	PANAMA CANAL AUTHORITY	VARIATION	PAGE 1 OF 5
1. REQUE	EST FOR PROPOSAL No.:	2. CONTRACT No.:	3. DATE:
RFP-76161		CMC-221427	October 1, 2013
	10101		4. VARIATION No.: 079
5. ISSUED	D BY:		
Employ Locks I Buildin	MA CANAL AUTHORITY yer's Representative Project Management Division ng 740, Corozal na, Republic of Panama		
<ol> <li>NAME AND ADDRESS OF CONTRACTOR (INCLUDE PHYSICAL &amp; POSTAL ADDRESS)</li> <li>Grupo Unidos por el Canal, S.A.</li> <li>Building 22B, Brujas Road</li> <li>Cocoli, Republic of Panama</li> </ol>		7. CONTRACTOR'S TELEPHONE N	UMBER:
		507-316-9900	
		007-010-0000	
		8. CONTRACTOR'S FACSIMILE NUMBER:	
000011,			
9. VARIAT		s set forth in item 10. entitled "DESCRI	PTION OF VARIATION".
The co	TION: contract referred to in item No. 2 is hereby varied a NO. The contractor shall send a copy, duly si A. THIS VARIATION IS EXECUTED ON THE B THE VARIATION DESCRIBED IN ITEM 10 I	gned, of this Variation to the Employer' ASIS OF: <i>(Specify the legal authority).</i>	s Representative/Contracting Officer.
YES.	contract referred to in item No. 2 is hereby varied a	gned, of this Variation to the Employer' ASIS OF: <i>(Specify the legal authority).</i> S HEREBY INCORPORATED AND MA	s Representative/Contracting Officer.
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11. NAME AND TITLE OF THE PERSON AUTH TO SIGN (Type or print)	IORIZED	12. NAME AND TITLE OF THE EMPLOYER'S REPRESENTATIVE/CONTRACTING OFFICER(Type or print)		
Bernardo Gonzalez Contractor's Representative		Jorge de la Guardia, Employer´s Representative		
	14. DATE:	15. PANAMA CANAL AUTHORITY	16. DATE:	
Authorized signature)	12013	(Employer's Representative/Contracting Officer's signature)	1/x /2013	

Variation No. 079 is issued to incorporate the following changes:

1. Volume II, Part 1, Section 01 81 26 [Communications, Control, Safety, and Security Systems] – In Paragraph 1.02 CC. add the following Standards in numeric order:

60096-0-1(12) Radio frequency cables - Part 0-1: Guide to the design of detail specifications - Coaxial cables

61196-1(05) Coaxial communication cables - Part 1: Generic specification - General, definitions and requirements

(GUPC-IAE-2171) (IAE-UPC-1684) (RFV-0198)

- 2. Volume II, Part 2, Section 01 83 00 [Facility Shell Performance Requirements] – Delete in its entirety Paragraph 1.04 B. 4. a. and replace it with the following:
  - a. Construct the Exterior Enclosure Using One or More of the Following:
    - 1) Concrete masonry unit walls.
    - 2) Weatherproof concrete ventilation blocks.
    - 3) Cast-in-place concrete walls.
    - 4) Sliding window in offices.
    - 5) Metal doors and rollup doors.
    - 6) Panic bars on exit doors.
    - 7) Heavy-duty hardware.

8) Insulated Steel Panel when placed above masonry block wall no less than 3.00m high measured from the ground floor of the building.

(GUPC-IAE-2179) (IAE-UPC-1702) (GUPC-IAE-2161) (IAE-UPC-1655) (RFV-0193)

- **3.** Volume II, Part 2, Section 25 11 00 [Data Processing Equipment (DPE)] –Delete in its entirety Paragraph 1.03 B.9.b.1, previously agreed upon in Variation No. 074, and replace it with the following:
  - "1. All units shall be designed according to specific system manufacturer recommendations and be suitable for rack mounting and the best data center practices. Unless otherwise specified or recommended by the system integrator and reviewed by the Employer, servers for CCSS systems shall be blade type. Servers shall have the following or better characteristics:"

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(GUPC-IAE-2172) (IAE-UPC-1689) (RFV-0208)

- 4. Volume II, Part 2, Section 26 05 43[ Underground Ducts And Raceways For Electrical Systems] –Delete in its entirety Paragraph 1.04 A. and replace it with the following:
  - "A. **Duct Lines**: <sup>A7</sup>Electrical ducts shall be sized no less than 10 cm nominal diameter. Duct lines .....below-grade structures. In lieu of markers, a 5-mil (1 mil is 0.001 inches) brightly colored plastic tape not less than 7.5 cm wide and suitably inscribed at not more than 3 m on centers with a continuous metallic backing and a corrosion resistant 0.35-mil metallic foil core to permit easy location of the duct line, shall be placed approximately 30 cm below finished grade levels."

(GUPC-IAE-2174) (IAE-UPC-1690) (RFI-0604

- 5. Volume II, Part 2, Section 27 37 00 [Multi-band Mobile Radio Communication Systems] Delete Paragraph 1.03 C. 12.b. in its entirety and replace it with the following:
  - "b. Lines shall meet the requirements of EIA 199, IEC 60096-0-1, and/or IEC 61196-1. Flexible lines are preferable."

(GUPC-IAE-2171) (IAE-UPC-1684) (RFV-0198)

- 6. Volume II, Part 2, Section 28 16 43 [Perimeter Security Systems] Delete Paragraph 1.04 C.3 in its entirety and replace is with the following:
  - 3. The PSSs shall be capable of defining detection zones as small as 3 m long, discriminate events along the perimeter, and adjust sensitivity for each zone independently in lengths of 1 m or longer.

(IAE-UPC-1536) (GUPC-IAE-1399) (IAE-UPC-1212)

7. Volume II. Part 2, Section 33 81 26 [Outside Plant Pathways For Underground Communications] – Delete Paragraph 1.03 C. 22. b. in its entirety and replace it with the following:

b. Tape material shall have a minimum width of 101 mm (4 in), overall thickness of 5 mils, and sufficient metal particles for easy location after burial by using a standard metal detector.

(GUPC-IAE-2174) (IAE-UPC-1690) (RFI-0604)

- **8. Volume II, Part 3, Section 01 33 00 [Submittal Procedures]** Delete Paragraph 1.03 F. in its entirety and replace it with the following:
  - F. "On a monthly basis until taking-over, the Contractor shall submit an updated list of project drawings, along with an electronic copy of updated as-built drawings produced during this period, revision-log entries, and updated technical specifications ".

(IAE-UPC-1709) (GUPC-IAE-2142) (IAE-UPC-1670) (GUPC-IAE-2095) (IAE-UPC-1591) (GUPC-IAE-1948) (IAE-UPC-1481) (RFV-0170)

- **9.** Volume II, Part 3, Section 01 33 00 [Submittal Procedures]: Delete Paragraph 1.05 F. 11. e. 1) a) in its entirety and replace it with the following:
  - a) "A printed or electronic copy set of the design drawings, Released for Construction Drawings, and/or shop drawings are kept in the Contractor's field office. All changes to these drawings resulting from the actual installation, construction, or as-built conditions shall be transferred to that copy set as soon as practicable, but never later than thirty days, after the changes have occurred. The As-Built Management Procedure, to be updated by the Contractor and reviewed by the Employer, shall define the type of document to be used (i.e. Shop Drawings or the Design Release for Construction drawings / documents) for each and every discipline for the preparation of the As-Built drawings. All entries shall be dated and numbered per the Contractor's CADD Standards, and attention shall be called to each entry by a "cloud" drawn around the area affected."

(IAE-UPC-1709) (GUPC-IAE-2142) (IAE-UPC-1670) (GUPC-IAE-2095) (IAE-UPC-1591) (GUPC-IAE-1948) (IAE-UPC-1481) (RFV-0170)

10. Volume II, Part 3, Section /01 33 00 [Submittal Procedures]: Delete Paragraph

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1.05 F. 11. e. 1) b) in its entirety and replace it with the following:

b) "The Contractor shall update the As-Built Drawings once all the items defined in the correspondent RFC drawing are executed and finalized. If the construction/fabrication/installation process of some elements in the drawing lasts more than one (1) year, the Contractor shall prepare intermediate versions of the As-Built Drawings as needed to guarantee the traceability of the changes. That proposal shall be included as part of the As-Built Management Procedure."

> (IAE-UPC-1709) (GUPC-IAE-2142) (IAE-UPC-1670) (GUPC-IAE-2095) (IAE-UPC-1591) (GUPC-IAE-1948) (IAE-UPC-1481) (RFV-0170)

There is no time or cost impact to the Locks Contract as a consequence of this Variation.

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