

### METEOROLOGICAL, CLIMATOLOGICAL, AND GEOPHYSICAL AGENCY

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

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

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

Assignment Title: Individual Consultant Communication Infrastructure Network Development and Communication Network Lease

Reference No.: ID-BMKG-303900-CS-INDV-2

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 Consultant Communication Infrastructure Network Development and Communication Network Lease.

The scope of work for Individual Consultant Communication Infrastructure Network Development and Communication Network Lease 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 Individual Consultant Communication Infrastructure Network Development and Communication Network Lease IDRIP BMKG.

### 2. Scope of Works:

- a. **Work preparation** is preparing for the implementation of activities, including coordinating with stakeholders, technical teams, other related parties to agree on work plans, work implementation methodologies and work outputs as well as drafting a Communication Infrastructure Network Development concept.
- b. Work Implementation are:
  - Availability of design and specification of Communication Infrastructure
     Network Development, upgrade-able and integrated.
  - II. Availability of inventory of technical needs for communication

- infrastructure network development and communication network lease.
- III. Availability of plans and estimates of general cost budgets along with technical specification plans for the proposed design plans.
- IV. Availability of coordination lines with several parties related to communication infrastructure network development and communication network lease both internally and externally from BMKG.
- V. The preparation of technology recommendations for communication infrastructure network development that are most in accordance with the models and simulations provided by the BMKG.
- VI. Availability of supporting data needs and comparisons to meet technical specifications related to communication infrastructure network development and communication network lease.
- VII. Availability of technical specifications regarding communication infrastructure network development and communication network lease in the form of documents.

### c. Evaluation and Activity Report:

- I. Coordinate routine review activities of the evaluation results of project implementation with related parties, such as providers, users and others.
- II. Coordinate closely with the head of PMU and PIU in reporting on Communication Infrastructure Network Development activities and contribute to addressing work problems activities that require strategic input on a regular basis.
- III. Preparation of Activity Result Reports.

### 3. Output:

The Individual Consultant Communication Infrastructure Network Development and Communication Network Lease is expected to provide work results in the form of :

- a. Infrastructure design and inventory of communication infrastructure network development needs and communication network leases.
- b. Reports on the results of the implementation of activities on a regular basis, post-activity reports in the form of final activity reports and/or other similar reports.
- c. Document of monitoring and implementation strategy of communication infrastructure network development and communication network lease with clear and implementable directions and inputs.
- d. Other documents including supporting data, presentations, meeting notes and review and benchmarking of documents related to communication network infrastructure development and communication network lease.
- e. Input for communication network infrastructure development activity documents and communication network leases, terms of reference and relevant tender documents as part of preparation with technical input from stakeholders and other relevant

technical specialists.

f. Technical specification document according to BMKG format.

The consultant will be assigned approximately for 3 (three) months. The expected commencement of service is October 2022.

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

The Meteorology, Climatology and Geophysics 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:

- a. 1 (one) expert in the field of Information and Communication Technology with educational qualifications of Strata 1 / (S1) graduates in the field of Information Management / Informatics Engineering / Electrical Engineering / Computer Science / Computer Engineering.
- b. Able to provide recommendations on the best ICT solutions to solve problems.
- c. Have a minimum certification of CCIE Routing and Switching, and or equivalent certificate.
- d. Master Data Center infrastructure design and ICT development.
- e. Have extensive knowledge of the world of ICT
- f. Have experience as a team leader in ICT development activities in the last five years.
- g. Have an analytical mindset with problem-solving skills.
- h. Good command of document writing and verbal communication (in English and Indonesian).
- i. Have a minimum of 15 years experience as a leader/consultant technician in the field of Infrastructure/Network/ICT.

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 September 20<sup>th</sup>, 2022 at 16.00 local time.

Badan Meteorologi, Klimatologi dan Geofisika-BMKG Meteorological, Climatological, and Geophysical Agency

Attn: Pokja Pemilihan IDRIP BMKG Jalan Angkasa I No.2 Kemayoran, Jakarta Pusat, DKI Jakarta 10610, Indonesia PO Box 3540 Jkt +62 21 4246321

+62 21 4246703 Email: pokja.idrip@bmkg.go.id

Website: www.bmkg.go.id

### TERM OF REFERENCE (TOR)

# CONSULTANT SERVICES FOR COMMUNICATION INFRASTRUCTURE NETWORK DEVELOPMENT AND COMMUNICATION NETWORK LEASE

INDONESIA DISASTER RESILIANCE INITIATIVES PROJECT - IDRIP



BADAN METEOROLOGI KLIMATOLOGI DAN GEOFISIKA FISCAL YEAR 2022

### TERM OF REFERENCE (TOR)

# CONSULTANT SERVICES FOR COMMUNICATION INFRASTRUCTURE NETWORK DEVELOPMENT AND COMMUNICATION NETWORK LEASE INDONESIA DISASTER RESILIANCE INITIATIVES PROJECT – IDRIP FISCAL YEAR 2022

### a. Overview of Communication Infrastructure Network Development And Communication Network Lease

In order to improve and support the operational activities of the Central BMKG, the Communication Network Center develops and improves the communication network infrastructure at the Central BMKG Computing Building so that the security of data and information exchange is maintained and fast in supporting operational and non-operational activities in work units within the BMKG. To ensure the availability of data and information, the BMKG Communication Network Center seeks to build and improve the communication network infrastructure at the BMKG data center (DC) which is used to ensure the availability of communication network access for processing servers. The internet network at the BMKG data center also has an important role in collecting and disseminating observation data, disseminating BMKG information in the form of early warnings to the public of potential tsunami hazards and hazards due to extreme weather, as well as being used to exchange national and international data that cooperate in data exchange with BMKG.

To strengthen the integrated multi-hazard mitigation system, especially for the strengthening of the MHEWS (Multi-Hazard Early Warning System), it is necessary to revitalize the communication network by increasing the network capacity and scalability of the data center space network infrastructure which will improve data communication services for MHEWS through the High Availability Network Communication System, or increase data and information traffic capacity for InaTEWS. In the end, timely and accurate tsunami early warning will help the community to avoid the impact of the tsunami hazard and directly not only increase the availability of data traffic at the BMKG Head Office but also increase the availability of data sent to MHEWS at BNPB.

To support the Tsunami Early Warning System-TEWS dissemination system, it is necessary to develop a reliable Communication Infrastructure Network and continuous Communication Network Lease, so that it can support the dissemination of the Tsunami Early Warning System-TEWS. For the implementation of these activities, a consultant is needed to monitor the implementation of the work and arrange the Communication Infrastructure Network Development.

### **b.** Assignment Purpose

The purpose of The Consultant Service for Communication Infrastructure Network Development and Communication Network Lease are as follows:

- 1. Availability of design and specification of communication network infrastructure, upgradeable and integrated.
- 2. Availability of inventory of technical needs for communication infrastructure network development and communication network lease.
- 3. Availability of plans and budget estimates in general along with technical specification plans for the proposed design plans.
- 4. Availability of coordination lines with several parties related to communication infrastructure network development and communication network lease both internally and externally from BMKG.
- 5. Compilation of technology recommendations for Communication Infrastructure Network Development that are most in line with the models and simulations provided by BMKG.
- 6. Availability of supporting data needs and comparisons to meet technical specifications related to communication infrastructure network development and communication network lease.
- 7. Availability of the need for technical specifications regarding communication infrastructure network development and communication network lease in the form of documents.

### c. Scope of Services

The scope of work of Consultant Services for Communication Infrastructure Network Development and Communication Network Lease under the supervision of the Communication Network Center is divided into several stages, that is:

1. Work preparation is preparing for the implementation of activities, including coordinating with stakeholders, technical teams, and other related parties to agree on work plans, work implementation methodologies and work outputs as well as drafting a Communication Infrastructure Network Development concept.

### 2. Work Execution:

- a. Availability of design and specification of Communication Infrastructure Network Development, upgrade-able and integrated.
- b. Availability of inventory of technical needs for communication infrastructure network development and communication network lease.
- c. Availability of plans and estimates of general cost budgets along with technical specification plans for the proposed design plans.

- d. Availability of coordination lines with several parties related to communication infrastructure network development and communication network lease both internally and externally from BMKG.
- e. The preparation of technology recommendations for communication infrastructure network development that are most in accordance with the models and simulations provided by the BMKG.
- f. Availability of supporting data needs and comparisons to meet technical specifications related to communication infrastructure network development and communication network lease.
- g. Availability of technical specifications regarding communication infrastructure network development and communication network lease in the form of documents.

### 3. Evaluation and Activity Reports:

- a. Coordinate routine review activities of the evaluation results of project implementation with related parties, such as providers, users, and others.
- b. Coordinate closely with the head of PMU and PIU in reporting on Communication Infrastructure Network Development activities and contribute to addressing work problems activities that require strategic input regularly.
- c. Preparation of Activity Result Reports.

### d. Required Qualifications and Experience

- 1 (one) expert in the field of Information and Communication Technology with educational qualifications of Strata 1 / (S1) graduates in the field of Information Management / Informatics Engineering / Electrical Engineering / Computer Science / Computer Engineering.
- 2. Able to provide recommendations on the best ICT solutions to solve problems.
- 3. Have a minimum certification of CCIE Routing and Switching, and or equivalent certificate.
- 4. Master Data Center infrastructure design and ICT development.
- 5. Have extensive knowledge of the world of ICT
- 6. Have experience as a team leader in ICT development activities in the last five years.
- 7. Have an analytical mindset with problem-solving skills.
- 8. Good command of document writing and verbal communication (in English and Indonesian).
- Have a minimum of 15 years experience as a leader/consultant technician in the field of Infrastructure/Network/ICT.

#### e. Results

The Consultant Service for Communication Infrastructure Network Development and Communication Network Lease is expected to provide work results in the form of :

- 1. Infrastructure design and inventory of communication infrastructure network development needs and communication network leases.
- 2. Reports on the results of the implementation of activities on a regular basis, post-activity reports in the form of final activity reports and/or other similar reports.
- Document of monitoring and implementation strategy of communication infrastructure network development and communication network lease with clear and implementable directions and inputs.
- 4. Other documents including supporting data, presentations, meeting notes, and review and benchmarking of documents related to communication network infrastructure development and communication network lease.
- 5. Input for communication network infrastructure development activity documents and communication network leases, terms of reference and relevant tender documents as part of preparation with technical input from stakeholders and other relevant technical specialists.
- 6. Technical specification document according to BMKG format.

### f. Schedule of activities

Activities will be carried out within 3 (three) months, from the signing of the contract with the following details:

		Months		
No.	Activity	1	2	3
1	Mobilization of individual consultants/specialists			
2	Infrastructure design and inventory need Communication Infrastructure Network Development and Communication Network Lease.			

No.	Activity	Months		
		1	2	3
3	Assistance in the implementation of the Communication			
	Infrastructure Network Development and Communication			
	Network Lease.			
4	Carry out monitoring and evaluation of activities			
5	Activity Report			