	POSITION	QUALIFICATION	NUMBER OF PEOPLE
A. Expert			
1	Project Manager	Architectural / Civil Engineering of Bachelor Degree at least 15 years or at least 5 years of Master Degree	1

In accordance with the provisions of the Minister of Public Works Number 08/PRT/M/2011 and the supporting regulations below, that the respective expert must have Bachelor's Certificates, ID card, NPWP (tax identification number) and Certificates of Expertise in related field. Senior Expert (*Ahli Utama*) classification is preferred (based on INKINDO Expert Classification).

## 8. Legal Reference

- ✓ Partner Cooperation Agreement with World Bank;
- ✓ Law Number 1 of 2017 concerning Construction Services;
- ✓ Law Number 2 of 2017 concerning Construction Services;
- ✓ Law Number 11 of 2020 concerning Job Creation;
- ✓ Law Number 31 of 2009 concerning Meteorology, Climatology and Geophysics;
- ✓ Government Regulation Number 16 of 2021 concerning Implementing Regulations of Law Number 28 of 2002 concerning Buildings;
- ✓ Government Regulation Number 46 of 2012 concerning Observation and Management of Meteorological, Climatological and Geophysical Data (State Gazette of the Republic of Indonesia of 2012 Number 139, Supplement to the State Gazette of the Republic of Indonesia Number 5304);
- ✓ Presidential Regulation Number 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018 concerning Procurement of Government Goods/Services;
- ✓ Presidential Regulation of the Republic of Indonesia Number 61 of 2008 concerning the Meteorology, Climatology and Geophysics Agency;
- ✓ 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;
- ✓ 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;

- ✓ 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;
- ✓ 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 Consulting Services.
- ✓ Minister of Public Works and Public Housing Regulation Number 14/2020 concerning Standards and Guidelines for Procurement of Construction Services through Providers.
- ✓ Decision of the Indonesian Governing Council of the National Association of Indonesian Constituents Number 22/SK.DPN/X/2020 concerning Guidelines for Minimum Standards of Remuneration / Personnel Costs (Billing Rate) and Direct Costs for Consulting Services Business Entities in 2021.

## 9. Scope of work

The scope of tasks that must be carried out by personal Experts includes the tasks of making Technical Documents, among others;

- a. Reporting and Planning Analysis based on data and needs from Users regarding existing conditions and renovation limits
- b. Prepare development plans, including making:
  - 1) Building block plan, site plan;
  - 2) Plans, views, and sections;
  - 3) Construction improvement plan and space layout.
- c. Preparation of detailed plans, includes making:
  - 1) Detailed drawings of physical renovations along with technical explanations;
  - 2) Work Plan and Conditions;
  - 3) Details of the volume of work execution (BQ/Bill of Quantity);
  - 4) Construction work budget plan.

## 10. Output

In general, the output of the planning consultant is divided into several stages as follows:

- a. Planning Final Report
- b. Plan Development Stage
  - 1) Building block plan, site plan;
  - 2) Plans, views, and sections;
  - 3) Construction improvement plan and space layout.
- c. Detailed Plan Stage
  - 1) Complete and detailed technical drawings of the building;
  - 2) Work Plan and Conditions;
  - 3) Plan of activities and volume of work (BQ/Bill of Quantity);
  - 4) Budget Plan;

All reports in the above work stages are also made in the form of softcopy files of office format documents (Word, Excel, etc.), image files in CAD format, and backed up in PDF format which is stored in Flash Disk as much as 1 (one) unit.

#### **11. Work Completion Period**

The period of completion of the planning consultant service work is 90 (ninety) calendar days.

**BILL OF QUANTITY (BoQ)**  
**INDIVIDUAL PLANNING CONSULTANT SERVICES FOR WORK**  
**RENOVATION OF 24 SHELTER/ BUNKER BUILDING SITES FOR**  
**UPGRADING SEISMOGRAPH BROADBAND SENSOR**

**I. PERSONNEL DIRECT COST**

NO	Component	2022					
		Volume				Cost/Unit	Total Cost
		Qty	Month	Total	Unit		
1	Planning Consultant Services For Work Renovation of 24 Shelter/Bunker Building Sites For Upgrading Seismograph Broadband Sensor	1	3	3	OB/PM		
<b>TOTAL DIRECT PERSONNEL COSTS</b>							

**II. NON PERSONNEL DIRECT COST**

NO	Component	Unit	Volume	Cost	
				Cost per Unit	Total Cost
1	Preliminary Report Document	Book	5		
2	Printed and File Technical Documents (Budget Plan, Bill of Quantity, Technical Documents)	Book	48		
3	Final Report Document	Book	5		
<b>TOTAL NON-PERSONNEL DIRECT COSTS</b>					

**TOTAL**

No	Description	Cost
I	PERSONNEL DIRECT COST	
II	NON PERSONNEL DIRECT COST	
	<b>TOTAL</b>	