	Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works				
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		Volume I, Part 1 – Bidding Procedures			
1.	Cost Centre A	Please confirm that Simulator is required for Training Centre only.	Yes, Bidder's understanding is correct		
		If yes, please confirm that the Item 2.8.1 (f) in Cost centre A, shall be listed under Section 2.9 instead.			
2.	Cost Centre E (e) FTI and Bicutan Station Cost Centre C Cost Centre B	Installation for all packages for FTI and Bicutan stations is clearly excluded from cost centre C. Nevertheless, it is not clear if supply is excluded or included in cost centre B.	FTI & Bicutan is fully excluded in the Cost Centre.		
		 Can you confirm that all design, supply, installation and testing and commissioning for FTI and Bicutan stations is included in cost centre E (provisional sum of 5,811,000,000) and thus shall not be priced at this stage in the cost centre A, B, C and D? Installation for all packages in tunnel and on viaduct after Senate beyond the 25KM marker post towards FTI is clearly excluded from cost centre C. Nevertheless, it is not clear if 	Yes, design, supply, installation and testing and commissioning for FTI and Bicutan Stations are not priced by the Bidder in this Bid Submission under the Cost Centre A, B, C and D. It will instead be under Cost Centre E Installation and Supply of all CP 106 packages in the tunnel and on viaduct after Senate beyond the 25KM marker post towards FTI is		
		excluded from cost centre C. Nevertheless, it is not clear if supply is excluded or included in cost centre B.	beyond the 25KM marker post fully excluded.		

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		Can you also confirm that all design, supply, installation and	Yes, design, supply, installation and testing	
		testing and commissioning for the tunnel and viaduct section	and commissioning for the tunnel and viaduct	
		beyond marker post 25KM towards FTI, is included in cost	section beyond marker post 25KM towards	
		centre E (provisional sum of 5,811,000,000) and thus shall not	FTI not to be priced by the Bidder at this stage	
		be priced at this stage in the cost centre A, B, C and D?	in the cost centre A, B, C and D. It will instead	
			be under Cost Centre E	
		Volume II, Part 2 – Employer's Requirements,		
		c) Technical Requirements (ERT)		
3.	02 Signaling System_12 Dec	In the Clause 2.5.6, it mentions that the ATO shall indicate	Supply of TMS is within CP107 scope of works.	
	2019 (PA)	that all PSDs are closed normally, through \underline{TMS} monitor.		
	Clause: 2.5.6	However, we find no requirement for the provision of TMS in	CP 106 contractor's signaling system shall	
	Page: SIG-2-20	the CP106 tender documents.	interface with TMS,	
		Please confirm if the design, supply and provision of TMS		
		monitor is not under CP106 scope of work.		
		If Yes, kindly provide the system requirement for TMS.		
4.	3) Telecommunication System	Access Control system (provided by Civil Contractor).	Yes, Bidders understanding is correct Access	
	(TEL)	The CCTV system shall interface with access control system	Control System (ACS) shall be provided by	
	Clause: 3.7.5	for displaying the alarm area triggered from Access control	Civil Control. The Civil drawings for OCC,	
	Page: TEL-3-47	system in OCC, Depot, Station area and any other area.	Depot and Station information was published	

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		Please provide details of the number of Access control points	under GBB No 5 on 04 May 2020.	
		OCC, Depot and the 4 Stations for interfacing with CCTV and	This is detailed design for contractor to assess	
		the selected ACS product manufacturer.	and conduct coverage study during detailed	
			design.	
			ACS scope of work is under Civil Contractor,	
			however the interface and system integration	
			are to be conducted between Cp 106 & Civil	
			Contractors during the detailed design.	
5.	02 Signaling System_12 Dec	Please advise if the Operation HMI workstation for COM	The HMI workstation for Telecommunication	
	2019 (PA)	(Radio, PA, PIDS, CCTV, TEMS, DPS) will be in accordance	will be in accordance with the OCC functions	
	Clause: 2.5.11	with the OCC functions and structure defined for	and subject to discussion with the O&M	
	Page: SIG-2-32	communication monitoring and CCTV monitoring (i.e. total of	concessionaire during detailed design.	
		two operator position).	However, Minimum two operator position is	
			required for Telecommunication subject to	
			approval from The Engineer and acceptance	
			by The Employer.	
6.	3) Telecommunication System	With reference to the requirement for Mobile Services to	1. Coverage design for the operator is not	
	(TEL)	ensure the full coverage inside tunnel and underground	part of the Cp 106 Contractor. It is the	
	Clause: 3.7.3	Station area for the mobile operators.	telco operator's responsibility	
	Page: TEL-3-37	Please advise the following	2. KPI: mobile service coverage is not part of	

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		 Coverage design for which operator (Globe, SMART or Ditto) Key Performance Indicator There be only one LCX can be allocated as per Tunnel Section Drawing, 	CP 106. The Mobile operator will submit the KPI's and design for tunnel and underground section for approval of The Engineer and The Employer during detailed design stage.
		4. Point of Interface shall be at the Telco Room of each station building.	3. The mobile operator radio coverage should not Impact the operations of MMSP radio system. Provision for two leaky cable installation by Mobile operators inside Tunnel section consider at this point.
			No direct interface with TELCO supplier, it a separate standalone system. An interference study between MMSP radio system & mobile operators' systems shall be conducted before approval of mobile operator coverage design is accepted.
			4. Yes, the location of POI for commercial operator shall be at the Telco/MDF room

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			inside each station.
7.	06 AFC System_12 Dec 2019	This system shall be installed in the Metro Manila subway and	Metro Manila Subway Project will use the
	(PA)	shall be capable of interoperating with existing LRT1, 2, MRT3	New National Standard Card, which will be
	Clause: 6.3.1	AFC systems and Manila commuter lines (NSCR, MCRP,	adopted all over Philippine.
	Page: AFC-6-4	NSRP-South) using a contactless IC card.	
		Question: Can we assume that the contactless IC card is the	This Bid is for MMSP only not for other
		new contactless stored value card to be developed under the	railway.
		Metro Manila Subway Project? If so, how can this new card be	
		accepted at the current Line 1,2 and MRT 3?	
		Does the scope of this contract include the modification of the	
		existing AFC system in LRT 1,2 & MRT3? And please explain	
		how the current AFC contractor can be liable for the future	
		commuter lines in Manila, as you have mentioned that the	
		contactless IC card must be accepted at future commuter lines.	
8.	06 AFC System_12 Dec 2019	Please confirm if there is a typo error. Should it read " \underline{A}	Yes, the bidder <u>'s</u> understanding is correct ly .
	(PA)	sufficient number of workstations with a 22-inch LCD", the	
	Clause: 6.3.3.3	CCS to be replaced with workstations.	
	Page: AFC-6-5	Is this the correct understanding?	

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		It is stated that the Key Management System (KMS) shall be	Yes, the bidder's understanding is correct.	
		delivered under the Central Computer. However, this	This will be clarified once the Central Clearing	
		requirement contradicts Clause 6.7.9.2 which states that the	House is ready.	
		following functions are performed by the Central Clearing		
		House (CCH):		
		- Clearing function;		
		- Blacklist generation management;		
		- Card status (including balance information) management;		
		- Security key management; and		
		- SAM management		
		As the Central Clearing House is not under the scope of the	Yes, the bidder's understanding is correct.	
		MMSP, and the functions listed under Clause 6.7.9.2	This will be clarified once the Central Clearing	
		Requirement have listed the Security key management & SAM	House is ready.	
		management to be under the CCH scope of work.		
		Please clarify if there is a need to supply the Lower Certificate		
		Authority (CA) terminal and Key Management System (KMS)?		
9.	06 AFC System_12 Dec 2019	Please confirm that the scope of work for the MMSP AFC	Yes, the bidder's understanding is correct	
	(PA)	contractor excludes the provision of the following:		
	Clause: 6.3.3.4	- Central Clearing House		
	Page: AFC-6-6	- Off-site sales terminals (in future)		

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		- Commercial banks and credit card agencies for the handling		
		of financial transactions (in future); and		
		- Future AFC systems provided by other service providers		
		If so, as the Central Clearing House is at a higher tier compared to the Central Computer, shouldn't be the interface coming from the Central Clearing House? Why is this Clause requiring the lower tier Central Computer to come out with the interface? Please clarify the meaning and functional requirement of Telecommunication link stated in following clause:	The Client is responsible for preparing Central Clearing House this will be resolve once the Clearance house is ready	
		" interfaces to external transmission networks to provide	It means, the Contractor shall provide the	
		<u>Telecommunication links</u> ".	provision of network connection or link to the	
			Central Clearing House by interface with	
			external network service provider.	
10.	06 AFC System_12 Dec 2019	Is the description of the <u>common use card</u> the same card as	Yes, the bidder's understanding is correct	
	(PA)	described under Clause 6.3.1 (contactless IC card) & Clause		
	Clause: 6.4.1	<u>6.3.2 (common card)</u> ?		
	Page: AFC-6-7			
		If it is the same, can we assume that the contactless IC card,	Yes, the bidder's understanding is correct.	
		common card, and common use card refer to the same card,		

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		and all 3 definitions are referring to the same card?	
		If the answer is yes to the above question, what is the meaning of "EMV standard-based Smart Card oriented". In our understanding, EMV is an international standard that is linked to the EMVCo, and it is a proprietary standard that applies to EuroPay, Mastercard & Visa. Under EMV, there are both contact and contactless standard.	The AFC system shall be EMV compliant; designed to process EMV CSC, QR codes, NFC. All Contactless EMV readers should support EMV level 1 & applicable EMV Level 2 standard kernels for processing Contactless EMV media including card or NFC mobile application
		There is no such thing as an EMV smart card, which essentially means that there is no contactless EMV that still contains a contactless purse.	EMV compliant Dual Contacts and Contactless card
		Therefore, please confirm if our following assumption is correct: <u>The AFC system is EMV compliant, but the card will remain</u> <u>the 3 definitions of contactless IC card, common card &</u> <u>common use card</u> ?	The Common card will be (National Standard Card) based under the National Standard specification, which will be Dual EMV Contact and Contactless Card.

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		Please advise.		
11.	06 AFC System_12 Dec 2019	There is a new term called MMSP Card. Please advise if this	Yes, the bidder's understanding is correct,	
	(PA)	MMSP is the same card that has the definition of contactless	these are the same card. MMSP card will use	
	Clause: 6.4.1	IC card, common card & common use card? Can we assume	National standard.	
	Page: AFC-6-7	that there are 4 definitions of the same card? Or there are 4		
		different types of cards? Please advise.		
12.	06 AFC System_12 Dec 2019	Please confirm that the EMV requirement is only to prepare	Yes, the bidder's understanding is correct.	
	(PA)	the infrastructure only, and not to deliver the full Account-		
	Clause: 6.4.1.2	Based Ticketing as the ABT solution is still dependent on the		
	Page: AFC-6-7	DOTr. Is this understanding correct?		
		If EMV is to be accepted only in the future, then the following	The New National Standard Card will be EMV	
		requirement listed under 6.4.1.2 is only for future needs & not	enable and is under scope of DOTr and it will	
		required to be delivered:	be implemented in MMSP line.	
		- For multiple journey, Staff pass and other tickets retained by	Yes, the bidder's understanding is correct	
		the passengers will also be issued through EMV smart card;		
		- MMSP personalized Staff card would also be issued through		
		EMV CSC and used as access control cards at MMSP premises		
		by maintenance, support staff, and MMSP employees;		

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		- Near Field Communication (NFC) based: Near Field		
		Communication (NGC) enabled smartphones shall be used for		
		payment media for transaction payments transit and non-		
		transit terminals; and		
		- Types of Fare Media- AFC system shall process the following		
		type of fare media in MMSP, below are the fare media options		
		for MMSP for ticketing.		
		Please confirm.		
13.	06 AFC System_12 Dec 2019	Can we confirm that the O&M company scope of work is not	Yes, the bidder's understanding is correct.	
	(PA)	included under the MMSP AFC scope of work? The entire	This is for information only and O&M Scope of	
	Clause: 6.4.3.1	Clause 6.4.3.1 is for information only, and there is no need to	work is not under CP106 contract.	
	Page: AFC-6-10	comply with the details listed under this entire clause. Please		
		confirm if this understanding is correct?		
14.	06 AFC System_12 Dec 2019	It is stated that the contractor shall propose operations for the	No, the bidder's understanding is incorrect.	
	(PA)	card and system security and obtain notice of no-objection by		
	Clause: 6.4.3.2	the Engineer to coordinate with the O&M company. Please	This is design and build contract. The	
	Page: AFC-6-10	explain why the MMSPAFC contractor needs to do this work?	Contractor shall supply, develop, secure, and	
		It is stated in the previous clauses that the security	provide technical support for the	
		management is done at the CCH Level, and the Central	personalization devices. Also, Contractor shall	
		Computer is purely accepting the keys only. Therefore, if the	propose operation for handling card issuance	

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		security design is flawed or insufficient, it is not the	at MMSP stations so that the personalization	
		responsibility of the contractor. The Clause should be removed	devices can operate at their selected points of	
		this responsibility from the contractor.	card issuance.	
		Please confirm if this understanding is correct.		
15.	06 AFC System_12 Dec 2019	Can we confirm that the Stored Value Card is also the same as	Yes, Bidder's understanding is correct.	
	(PA)	the following:		
	Clause: 6.4.6	1. MMSP Card	MMSP IC card will be Dual EMV Contact and	
	Page: AFC-6-14	2. Contactless IC card	Contactless card which will be the Common	
		3. Common card	card i.e. (National Standard Card).	
		4. Common use card		
			It means all 3 definitions mentioned above are	
		If not, please explain what are the differences between each of	same.	
		these cards.		

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16.	06 AFC System_12 Dec 2019 (PA) Clause: Page:	Please clarify the meaning of EMV CSC? Are you referring to the Mastercard & Visa issued contactless credit cards? Or are you referring to the NXP DesFIRE card that will settle the contactless part (meaning that there will be a purse that contained a value), which will have a separate EMV contact chip that allows it to perform credit card function.	It means EMV Contactless Store Card (Mastercard & Visa issued contactless credit cards)	
		General Bid Bulletin		
17.	 (i) General Bid Bulletin No. 3 and (ii) General Bid Bulletin No. 7 Clause: (i) Annex B, Item 3 & (ii) Annex A, Item 6 Page: (i) 2 of 16 & (ii) 3 of 115 	Please confirm that at each station access shafts will be available with lifting facilities (provided and operated by Civil Contractors) to enable the delivery of equipment to the equipment rooms additional to the larger track access points.	No, bidder's understanding is incorrect. Refer Volume II, Part 2 — Employer's Requirements (ER), b) General Requirements (ERG), Appendix 6, Sections 1.2 and 3.2, it was stated that Civil Contractors will provide works area only. That means lifting facilities shall be provided by CP106 Contractor.	
			However, the CP 106 Contractor shall coordinate with relevant Civil Package Contractors' on the lifting of equipment	

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			arrangements for the construction phase and
			for permanent maintenance.
18.	General Bid Bulletin No. 7	Please confirm that for CP106, the total number of trains to be	Yes, bidder's understanding is correct.
	Clause: Annex A, Item 9	supplied with equipment in this scope is limited to 30 train	
	Page: 4 of 115	sets.	