

PANAMA CANAL AUTHORITY	VARIATION	PAGE 1 OF 5
1. REQUEST FOR PROPOSAL No.:  76161	2. CONTRACT No.:  CMC-221427	3. DATE: August 29, 2016
		4. VARIATION No.: 180

5. ISSUED BY:

PANAMA CANAL AUTHORITY  
Employer's Representative  
Locks Project Management Division  
Building 740, Corozal  
Panama, Republic of Panama

6. NAME AND ADDRESS OF CONTRACTOR (INCLUDE PHYSICAL & POSTAL ADDRESS)  Grupo Unidos por el Canal, S.A. Building 22B, Brujas Road Cocoli, Republic of Panama	7. CONTRACTOR'S TELEPHONE NUMBER:  507-316-9900
	8. CONTRACTOR'S FACSIMILE NUMBER:

**9. VARIATION:**

The contract referred to in item No. 2 is hereby varied as set forth in item 10, entitled "DESCRIPTION OF VARIATION".


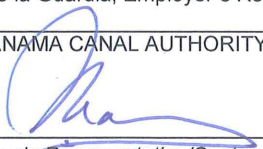
YES. NO. The contractor shall send a copy, duly signed, of this Variation to the Employer's Representative/Contracting Officer.

	9 A. THIS VARIATION IS EXECUTED ON THE BASIS OF: <i>(Specify the legal authority)</i> .  THE VARIATION DESCRIBED IN ITEM 10 IS HEREBY INCORPORATED AND MADE A PART OF THE CONTRACT.
	9 B. THE CONTRACT REFERRED TO IN ITEM NO. 2, IS VARIED TO INCORPORATE ADMINISTRATIVE CHANGES (such as the paying office, account numbers, etc.).
X	9 C. THIS BILATERAL AGREEMENT IS SIGNED AND INCORPORATED INTO THE CONTRACT REFERRED TO IN ITEM NO. 2 OF THIS FORM, ON THE BASIS OF: <i>(Specify the legal authority)</i> Volume III, Conditions of Contract , Sub-Clause 1.16 [Entire Agreement], 4 <sup>th</sup> Paragraph
	9 D. OTHER. <i>(Specify manner and the legal authority)</i> .
	9 E. ACCOUNT NUMBER <i>(If required)</i> :

**10. DESCRIPTION OF THE VARIATION** *(List in accordance with the order of the Contract. If additional space is required, use blank sheets).*

### See Variation Agreement Enclosed

Except for the variation(s) herein specified, all other terms and conditions of the Contract remain unchanged.

11. NAME AND TITLE OF THE PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>  Jose Pelaez Contractor's Representative	12. NAME AND TITLE OF THE EMPLOYER'S REPRESENTATIVE/CONTRACTING OFFICER <i>(Type or print)</i>  Jorge de la Guardia, Employer's Representative
13. CONTRACTOR   (Authorized signature)	14. DATE: 29/08/2016
15. PANAMA CANAL AUTHORITY   (Employer's Representative/Contracting Officer's signature)	16. DATE: 29/VIII/2016

**This Variation Agreement Number 180, is dated as of August 29, 2016 and made**

**Between:** Autoridad del Canal de Panama, Building 740, Corozal, Panama, Republic of Panama (hereinafter called the "**Employer**") on the one part,

**and**

Grupo Unidos por el Canal, S.A., of Building 22B, Brujas Road, Cocoli, Panama, Republic of Panama, a corporation organized under the laws of the Republic of Panama, registered under microjacket number 682266, document number 1683284 of the Mercantile Section of the Public Registry Office of the Republic of Panama (hereinafter called the "**Contractor**" and together with Employer, the "**Parties**") on the other part.

**Whereas:**

- (a) The Employer and the Contractor are party to Contract CMC-221427 for the Design and Construction of the Third Set of Locks, dated August 11, 2009 (as the same has been or may be varied, amended, supplemented or otherwise modified (the "**Contract**")).
- (b) The Employer took over the whole of the Works pursuant to Sub-Clause 10.1 [Taking Over of the Works] on June 24, 2016.
- (c) Following discussions between the Parties, and letters GUPC-IAE-4869 dated June 17, 2016, IAE-UPC-3037 dated June 26, 2016, IAE-UPC-3038 dated June 27, 2016 and IAE-UPC-3079 dated July 29, 2016, the Parties entered into Variation Agreement No 178 for the carrying out of additional training and support as proposed by the Contractor.
- (d) By GUPC-IAE-4948 dated August 12, 2016, the Contractor offered (as an alternative to the additional training and support described in Variation Agreement No 178 which was not carried out) additional training for the Employer's personnel for a period of four weeks commencing on August 29, 2016.
- (e) The Employer responded by letter IAE-UPC-3098 dated August 23, 2016 asking for clarification of and further information in relation to the Contractor's letter GUPC-IAE-4948. This was given by the Contractor during subsequent discussions between the Parties.
- (f) The Employer agreed to the Contractor's amended proposal on the basis that there would be no cost or time implications for the Contract (other than the increase in the Contract Price referred to in Paragraph 11 of Variation No 178) and subject always to the Parties agreeing a formal variation to reflect such revised arrangements.
- (g) Therefore, subject to the terms of this Variation Agreement No. 180, the Parties have agreed to a modification to Variation Agreement No 178 as hereinafter stated, but not further or otherwise.



**THE PARTIES HEREBY AGREE AS FOLLOWS:**

The Employer and the Contractor agree to vary the Contract as follows:

1. In this Variation Agreement No. 180, the words and expressions shall have the same meanings as are respectively assigned to them in the Contract, save as amended below or as expressly stated.
2. It is agreed that this Variation Agreement No. 180 and the modifications contained herein are approved and dated in writing by the authorized representatives of the Contractor and the Employer and in doing so the Parties acknowledge and identify that this is done in accordance with Sub-Clause 1.16 [*Entire Agreement*] of the Contract.
3. The Parties acknowledge and agree that this Variation Agreement No. 180 shall not be deemed to settle any outstanding issues, claims, demands, actions, disputes or proceedings between the Parties including but not limited to those in relation to any delay to the Works (both as to time and costs) and all such issues, claims, demands, actions, disputes or proceedings remain in contention between the Parties and all respective rights, remedies, claims and defenses of the Parties including but not limited to those concerning and arising out of any delay and/or responsibility for delay and the consequences thereof remain fully reserved. The Parties expressly agree that no Party is waiving, making an admission with respect to, or intending to prejudice any claims, defenses, arguments or remedies that any of them has or may have arising out of events up to and including the date of this Variation Agreement No. 180 or in the future concerning their respective performance under and in relation to the Contract. For the avoidance of doubt, all delay-related issues between the Contractor and the Employer, and their respective rights and remedies regarding responsibility for delay and the consequences thereof, remain fully reserved. Nothing in this Variation Agreement No. 180 will have the effect of changing or extending the Time for Completion or any Milestone Dates under the Contract or entitle the Contractor to Excusable Delay. For the avoidance of doubt, this Variation Agreement No. 180 is without prejudice to each Party's position in any current or future DAB and/or arbitration proceedings pursuant to Sub-Clauses 20.4 [*Obtaining Dispute Adjudication Board's Decision*] and/or 20.6 [*Arbitration*] respectively (including but not limited to ICC References 20910/ASM, 20911/ASM and 19962/ASM).
4. Save where expressly stated in, and/or in relation to breaches of, or failure by either Party to comply with, the terms of this Variation Agreement No. 180, the Parties agree that:
  - a) they shall have no claims for additional time or money or any other relief or entitlement of any kind as a direct consequence of this Variation Agreement No. 180; and

August 29, 2016

Design and Construction of the Third Set of Locks

- b) nothing in this Variation Agreement No. 180 is intended to or does increase the Contract Price or the Time for Completion.
5. Further, the Contractor's obligations as to the progress of the Works and to complete the Works and comply with the Contract remain in all respects unaffected and nothing within this Variation Agreement No. 180 is intended to be a waiver or relaxation of the Contractor's obligations under the Contract, save only as expressly stated herein and the Contract shall remain fully effective as varied herein and the Contract shall have effect as though the provisions contained in this Variation Agreement No. 180 had been originally contained in the Contract.
6. The Parties hereby agree to add the following definition to Sub-Clause 1.1 [Definitions] of the Contract under Sub-Clause 1.1.6 [Other Definitions] (which shall be added in proper alphabetical order but without any number):

**"Variation Agreement No. 180"** means Variation Agreement Number 180, dated August 29, 2016, between the Employer and the Contractor.

7. In Paragraph 8 of Variation No 178 the words

*"The Contractor shall provide the following personnel to the Employer for 30 calendar days (including weekends) after June 27, 2016, commencing on June 28 2016."*

shall be deleted and replaced with the following:

*"The Contractor shall provide the following personnel to the Employer for 30 calendar days (including weekends) commencing on August 29, 2016."*

8. In Paragraph 9 of Variation No 178 the words

*"The Contractor shall provide additional training to six of Employer's personnel in relation to the LMCS and EDCS for a period of 30 days after June 27, 2016, commencing on June 28, 2016. This shall take place each week from Monday to Friday; 7:30 A.M. - 3:30 P.M. at the Pacific site. The training shall include:"*

shall be deleted and replaced with the following:

*"The Contractor shall provide additional training to six of Employer's personnel (each of whom shall be provided with a computer by the Employer) in relation to the LMCS and EDCS for a period of four weeks commencing on August 29, 2016. This training shall take place each week from Monday to Friday; 7:30 A.M. - 3:30 P.M. at the Pacific site. The training shall be as set out in Appendix 1 to Variation No 178 and shall include:"*

9. Paragraph 11 of Variation No 178 shall be deleted and replaced with the following:



August 29, 2016

Design and Construction of the Third Set of Locks

---

11. *Following the completion of the period of additional training & support referred to in Paragraphs 8 and 9 of this Variation No 178, the Contractor shall be entitled to make an extraordinary application for payment in a form acceptable to the Employer in the sum of USD 250,000. Subject to the receipt of such application, the Employer shall make payment of such amount within 30 days of the completion of the additional training & support without deduction or set-off.*
10. The Appendix to this Variation Agreement No. 180 shall be added as Appendix 1 to Variation No 178.
11. This Variation Agreement No. 180 shall be governed by the Laws of the Republic of Panama and is deemed to be incorporated into and form an integral part of the Contract.
12. Each Party shall from time to time (at its own cost) do, perform, sign, execute and deliver all such acts, deeds, documents and things (or procure the doing, performance, signing, execution or delivery of them) to give full effect to this Variation Agreement No. 180 and secure the full benefit of the rights, powers and remedies conferred upon it in this Variation Agreement No. 180.

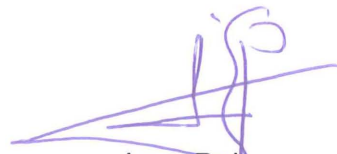
**In Witness** whereof the Parties hereto have caused this Variation Agreement No. 180 to the Contract to be executed on the 29<sup>th</sup> of August of the year 2016 by their duly authorized representatives.

For ACP



Jorge de la Guardia  
Employer's Representative

For GUPCSA



Jose Pelaez  
Contractor's Representative

\*\*\*\*\*

## Training content proposal

System	Device	Content	Time (h)	Day #	Week #
LMCS Software	RSLogix 5000	Tags / Routines / Addons	2	1	1
	Type 1	CNET / ENET COMM	3.5		
		LEVEL 0: Data Adq. / Validation	2.5		
		LEVEL 1: Valve / RG Interface	8		
		LEVEL 2: Group Commands	3		
		LEVEL 3: LH / WSB SFCs	1.5		
		LEVEL 4: LHS Coordination	1		
		LEVEL 5: Canal SFCs	2.5		
		SIL2	4		
	Type 2	LEVEL 0: Data Validation	1		
		LEVEL 1: Valve [MOE]	1		
	Type 3	LEVEL 0: Data Validation	1		
		LEVEL 1: Valve (Conduits)	1		
	Type 7	RG Sensors	2		
		VFDs	2		
		CNET / Modbus COMM	3		
		SIL2	1		
SIMULATOR	Migrate Field PLCs	4			
	Modify Routines / Download PLCs	4			
	Predefined Scenes	2			
	Field Events Reconstruction	6			
Network	FIREWALL / ROUTERS	Rules / Routing	5		
		Connections	3		
	STRATIX	Setup	3		
	CNET RINGS	Configuration	5		
EDCS Software	Type 1	SWITCHGEARS	4		
		CNET / ENET COMM	4		
	Type 2	SFC - Step Loading	4		
		MODBUS COMM	4		
Graphical User Interfaces	HMI	MCCs	4		
		MDS	4		
		PDS	4		
	OIT	Type 1	4		
Type 2		1			
Type 3		1			
Type 7		2			
Servers	FT HMI Server	Configuration	1		
	FT Data Server	Configuration	2		
	Historian	SMT	5		
		PI Datalink Reports	3		
	Alarms DB	SQL Queries	1		
	Asset Center	Logs	4		
	Domain Controller	Users & Groups	1		
		Group Policies	1		
DNS		1			
Practical Test	Simulator	HMI / PLC Modifications	4 h / person 1	18	
			4 h / person 2		
			4 h / person 3	19	
			4 h / person 4		
			4 h / person 5	20	
			4 h / person 6		
TOTAL			160	20	4