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**Bids and Awards Committee (BAC) Resolution Recommending Resort to
Alternative Method of Procurement through Direct Contracting pursuant to
Section 50 of the Revised IRR (R.A. 9184) and Recommending Approval**

Resolution No. 2018-037

WHEREAS, the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) through the Engineering and Technical Services Division (ETSD), the responsible Division, is desirous for the **Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays (hereinafter, "Project")**; and intends to apply its **Approved Budget Contract (ABC), in the amount of THIRTY SEVEN MILLION FIVE HUNDRED THOUSAND PESOS ONLY (Php37,500,000.00), under Purchase Request No. 2018-09-0656;**

WHEREAS, by virtue of its mandate and functions provided for under the procurement law including its revised implementing rules and regulations (IRR), the PAGASA-BAC carefully examined and scrutinized the purpose, nature and scope of services of the instant project upon receipt of the end-user unit's proposal thereto;

WHEREAS, after a careful examination, evaluation and scrutiny of the above project proposal, the PAGASA-BAC determined that the Project requirements and the scope of services required therein, including the determination of the Approved Budget for the Contract are in order;

WHEREAS, for and in consideration the necessity for the provision of Full Upgrading of Tagaytay C-band Dual Polarization Weather Doppler Radar which is one of the state-of-the-art equipment and powerful tool that provide real time an accurate observation of atmospheric parameters such as rainfall intensity, wind speed and direction. This equipment is utilizing for the major products and services that PAGASA provided in weather forecasting/now casting and tropical cyclone warning to: (1) identify and give the exact location of the tropical cyclone center within the effective radius; (2) as part of Rainfall Warning System (RWS), formulate and issue color-coded heavy rainfall warning and thunderstorm advisory; and (3) provide trend forecast in Aviation Meteorological Services. On the other hand, in flood forecasting, the quantitative estimates of rainfall intensities are use in the formulation of flood advisories. However, due to its 24/7 operating hours, wear and tear is inevitable. Thus, a replacement of some parts that are outdated such as: signal processor ENIGMA III; radar control unit; antenna motion controller and servo amplifiers including the motor/gearbox assembly is very much necessary and important to ensure continuous operation of the equipment;

WHEREAS, the PAGASA-BAC determined **Constructicons, Inc.**, a corporation existing under the laws of the Philippines, as the authorized partner and representative of **Enterprise Electronics Corporation (EEC)**, the manufacturer and supplier of the above-mentioned equipment, within the Philippines, more particularly on matters pertaining to C-band Dual Polarization Weather Doppler Radar of PAGASA.

WHEREAS, the PAGASA-BAC finds merit and legal basis to recommend the resort to alternative method of procurement through Direct Contracting under Section 50 of the revised IRR (R.A. 9184).

NOW, THEREFORE, for and consideration of the foregoing, We the Members of the PAGASA Bids and Awards Committee, hereby **RESOLVE** as it is hereby **RESOLVED**:

- a) To **RECOMMEND**, the Agency's Full Upgrading of Tagaytay C-band Dual Polarization Weather Doppler Radar;
- b) To **RECOMMEND**, further, the compliance with the Procurement Law and its IRR, the procurement procedures on the resort to **Alternative Method of Procurement through Direct Contracting pursuant to Section 50 of the Revised IRR of R.A. 9184**, shall be undertaken; and,
- c) To **RECOMMEND**, further, that, **Enterprise Electronics Corporation (EEC)** or its duly authorized local partner and representative in the Philippines, i.e. **Constructicons, Inc.** be considered and directly invited to in the said process; and,
- d) To **RECOMMEND**, finally, for the approval of the foregoing findings and recommendations.

RESOLVED, this **26th of September 2018** at the Office of the Deputy Administrator, Administration & Engineering Services Conference Room, 4th Floor, PAGASA Main Building, Science Garden Complex, BIR Road, Diliman, Quezon City.


EDWIN F. MANRESA
Interim Member/End-user


CESAR A. RAMOS
Member


JESSIE B. ARCE
2ND Vice-Chairperson


JOEL C. RIVERA
Member

EDNA L. JUANILLO
1ST Vice-Chairperson


Engr. CATALINO L. DAVIS
Chairperson

APPROVED/DISAPPROVED:


VICENTE B. MALANO, Ph.D.
Administrator

Approved on _____



NOTICE OF AWARD

**JOINT VENTURE PARTNERSHIP OF CONSTRUCTICONS INC.
 And ENTERPRISE ELECTRONICS CORPORATION**

Unit B&C 17th Floor, Petron Mega Plaza Bldg.,
 358 Sen. Gil Puyat Ave., Salcedo Village Makati City
 Tel# 556-7753 / 828-3098
 E-mail Add: montanojrep@gmail.com

Thru: MR. EUSEBIO P. MONTANO, Jr
 Sales Manager and Authorized Representative

Sir/Madame:

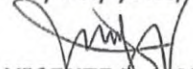
We are pleased to notify you that the PAGASA Management has approved the award to your firm the contract for the **"Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays (PR No. 2018-09-0656)** in the total calculated amount of **THIRTY SEVEN MILLION FIVE HUNDRED THOUSAND PESOS (Php37,500,000.00) ONLY.**

You are therefore requested to accept and conform to this award by affixing your signature hereunder and provide within **ten (10) calendar days**, from receipt hereof, the requisite performance security in any of the following forms:

Form of Performance Security	AMOUNT (Equal to Percentage of the Total Contract Price)	
<ul style="list-style-type: none"> Cash or Cashier's/Manager's check, Bank Draft/Guarantee confirmed by a Universal or Commercial Bank. Irrevocable letter of credit issued by a Universal or Commercial Bank. 	5%	Php1,875,000.00
<ul style="list-style-type: none"> Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security. 	30%	Php11,250,000.00

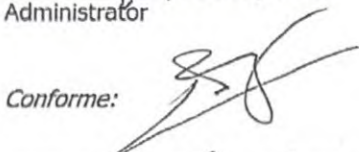
Failure to provide the performance security shall constitute sufficient ground for cancellation of the award and forfeiture of the bid security.

Very truly yours,



VICENTE B. MALANO, Ph.D.
 Administrator

Conforme:



Date:

3/8/19

"tracking the sky....helping the country"

Postal Address: P.O. Box 3278 Manila • Tel No. (63-2) 929-4865 / 434-9040 • Fax No. 929-4865



**Bid and Awards Committee (BAC) Resolution Declaring Award and Acceptance
of Lowest Price Quotation and Recommending Approval**

Resolution No. 2018-088

WHEREAS, the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), through the PAGASA Bids and Awards Committee, by virtue of **BAC Resolution No. 2018-037**, series of 2018, posted the **Notice to Bidders (NTB) on 09 October 2018** at the PAGASA Website, the G-EPS and PAGASA Bulletin Board, notifying all interested bidders of the Agency's **resort to Alternative Method of Procurement through Direct Contracting** under **Rule XVI, Section 50** of the Revised IRR of R.A. 9184, for the procurement of the following goods and services, with their corresponding Approved Budget for the Contract (ABC), to wit:

PARTICULARS	ABC	Reference (PR No)
Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays	Php37,500,000.00	2018-09-0656

WHEREAS, the **JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION**, a corporation duly established under the laws of Philippines and determined by the Committee as the duly **authorized supplier and distributor** of the above-mentioned project, has been duly invited to participate in the procurement process thereof and submit its lowest price quotation in connection with the aforementioned Project;

WHEREAS, in response to said invitation, **JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION**, accepted the invitation and on **15 November 2018**, the schedule for the submission of the tender documents for the Project, timely submitted its price quotations and other pertinent documents in accordance with the specific requirements of the Project; and the same was accepted by the PAGASA Bids and Awards Committee, having complied with the preliminary evaluation of bids. Its price quotation for the implementation of the Project is summarized as follows:

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Name of Bidder	Price Quotation (As "Read")
JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION	Php37,500,000.00

WHEREAS, the report on the detailed evaluation of bids conducted by the TWG resulted in the following:

Name of Bidder	Price Quotation (As "Calculated")
JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION	Php37,500,000.00

[Handwritten signatures and initials on the left margin]

WHEREAS, upon careful examination, validation and verification of **JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION** tender documents, including the evaluation report submitted by the TWG, the Committee has determined that, Joint Venture of Constructicons, Inc. and Enterprise Electronics Corporation has complied with all the criteria for post-qualification and was responsive on all requirements and conditions specified in the Bidding Documents; Hence, it was moved and duly concurred by the BAC Members that **JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION** lowest price quotation be accepted accordingly, thereby, recommending the award of the contract to Joint Venture of Constructicons, Inc. and Enterprise Electronics Corporation for the implementation of the above Project.

NOW, THEREFORE, for and consideration of the foregoing, We the Members of the Bids and Awards Committee, hereby RESOLVE as it is hereby RESOLVED:

- a) to **DECLARE**, the Award of the contract for the Project entitled: Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays, to JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION;
- b) to **RECOMMEND**, the acceptance of the lowest price quotation of JOINT VENTURE OF CONSTRUCTICONS, INC. AND ENTERPRISE ELECTRONICS CORPORATION for the project in the total calculated amount of **THIRTY SEVEN MILLION FIVE HUNDRED THOUSAND PESOS ONLY (Php37,500,000.00)**;
- c) to **RECOMMEND**, finally the **APPROVAL** of the foregoing findings and recommendations.

RESOLVED this 08th Day of February 2019 at the Amihan Conference Room, 2nd Floor PAGASA Main Building, Science Garden Complex, Agham Road, Diliman, Quezon City.


EDWIN F. MANRESA
Interim Member/End-user

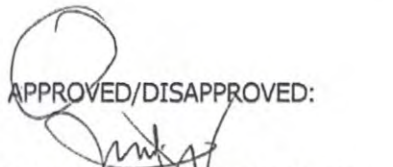

JOEL C. RIVERA
Member


EDNA L. JUANILLO
1st Vice-Chairperson

(on leave)
CESAR A. RAMOS
Member


Engr. JESSIE B. ARCE
2nd Vice-Chairperson


Engr. CATALINO L. DAVIS
Chairperson

APPROVED/DISAPPROVED:

VICENTE B. MALANO, Ph.D.
Administrator
Approved on _____



Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
Philippine Atmospheric, Geophysical and Astronomical Services
Administration (PAGASA)

NOTICE TO PROCEED

**JOINT VENTURE PARTNERSHIP OF CONSTRUCTICONS INC. and
ENTERPRISE ELECTRONICS CORPORATION**

Unit B&C 17th Floor, Petron Mega Plaza Bldg.
358 Sen. Gil Puyat Ave., Salcedo Village, Makati City
Email Add: montanojrep@gmail.com

Thru: Mr. EUSEBIO P. MONTANO, Jr.
Sales Manager and Authorized Representative

Sir:

The attached **Contract** (Reference No. CT 2019-012) having been approved, notice is hereby given to your firm that, delivery of the goods and other ancillary services may proceed for the Project entitled: **"Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays"** (Reference: PR No. 2018-09-0656 / IB No. 2018-003DC), effective upon receipt of this Notice.

You are therefore responsible for performing the services under the terms and conditions of the Contract and in accordance with the Implementation Schedule.

Please acknowledge receipt and acceptance of this notice by signing both copies in the space provided below. Keep one copy and return the other to PAGASA.


Very truly yours,


VICENTE B. MALANO, Ph.D.
Administrator *fbk*

I hereby acknowledge receipt of this Notice on

June 10, 2019
(date of receipt)

Name of Representative of the Bidder: GEORGE G. GOLY

Authorized Signature: 

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Science Garden Compound, BIR Road, Brgy. Central, Quezon City,
Metro Manila, Philippines 1100
Postal Address: P.O. Box 3278 Manila

Tel. Nos. (632) 929 48 65; (632) 434 90 40
Fax: (632) 929 48 65
Website: <http://bagong.pagasa.dost.gov.ph>



Contract ID No. : *CI 2019-012*
 Contract Name : **Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays**
 Location of Project : **Tagaytay**

CONTRACT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This contract is entered into on this _____ day of _____ 2019 by and between:

The **PHILIPPINE ATMOSPHERIC, GEOPHYSICAL AND ASTRONOMICAL SERVICES ADMINISTRATION (PAGASA)**, a government agency, under the Department of Science and Technology with principal office located at PAGASA Science Garden Complex, BIR Road, Diliman, Quezon City, represented herein by **DR. VICENTE B. MALANO**, in his capacity as Administrator, hereinafter referred to as "**PAGASA**";

- and -

The Joint Venture of **CONSTRUCTICONS, INC.**, a domestic corporation duly organized and existing under and by virtue of the Corporation Code of the Philippines; and **ENTERPRISE ELECTRONICS CORPORATION**, a foreign corporation duly organized and existing under the laws of United States of America and duly licensed in accordance with the corporation code of the Philippines and the Foreign Investment Act of 1991 with principal address at Unit B & C 17f Petron Mega Plaza, 358 Sen. Gil Puyat, Salcedo Village, Makati City, represented in this Contract by **MR. EUSEBIO P. MONTANO, JR.**, in his capacity as the joint venture's authorized and designated representative, hereinafter referred to as the **SUPPLIER**.

WITNESSETH THAT:

WHEREAS, PAGASA Bids and Awards Committee (PAGASA-BAC) in its Resolution No. 2018-036, recommended resort to alternative method of procurement through Direct Contracting pursuant to Section 50 of the Revised Implementing Rules and Regulation of RA9184 of certain goods and ancillary services, viz: Full Upgrading of Tagaytay C-band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays: PR No.2018-09-0656 / IB No. 2018-003DC, hereinafter referred to as "**PROJECT**" and the same is duly approved by the Head of the Procuring Entity.

WHEREAS, the SUPPLIER offered to provide the above goods and services required by **PAGASA** and has complied with all the requisite Eligibility, Technical and Financial submissions, in accordance with the specific requirements of the **Project** and with the provisions of Republic Act No. 9184, *otherwise known as* The Government Procurement Reform Act and its Implementing Rules and Regulations (IRR);

WHEREAS, after a careful and detailed evaluation and deliberation of the SUPPLIER's submitted proposals, the PAGASA-BAC, by virtue of **BAC Resolution No. 2018-088, series of**

Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguides and Cable Trays

2018, has concluded the said public bidding and declaring the award of Contract for the Implementation of the Project to the SUPPLIER and recommend the acceptance of its lowest price quotation.

WHEREAS, the **SUPPLIER**, upon receipt of the Notice of Award, has accepted the same in writing; has complied with the issuance of a Performance Security within the prescribed period; and, has represented itself to be qualified to undertake the Project in accordance with the Terms and Conditions set forth in this Contract and with the Terms of Reference for the Project;

WHEREAS, the following documents shall be deemed to form and be read and construed as part of this Agreement, *viz.*:

- Attachment (a) the Invitation to Bid (ITB);
- Attachment (b) the Instructions to Bidders;
- Attachment (c) the General and Special Conditions of Contract;
- Attachment (d) the Terms of Reference including the Technical Specifications;
- Attachment (e) the Bid Data Sheet (BDS);
- Attachment (f) Addendum and/or Supplemental/Bid Bulletins, *if any*;
- Attachment (g) the Eligibility and Technical Documents submitted by the SUPPLIER; *including*, the Bid Security, the Schedule of Requirements, the SUPPLIER's Conformity with the Technical Specifications, and brochures and other related literatures;
- Attachment (h) the SUPPLIER's technical proposals for the Project;
- Attachment (i) the Bidding Form and the Price Schedule submitted by the SUPPLIER;
- Attachment (j) the Additional Bidding Documents/Requirements, as required;
- Attachment (k) the Evaluation Report submitted by the TWG;
- Attachment (l) the PAGASA-BAC Resolution No. 2018-088, *s. 2018*, Recommending Award;
- Attachment (m) the Abstract of Bids, ("as READ" and "as CALCULATED");
- Attachment (n) the Notice of Award (NOA) of Contract and the SUPPLIER's conforme thereto;
- Attachment (o) the Minutes of Meeting;
- Attachment (p) the Performance Security;
- Attachment (q) the Supplier's duly notarized Joint Venture Agreement (JVA);
- Attachment (r) Approved Documents (Technical Description, Equipment Specification, Drawings, Schedule, etc.); and
- Attachment (s) Other contract documents as may be deemed necessary by the Parties.

The aforementioned shall collectively be referred to as "**Contract Documents.**"

WHEREAS, in this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract and the Terms of Reference (TOR) respectively referred to in **items (c) and (d)** of the immediately foregoing **Clause**.

NOW, THEREFORE, for and in consideration of the above premises and the undertakings set forth, the parties hereto shall mutually comply and agree as follows:

ARTICLE I. SCOPE OF THE CONTRACT

The **SUPPLIER**, for and in consideration of a sum of money to be paid by **PAGASA**, agrees to deliver in favor of **PAGASA**, Full Upgrade of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguides and Cable Trays, including Factory and On-Site Training

for PAGASA Radar Operators, Engineers and Technicians and furnish all labor, materials, equipment, tools and other facilities necessary for the satisfactory and faithful performance of all the works and services for the **Project**.

The works and services contemplated in this Contract shall consist of the following:

A. Scope of Works Contents

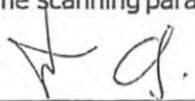
a. The Scope of work to be covered under the project between PAGASA and the Contractor are shown hereinafter;

1. Equipment and Parts for Full Upgrade

- 1.0.1 New servo amplifier assembly to replace SMC 3010 controller with new motor/gearbox assembly.
- 1.0.2 IQ2 upgrade, remove/replace ENIGMA3+ and install brand new digital signal processor.
- 1.0.3 New rack assembly
- 1.0.4 Includes IQ2 digital processor and IFD/MRP
- 1.0.5 Rackmount UPS
- 1.0.6 Updated RCU computer
- 1.0.7 New LCD KVM switch
- 1.0.8 Receiver upgrade components (new digital STALO, filters, mixers, amplifiers)
- 1.0.9 Full EDGE 6 package with new workstations includes Host and Remote with Perpetual License
- 1.0.10 Installation services, integration and testing.
- 1.0.11 System alignments and calibration.
- 1.0.12 Comprehensive maintenance of existing antenna and pedestal.
- 1.0.13 Full replacement of waveguides and accessories including installation of waveguide raceways. Materials should be corrosion-resistance (type 316 stainless steel) particularly from the atmospheric oxidation of sulfur dioxide.
- 1.0.14 Full replacement of raceways, broken fitting and conduits on the antenna down to the radar room. Materials should be corrosion-resistance (type 316 stainless steel).
- 1.0.15 Two engineers on site, one (1) mechanical and (1) electrical/electronic engineer.

1.1 Radar Software (EDGE6) with Perpetual License

- 1.1.1 Perpetual licenses of all radar workstation's software shall be supplied upon full payment to supplier's local partner.
- 1.1.2 All workstations must be able to generate, process, and display complete features of meteorological products and volume corrections including extended and optional products.
- 1.1.3 Must have utilities for configuration and maintenance of the system including ASCOPE visualization, Sun Tracking for antenna alignment, and radar calibration.
- 1.1.4 Network workstation must be able to display and monitor in real time the parameters of the built in test equipment (BITE) of the radar system.
- 1.1.5 Authorized users of network workstations must be able to control the radar and configure radar volume scanning parameters.



- 1.1.6** Customizable geographic display maps and text annotation.
- 1.1.7** Auto conversion to BUFR, HDF5, XML, ASCII, UF, NetCDF formats.
- 1.1.8** Auto export to GIF, PNG, JPG, BMP to another system over the network.
- 1.1.9** Capable of compositing data including data from other radar system. Must have ability to automatically remap and combine data from other radar data format.
- 1.1.10** Google Earth Map interface for automatic display of radar images.
- 1.1.11** Meteorological Products and Radar Volume Corrections
 - 1.1.11.1** Sea Clutter Detection and Correction
 - 1.1.11.2** Bright Band Correction
 - 1.1.11.3** Vertical Profile Correction
 - 1.1.11.4** Occultation Correction
 - 1.1.11.5** Standard Meteorological Products - PPI, RHI, CAPPI, ECHO TOP, ECHO BASE, ECHO THICKNESS, LAYER, MAX
 - 1.1.11.6** Extended Meteorological Products - Base Reflectivity, Multi PPI Display, Velocity Azimuth Display, Uniform Wind Technique (UWT), Severe Weather Analysis Display (SWAD)
 - 1.1.11.7** Hydrological Product - Vertically Integrated Liquid (VIL), Point Rainfall Total (PRT), Precipitation Accumulation (PAC), Rainfall Intensity Histogram, Surface Rainfall Intensity (SRI)
 - 1.1.11.8** Forecasting and Warning Products - Rain Tracking (RTR), Centroid Tracking (CTR)
 - 1.1.11.9** Aviation Products - Wind Shear Detection, Layer Turbulence
 - 1.1.11.10** Sensor & Data Integration - Satellite Image Integration, Rain Gauge Data Integration

1.2 Communication and Data Archiving

- 1.2.1** The radar communication system must be able to adapt to TCP/IP communication protocol.
- 1.2.2** Capable for automatic archiving of RAW data and selected products or converted products to a network attach storage (NAS) or other network computers.

1.3 Computing Facilities –Suitable for 24x7 mode of operation.

- 1.3.1** Three (3) CPU's - Upgrading of Host (a8650-rackmount) and remote (b8650 and c8650-desktop) Workstations
 - 1.3.1.1** Processor Latest technology
 - 1.3.1.2** Motherboard Latest technology

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1.3.1.3	Main Memory	8 GB
1.3.1.4	Hard Disks	Two (2) 2TB – in RAID1
1.3.1.5	Optical Drive	DVD R/RW
1.3.1.6	Graphics	High performance latest model
1.3.1.7	Network Cards	Two (2) gigabit Ethernet ports

- 1.3.2** Displays for Desktop Two 22" LED monitor
- 1.3.3** LCD KVM switch Appropriate specifications
- 1.3.4** Operating System Linux
- 1.3.5** UPS Backup time of 15 min. with AVR
- 1.3.6** EDGE6 Maintenance laptop - latest laptop computer model

1.4 Installation/Upgrading

- 1.4.1** Prior or during the upgrading/installation of new parts, the vendor is required to perform comprehensive maintenance of antenna and pedestal.
- 1.4.2** Full calibration/alignment of the whole system including the existing antenna and pedestal will be required.
- 1.4.3** Installation at site is the responsibility of the supplier, however PAGASA has the right to reject and disapproved inappropriate materials and installation method that can affect or might damage PAGASA properties.
- 1.4.4** All materials, tools and equipment for installation work shall be provided by the supplier.
- 1.4.5** Workmanships should also be approved by PAGASA.

1.5 Local Trainings

- 1.5.1** Comprehensive EDG6 software trainings for five (5) working days for ten (10) participants. Training includes software operation, data interpretation and analysis to be held at PAGASA central office. Expenses for meals and refreshments shall be borne by the supplier.
- 1.5.2** Comprehensive on-site hardware trainings for five (5) participants for five (5) days. Training includes operation troubleshooting, measurements and calibration. All expenses including transportation, lodging, and daily allowance of PHP 800.00 per day of each participants shall be borne by the supplier. Training expenses should be specified on item. 6.5 of the Terms of Reference

1.6 System Documentations

- 1.6.1** Two (2) sets (with e-copy) of manuals for installation, operation and maintenance of all the equipment to be supplied. Complete and detailed schematic diagrams, theory of operations, and calibration and maintenance procedure shall be included.
- 1.6.2** Schematics diagrams (with e-copy) of the whole radar system and parts in standard engineering format.
- 1.6.3** Original Equipment Manufacturer's model number, serial number and

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[Handwritten initials]

[Handwritten signature]

specification of individual radar system's parts and accessories to be supplied.

1.7 Site Acceptance Testing

1.7.1 Shall include a detailed tests and calibration procedures that shall be demonstrated by the supplier and validated by PAGASA engineers and technician during SAT.

1.8 System Commissioning

1.8.1 After the site acceptance test, the radar system shall be tested further for reliability and endurance by completing the 30 days continuous operation.

**ARTICLE II.
CONTRACT DURATION AND EFFECTIVITY**

This Contract for the Full Upgrading of Tagaytay C-Band Dual Polarization Weather Doppler Radar and Replacement of Waveguide and Cable Trays shall be for a period of **six (6) months** and shall immediately commence when the following conditions have been complied with:

- 1) When the herein Contract has been signed and approved by duly authorized representatives of both **Parties** and duly notarized; and,
- 2) Upon receipt by the **SUPPLIER** of the Notice to Proceed (NTP) from **PAGASA**.

**ARTICLE III.
CONTRACT PRICE / PAYMENT SCHEDULE**

For and in consideration of the fulfillment of all the terms and conditions of this Contract and consistent with the government accounting and auditing rules and regulations, **PAGASA** shall pay the **SUPPLIER**, in Philippine Currency, the total amount of **THIRTY SEVEN MILLION FIVE HUNDRED THOUSAND (P37,500,000.00) ONLY** (hereinafter, "**Contract Price**") as bid price offered by the **SUPPLIER**, inclusive of the Value Added Tax (VAT).

Furthermore, the **Parties** agree that the total Contract Price specified above shall be fully paid only upon final inspection and acceptance of the **Project** by **PAGASA** in favor of the **SUPPLIER**, which final inspection and acceptance shall be timely and reasonably issued.

**ARTICLE IV.
PERFORMANCE SECURITY**

The **SUPPLIER** shall post a Performance Security payable to the **PAGASA**, upon signing of the contract and/or receipt of the Notice of Award, whichever comes first, in the form of cash, certified check, cashier's or manager's check, bank draft/guarantee confirmed by a reputable local bank, irrevocable letter of credit issued by a reputable commercial bank; surety bond callable upon demand issued by any reputable surety or insurance company duly accredited by the Philippine Insurance Commission or a combination of the foregoing in accordance with the following schedules:

Form of Performance Security	Amount of Performance Security (Equal to Percentage of the Total Contract Price)
1. a) Cash or cashier's/manager's check, bank draft/guarantee confirmed by a Universal or Commercial Bank	Five percent (5%)

2. b) Irrevocable letter of credit issued by a universal or Commercial Bank	
3. c) Surety bond callable upon demand; and/or,	Thirty percent (30%)
4. d) Any combination of the foregoing.	Proportionate to share of form with respect to total amount of security

The performance bond must be **callable upon demand and valid until the system has been completely delivered, installed, tested, commissioned, inspected and accepted by the PAGASA and which shall be withdrawn only upon submission of warranty bond for the fulfillment of all the warranties in the project.**

**ARTICLE V.
RETENTION MONEY**

The total billing submitted by the **SUPPLIER** will be subject to retention of ten percent (10%) referred to as the "**retention money**".

The "retention money" shall be due for release upon final acceptance of the works. The **SUPPLIER** may, however request for the substitution of the retention money for each progress billing with irrevocable standby letter of credit from a commercial bank, bank guarantees or surety bonds callable upon demand, of amounts equivalent to the retention money substituted for and acceptable to the **PAGASA**; *Provided, that,* the **Project** is on schedule and is satisfactorily undertaken. Otherwise, the ten percent (10%) retention shall be made. Said irrevocable standby letter of credit, bank guarantee and/or surety bond, to be posted in favor of the **PAGASA**, shall be valid for a duration to be determined by the **PAGASA** and will answer for the purpose for which the ten percent (10%) retention is intended *i.e.* to cover uncorrected discovered defects and third party liabilities.

**ARTICLE VI.
DELIVERY TERMS AND CONDITIONS**

The **Parties** herein agree that the following terms and conditions shall be observed on the delivery of the radar system, its accessories and peripherals:

- 1) The **SUPPLIER** shall deliver full upgrade of the radar hardware and software. It is the supplier's responsibility to assess the condition of the existing radar, plan appropriate modifications and **provide necessary materials particularly on the replacement of waveguides**. All materials and workmanship shall be warranted as stated in the warranty provision of the Contract.
- 2) The **SUPPLIER** shall upgrade the radar with a brand new components and accessories. No refurbished equipment or parts will be allowed in the system.
- 3) Terms and Conditions written under Technical Specifications shall also be applied.
- 4) That, all items furnished under this Contract must be Cost, Insurance and Freight (CIF)-**PAGASA-Central Office, Science Garden Complex, Agham Road, Diliman, Quezon City, Philippines**. The **SUPPLIER** shall undertake the transportation of the radar system/equipment at the project site and all risks in this transportation shall be assumed by the **SUPPLIER**.
- 5) That, the delivery, installation, testing and commissioning of the equipment/system at the project site shall be made by the **SUPPLIER** in the presence of **PAGASA's** Project Monitoring Committee (PMC).
- 6) That, all site preparations incidental to the installation such as antenna/radome base footing preparation, cable trenches/trays and other related installation works shall be at the expense of the **SUPPLIER**.
- 7) That, the shipment of the radar equipment including its accessories described in **Article I** of this Contract shall be made on-site at the expense of the **SUPPLIER**.

- 8) That, the radar equipment shall be packaged in accordance with best commercial standards for air or sea freight, as the case may be.

**ARTICLE VII.
TITLE AND RISK OF LOSS**

The **SUPPLIER** shall be responsible for all risks and shall bear the cost of all necessary insurance on the equipment and other related equipment until such equipment shall have been finally accepted by **PAGASA**. It is understood that title and ownership of all equipment called for in this Contract shall be vested to **PAGASA** only upon final acceptance and payment thereof.

**ARTICLE VIII.
DELIVERY OF SERVICES AND EXTENSION OF TIME**

In the event that the performance of this Contract, or any obligations hereunder, is prevented, restricted, or interfered with by reason of: fire, earthquake, explosion or other casualty or accident or act of God; strikes or labor disputes, war or other violence; order, proclamation, regulation, ordinance; demand or requirement of any governmental authority; or any other act or condition which are beyond reasonable control of the affected Party, the Party so affected shall duly notify the other Party in writing.

Appropriate time extension may be granted in favor of the **SUPPLIER**; *Provided, that*, the **SUPPLIER** shall take all reasonable steps to avoid or remove such cause of non-performance and shall resume performance hereunder with dispatch whenever such causes are removed.

Extensions of the time may also be granted as mutually agreed upon by both **Parties** for any reasonable and valid causes.

For purposes of this Contract, *force majeure* or fortuitous events are those causes that are beyond its reasonable control, including but not limited to action of the elements, extreme weather conditions, fires, floods, sabotage and the like.

**ARTICLE IX.
SECURITY OF THE EQUIPMENT AND PERSONNEL**

The **SUPPLIER**, with the assistance of **PAGASA**, shall coordinate with concerned provincial or municipal government units for assistance on matters involving the security of the equipment and for the safety and unhampered movement of its personnel during installation phase.

PAGASA shall allow the **SUPPLIER** to assign its own security personnel from the time of delivery of equipment to installation and commissioning of the system.

**ARTICLE X.
LIQUIDATED DAMAGES**

It is understood that time is an essential component of this Contract and that upon its failure to complete the said contract within the period stipulated herein, **SUPPLIER** shall pay **PAGASA** liquidated damages in the amount equivalent to one-tenth (1/10) of one percent (1%) of the unperformed portion of contract price for each calendar day of delay.

PAGASA does not have to prove that it has incurred actual damages in claiming for liquidated damages.

Such amount shall be deducted from any money due or which may become due the **SUPPLIER** under the Contract and/or collect such liquidated damages from the retention money or other securities posted by the **SUPPLIER** whichever is convenient to the procuring entity.

In the event that the delay in the completion of the work exceeds a time duration equivalent to ten percent (10%) of the specified contract time plus any time extension duly

granted to the **SUPPLIER, PAGASA** may rescind the Contract, forfeit the **SUPPLIER's** performance security and takeover the prosecution of the Project or award the same to a qualified contractor through negotiated contract.

Such other provisions on liquidated damages under Annex "E" of R.A. 9184 and its IRR shall likewise be implemented

ARTICLE XI.
WARRANTY and AFTER SALES SERVICE

The **SUPPLIER** warrants that it shall strictly conform to all the Terms and Conditions set forth in this Contract. Specifically, the **SUPPLIER** warrants:

1. All workmanship, system parts, accessories, other materials and equipment and services shall be warranted by the **SUPPLIER** for two (2) years. The **SUPPLIER** shall be required to post a warranty bond in any acceptable form under the procurement law in order to assure that manufacturing defects will be corrected within the warranty period.
2. During the warranty period, any workmanship, system parts, accessories, other materials and equipment that fails to provide satisfactory operation shall be immediately replaced at the **SUPPLIER's** expense.
3. The repair of any defective material or equipment may be permitted; provided, however, that the item/s being repaired is/are restored to its/their original specifications.
 - a. Upon receipt and acknowledgment of PAGASA's report of such defect or problem, the **SUPPLIER** warrants that it shall take the necessary remedial action/s within seven (7) calendar days or any specified period acceptable to PAGASA. Failure on the part of the **SUPPLIER** to take appropriate action within the specified period shall render the **SUPPLIER** liable for penalty using the following formula: warranty bond 730 calendar days (2 years) x number of days of delay. Said penalty shall be charged against any collectible amount by the **SUPPLIER** to PAGASA or shall be deducted from the warranty bond posted by the **SUPPLIER** in favor of PAGASA.
 - b. The warranty for parts and services shall be TWO (2) YEARS ON-SITE on Doppler Weather Radar System. Two (2) visits for preventive and corrective maintenance are required for each radar units on the duration of warranty. The warranty service begins after the site acceptance test (SAT);
 - c. The **SUPPLIER** shall provide a clear written warranty describing the type of warranty PAGASA required.
 - d. The supplier will be required to provide warranty certificate from the OEM of the goods.
 - e. Customs charges, if any, for re-export/re-import of defective parts/repairs etc. shall be borne by **SUPPLIER** only.
 - f. Transportation cost for sending defective parts for repairs and sending back repaired or replaced one to radar site, shall be borne by supplier itself.
 - g. Other condition under warranty clause of "Technical specifications" section shall also be applicable.
 - h. Complete schematic diagrams of whole radar system and accessories particularly those not provided by the supplier/manufacture under section of Systems Documentations must be turned over to PAGASA after the warranty period and before the issue of the final acceptance of the radar system.

This shall include:

- i. Lists of recommended spare parts with price schedule valid for the next five years. Parts shall include SSPA, modulator, and power supply, TR-limiters, signal processor and receiver components. Mean Time Between Failure (MTBF) of individual recommended spare parts shall be indicated.
 - ii. List of major parts with corresponding price in foreign currency (Euro or US dollar) valid for five (5) years without price increase.
- i. Emergency Repairs (Radar System and accessories)
 - j. Priority Level-1 (Problems which caused the Weather Radar Operation to stop. Unable to perform normal observation).
 - i. Response Time -Within 48 hours from the time the fault/problem is reported. Mobilization might be affected by severe weather condition which might cause cancellation of flight, delay, etc.
 - ii. Repair Time
Within 3 days starting from maintenance team arrives at site provided parts are available for the repair.
Within 10 days after required parts are identified (if parts are not available on site).
 - k. Priority Level -2 (Observation is possible, but minor problem is occurring).
 - i. Response Time - On the scheduled maintenance time.
 - ii. Repair Time
During the scheduled maintenance time provided parts are available for repair.

Within 10 days after required parts are identified (if parts are not available on site).

Provision of service unit is required to provisionally replace the defective parts until such time that it was repaired.

- i. The SUPPLIER shall include in its bid a commitment for a dependable long term support for ten (10) years to PAGASA for the repair and maintenance of the radar system to be supplied.
 - m. It shall include in its commitment a provision of a reliable, swift and efficient on-site support and ensure a quick and readily available supply of spare and replacement parts.
4. That, the warranty for parts and services shall be TWO (2) YEARS ON-SITE on Doppler Weather Radar System. The warranty service begins after the site acceptance test. (SAT)
 5. That, the **SUPPLIER** shall provide a clear written warranty describing the type of warranty PAGASA required.
 6. All goods to be supplied should be free from all defects and faults in material workmanship and manufacture. They should be of the highest grade and consistent with the established and generally accepted standards for material of the type used and in full conformity with the specifications, drawings, or samples and shall operate properly.
 7. The supplier will be required to provide warranty certificate from the OEM of the goods.

8. Custom charges if any, for re-export/re-import of defective parts/ repaired parts or replaced parts to the foreign supplier country for repairs etc. shall be borne by **SUPPLIER** only.
9. Transportation cost for sending defective parts for repairs and sending back repaired or replaced one to radar site, shall be borne by **SUPPLIER** itself.
10. Other condition under warranty clause of "Technical Specification" section shall also be applicable.
11. Complete schematic diagrams of whole radar system and accessories particularly those not provided by the supplier/manufacturer under System Documentations must be turn over to PAGASA after the warranty period and before the issue of the final acceptance of the radar system.
12. Shall include lists of recommended spare parts with price schedule valid for the next five years. Parts shall include magnetron, modulator, and power supply, TR limiters, signal processor and receiver components. The Mean Time Before Failure of individual recommended spare parts shall be indicated.
 - a. Shall include list of major parts with corresponding price in foreign currency (Euro or US dollar) valid for five (5) years without price increase.
13. The BID price is INCLUSIVE OF VAT/EVAT, CUSTOM DUTIES, TAXES
14. Terms of payment – After acceptance and commissioning.

For this purpose, the **SUPPLIER** shall post a **warranty security** for the period of **two (2) years** (the "**Warranty Period**") to ensure that all manufacturing defects may be corrected within the specified period. The obligation for the warranty shall be covered by either a **retention money** in the amount equivalent to **at least ten percent (10%) of the total contract price** or a **special bank guarantee equivalent to at least ten percent (10%) of the total contract price**.

The said amount shall only be released only after the lapse of the warranty period. *Provided, however, that,* the material/equipment supplied are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

The two-year warranty period on all system parts, accessories, paraphernalia and services shall commence upon the issuance of the final acceptance by **PAGASA**.

The **Parties** agree that, during the effectivity of the warranty period, any problem or material defect that may arise or discovered shall be duly and timely reported by **PAGASA** with the **SUPPLIER** or its duly authorized representative/s. The **SUPPLIER** or its duly authorized representative/s shall respond and take appropriate remedial action within **seven (7) calendar days** upon receipt of the **PAGASA** report.

In the event, however, that the **SUPPLIER** fails to take action within the specified period, the **SUPPLIER** will be charged with a penalty of an equivalent amount to be deducted from the warranty bond. The computation shall be made as follows:

$$\text{Penalty} = \frac{\text{warranty bond}}{730 \text{ c.d.}} \times \text{no. of days of delay}$$

In the case of equipment and peripherals ("**third party equipment**") other than the Doppler Weather Surveillance Radar (DWSR) System, the following warranty periods shall be provided by the **SUPPLIER**:

For all local equipment, the **SUPPLIER** shall provide **PAGASA** with a standard warranty period, based on the recommended offers by the third party **SUPPLIERS**/manufacturers and shall commence after final acceptance by the **PAGASA**.

For all imported equipment, the **SUPPLIER** will require Certificates of Compliance and two (2) years Warranty, as the case may be, from all sub-system manufacturers and agrees to make such Certificates/Warranty to be made in favor of the **PAGASA**.

**ARTICLE XII.
OWNERSHIP OF DOCUMENTS AND NON-DISCLOSURE OF INFORMATION**

Upon acceptance by **PAGASA** of the **Project**, its components, parts and all products, product samples and specifications, data ideas, technology, plans, drawings, designs and technical and non-technical materials, all or any of which may be derived from any of the foregoing (all of which, individually and collectively, referred to as "Proprietary Information") are confidential and proprietary, the ownership of which shall transfer to **PAGASA** upon acceptance by **PAGASA** of the **Project**.

SUPPLIER agrees to hold the Proprietary Information in strict confidence. **SUPPLIER** further agrees not to reproduce, transcribe, or disclose the Proprietary Information to third parties without prior written consent or approval of the **PAGASA**.

**ARTICLE XIII.
TERMINATION OF CONTRACT**

PAGASA reserves the right to terminate this Contract at any time for a valid cause, without incurring liability and without prejudice to any other right of **PAGASA**, upon the **SUPPLIER's** material default of its obligations under this Contract such as violation of the terms and conditions of this Contract, significant delay in the work schedule that is not attributable to *force majeure* or fortuitous events or any valid reason beneficial to **PAGASA**, fraud, falsification or misrepresentation in any of the documents submitted by the **SUPPLIER** during the accreditation or eligibility check and post qualification, *Provided, however, that*, notice shall first be served by **PAGASA** to the **SUPPLIER**, within ten (10) days from the default, specifying the default and giving the "**SUPPLIER**" at least thirty (30) days from receipt of the notice to remedy the default. However, if the **SUPPLIER** is adjudged by competent authority, whether final or not, to suffer any sanction for serious infractions, **PAGASA** may unilaterally terminate this Contract at any time even before expiration of thirty (30) days.

**ARTICLE XIV.
MUTUAL CONSULTATIONS AND ARBITRATION AND VENUE OF ACTION**

The **Parties** shall as often as practicable, mutually consult with each other with respect to the faithful performance of their respective obligations under this contract.

The **Parties** shall use their best efforts to promptly resolve any differences or disagreement in connection with implementation of the terms and conditions of this contract. However, in the event that any dispute cannot be resolved after mutual consultation by the parties, then such dispute(s) shall be submitted to arbitration in accordance with the provisions of Republic Act No. 876 otherwise known as the "Arbitration Law". At the option of **PAGASA**, the arbitration shall be held only in Quezon City, excluding other venues. A decision in any such arbitration shall be final and binding on the parties, unless the aggrieved party appealed by way of a petition for review to the Court of Appeals.

The **SUPPLIER** shall continue to supply, deliver, install and commission the said weather radar system and other related equipment, notwithstanding that any dispute which may have arisen between the parties is being arbitrated.

**ARTICLE XV.
VALIDITY CLAUSE**

If any term or condition of this Contract is held invalid or contrary to law, the validity of the other terms and conditions hereof shall not be affected thereby.

**ARTICLE XVI.
GOVERNING LAWS**

The governing laws of Republic Act No. 9184 otherwise known as "The Government Procurement Reform Act" and its Revised Implementing Rules and Regulations, the laws on Obligations and Contracts and other pertinent laws of the Republic of the Philippines shall govern this Contract.

**ARTICLE XVII.
NOTICE AND ADDRESSES**

All correspondences between the parties and all notices required to be given under this contract shall be deemed to have been properly given only when made in writing and sent or delivered by Registered Mail, confirmed fax or hand delivered to the parties at their following respective addresses:

For **PAGASA:** Philippine Atmospheric, Geophysical
and Astronomical Services Administration (PAGASA)
Science Garden Complex, BIR Road, Diliman
Quezon City

Attention: **DR. VICENTE B. MALANO**
Administrator
Fax No. **(02) 434-90-39**

For **SUPPLIER:** Constructicons Inc. /
Enterprise Electronics Corporation

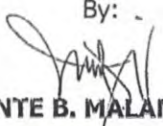
Attention: **MR. EUEBIO P. MONTANO, Jr.**
Sales Manager
Unit B&C 17th Floor, Petron Mega Plaza Bldg.
358 Sen. Gil. Puyat Ave., Salcedo Village,
Makati City
Tel./Fax No. **556-7753 / 828-3098**

IN WITNESS WHEREOF, the **Parties** hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

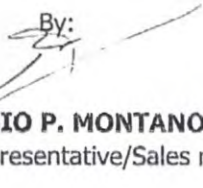
**PHILIPPINE ATMOSPHERIC, GEOPHYSICAL
AND ASTRONOMICAL SERVICES
ADMINISTRATION (PAGASA)**

**CONSTRUCTICONS INC. / ENTERPRISE
ELECTRONICS CORPORATION**

By: -


VICENTE B. MALANO Ph.D.
Administrator

By:


MR. EUSEBIO P. MONTANO, Jr.
Authorized Representative/Sales managr

Signed in the Presence of:


FLAVIANA D. HILARIO, Ph.D.
Deputy Administrator for Research and
Development


Representative for ENTERPRISE ELECTRONICS
CORPORATION

Funds Available:


BERNARD LOUISE C. DATUIN
Office in Charge Accounting Section

ORC# 2018-12-7355

1060 514000

₱ 37,500,000 -



ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
MAKATI CITY) S.S.

BEFORE ME, personally appeared:

Name	Valid Identification Document	Date Issued	Place Issued
VICENTE B. MALANO			
EUSEBIO P. MONTANO, JR.	PHIC NO. 03-175230741-8		

both known to me to be the same persons who executed the foregoing **CONTRACT** and they acknowledged to me that the same is their own, free and voluntary act and deed as well as that of the entity represented.

This instrument consists of **FIFTEEN (15) pages** including this page on which this Acknowledgment is written and has been duly signed by the parties and their witnesses.

SIGNED AND SEALED on JUN 04 2019 2019 at MAKATI CITY

Doc. No. 392;
Page No. 67;
Book No. XIV;
Series of 2019.

[Signature]
FLORIDA L. LAURESTE-BRECIA
Notary Public for and in Makati City
Appointment No. M-01 until December 31, 2019
17F Estroon Mega Plaza.
358 Sen. Gil Puyat Avenue, Makati City
PTR No. 7335764/ 1.04.19/ Makati City
IBP No. 063203/ 1.04.19/ Makati Chapter
Roll No. 56277
MCLE Compliance No. V-0020842/ 5-02-16

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