

Common Database (Questions and Answers)

No	Questions	PTD Answers
1	What are the distance between DC and DR? How many kilo meters? What is the connection between DC and DR?	DC will be in Yangon and DR will be in Nay Pyi Taw
2	What is the bandwidth?	The bandwidth will be provided by PTD.The required bandwidth between DC and DR shall be proposed by bidder.
3	REQ11: For fall-back/contingency plan what will be the expected minimum RTO/RPO that PTD would like to achieve?	99.9% uptime
4	REQ25: How many sites do we need to cover for on-site support? Only for Common database hosting sites or to all the MNOs?	On site supports for MNOs is not in the scope of this REQ.
5	REQ33 & 34: Who will be the main responsibility company, example system will be ours and working fine with the first batch of enrollment devices. In the event of new tender announce to secure additional enrollment device and new bidder won for supplying the new enrollment devices. Although it is supported with our system, in the event of issues arise who will be the first person to take the service ticket, enrollment device supplier or ABIS system owner?	MNO shall ensure to procure the compatible enrollment devices with the system.Bidder shall clearly communicate and discuss with MNOs for such issues and shall develop the agreed responsibility matrix with MNOs.
6	REQ.1 Propose solution must store the records at the designated servers that include at least a person's name, two fingerprints from left and right ,face photo with liveness detection, identity type, identity number and scan of identity card on both front and back sides. It also contains, additionally but not limited to, ,father's name, date of birth and address etc., Fingerprint ယူရမယ်လို့ ပြောထားပါတယ် အခု Covid-19 ကာလမှာ လက်ဗွေနှိပ်တာကို ရောဂါကူးနိုင်တာကြောင့် တားမြစ်ချက်ထုတ်ပြန်ထားပါတယ်, အဲအတွက် Biometric အချက်အလက်ရယူတာကို (Eye / Face) ပြောင်းလဲဖို့အစီအစဉ်ရှိပါသလား..	Currently PTD has no plan yet to change the biometric requirment from finginer print recognition to eye or face recognition.
7	What is FAC certificate? Does FAC stand for Factory Acceptance Certificate?	Any form of Final Acceptance Certificate from the organizations which were provided the similar solution to Common Database by the bidder.
8	Are these (REQ 12, 26, 30, 34, 35 and 36) optional?	REQ 12 is mandatory. Other REQ (26,30,34,35,36 remain as optional)
9	Is enrolment software and hardware part of the tender scope?	NO (In case of SDK enrollment device, bidder shall make sure for interfacing with the System to work properly)
10	If yes, what is the required specification and quantity?	N/A
11	If no, will this fall under the MNO responsibility or a separate tender?	YES
12	Does company need to propose price for biometric devices? -	NO
13	Is there any pricing template to use?	NO

No	Questions	PTD Answers
14	What is the commercial evaluation criteria?	The most expensive bid will have lowest score for commercial marks which contributes 50% of overall marks
15	Any other tender documents to review apart from Tender Instruction and Requirement posted in MOTC official website?	NO
16	Are that any document on the tender contract clauses?	NO
17	Is there any pricing template to use?	NO
18	Please can provide details technical and commercial evaluation criteria?	Please see the attached for scoring criteria.
19	Any other tender documents to review apart from Tender Instruction and Requirement posted in MOTC official website?	NO
20	Are there any document on the tender contract clauses? Also can clarify on payment term/milestone?	10% Advanced Payment with Advanced payment bond, 40% upon the completion of delivery , 40% upon the completion of system implementation and test run, 10% upon the FAC.
21	Please confirm (REQ 26, 30) optional?	Yes. They are optional
22	Please clarify if any SOW will be involved like Integration and Testing with MNOs?	YES. Integration and Testing with MNOs is in SoW.
23	We understand the tender is for Common Database. Will Enrolment software be part of bidder scope? Please clarify. If it is part of bidder scope, what are specification and quantity requirement for it? Unless necessary, it will be MNOs responsibility for enrolment? Or will be separate tender for it?	Please see answers of Question 9, 10, 11.
24	Please confirm if non-exclusivity of a firm which involve among other bidders for this particular tender will be disqualified?	PTD will disqualify the bidder who does not have authorization from ABIS manufactures and non-exclusivity will not a factor for disqualification.
25	REQ 6 1) As Biometric data of user shall not stored in any enrollment devices at PoS, Is the system integration with 4MNO is a real-time connecting to Common Database? 2) Does the enrollment station connect to the Common Database directly or via MNO Backend system? 3) Is the system integration with 4 MNO the back-to back integration or via the enrollment station connecting to Common Database Directly.	The enrollment shall have real time connection to common database to check and register the finger print of the subscriber and its SIM card number. Enrollment station shall not connect to common database via MNO Backend system. System Integration with 4MNOs may also be real time. It shall be under business logic proposed by the bidders.
26	REQ 7 If the offline data processing is required, Which system will manage storing the biometric data while the system is offline. Please clarify.	Offline storage except on-device encrypted data storage is not allowed. REQ 7 requires the bidder to propose offline data processing solution. Such solution is optional. However, the cost for such solution shall be proposed separately and that cost will not be considered for evaluation.

No	Questions	PTD Answers
27	<p>REQ 8</p> <p>As per requirements, Are the data removal and housekeeping process required to be applicable for Common DB or 4MNO systems which are connecting to CDB?</p>	<p>Will not be required in MNO system.</p>
28	<p>REQ 15</p> <p>If offline system is required, the subscriber's data must be stored in MNO system temporarily. This requirement oppose to RFQ 6. Please clarify more details.</p>	<p>Please Refer to Answers of Question 26</p>
29	<p>REQ 27</p> <p>What is ABIS response time requirement for 1:N & 1:1?</p> <p>1:1 Verification is required? Please clarify.</p>	<p>As mentioned in REQ 27, the ABIS must be able to perform 500 verifications within one minute i.e. verify a new finger print (1) against the existing finger prints (N) (This is also called registration of subscribers). ABIS must also be able to perform 1000 registration of SIM Card with verified finger print.</p> <p>1:N is for verification of subscriber with the finger print in the Common Database. The finger print of the subscriber will be matching with the existing finger prints in the Database. (1:N) . (This is called verification or registration of subscribers and it is 1:N)</p> <p>After completion of registration of the subscriber with other personal information, the SIM card numbers will be registered to the that verified single subscriber. (1:1) (This is called registration of SIM card with finger print and it is 1:1)</p> <p>လက်ရှိ SIM Card များအားလုံးကို finger print ဖြင့် ပြန်လည်မှတ်ပုံတင်ရမည်ဖြစ်သည်။ သို့ဖြစ်ရာ လက်ရှိ SIM card အသုံးပြုသူများအနေဖြင့် မိမိတို့မည်သူမည်ဝါဖြစ်ကြောင်း မိမိတို့၏ finger print ဖြင့် Customer Registration ဆောင်ရွက်ရမည်ဖြစ်ရာ ABIS အနေဖြင့် System အတွင်း ဝင်ရောက်လာသည့် finger print သည် ABIS အတွင်း ရှိပြီးဖြစ်သည့် fingerprint ဟုတ်မဟုတ် ကို ဝင်ရောက်လာသည့် fingerprint (1) နှင့် ABIS အတွင်း ရှိပြီးဖြစ်သည့် fingerprint များ (N) တို့ဖြင့် တိုက်ဆိုင်စိစစ်ခြင်း verification ပြုလုပ်ရမည်ဖြစ်သည်။ (1:N)။ Verification ပြုလုပ်ပြီးပါက သုံးစွဲသူတစ်ဦးတွင် Unique ID တစ်ခုရရှိလာမည်ဖြစ်သည်။</p> <p>ထို့နောက်တွင် subscriber ၏ SIM cards များအား SIM card Registration ပြုလုပ်ရာတွင် အဆိုပါ Unique ID ၊ Fringer Print တို့နှင့် 1: 1 Verification ပြုလုပ်၍ မှတ်ပုံတင်ရမည် ဖြစ်ပါသည်။</p>
30	<p>Which level is the system availability required?</p>	<p>99.9% uptime</p>
31	<p>Plese clarify RPO & RTO, DC Active-Active or Active or Passive.</p>	<p>Active-Standby</p>
32	<p>REQ 1</p> <p>Face Photo with liveness? Please clarify application usage. - 1:1 macthing?</p> <p>Please confirm if Enrolment SW and Biometric device are out of this tender scope.</p> <p>Could you provide the enrolment duration? or how many people register per day in average?</p>	<p>Face Photo will not be used for matching. The face photo of subscriber shall be taken with a camera which have liveness detection features to make sure thre is no irrevtent photos of the subscribers. Face photo shall only be stored as biographic information of the subscriber.</p>

No	Questions	PTD Answers
33	REQ 2 1) Is SIM registration & activation application part of tender deliverable? 2) Is (1) part of enrolment application? 3) Is the Biometric data transmitted online only?	(1) SIM Registration and activation are not tender deliverable. (2) SIM Registration, activation and enrolment are different processes. (3) YES
34	REQ 3 1) What is system response time requirement?	N/A
35	REQ 4 1) could you provide more details about all existing SIM Registration Database? (which based, data, format,...) 2) could we clarify if all the existing database must be migrated to common database?	Existing database of MNOs is not required to migrate into common database. The copy of all existing databased shall be stored as mentioned in REQ 4.
36	REQ 5 1) Can you describe what are the actions system need to perform @ 5000 RW/sec with a response time of 5 secs? Incl. biometric de-duplication? 2) Is 5000 RW/sec considered peak hour rate? If so, what is considered average rate?	5000 RW concerrent requests with the response time withis 5 sec is not related to ABIS transaction (such as biometric de-duplication). It only refer to system transaction those are not related to ABIS. REQ 5 is considered as system throughput.
37	REQ.11 Need more clarification on what system failures scenarios are?	Any scenarios which Biometric data cannot reach, be processed or delievered except Force Majure conditions.
38	REQ 12 Use cases & technical requirements are not clear in this excel	Use cases shall be developed by bidder
39	REQ 13 Is API Gateway part of Government Furnished Equipment (GFE)?	NO. Bidder shall propose API Gateway.

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40	<p>REQ 17</p> <p>1) Please be specific what are Government Furnished Equipment (GFE) and facilities, e.g. data center hosting level and sites, network equipment, servers and support?</p> <p>2) What is MOTC system operational model in terms of staffing, e.g. front-end counter, back end IT etc.?</p> <p>3) Staff training for which users? Mobile company operators, back-end IT staff?</p> <p>4) What are system availability requirements (for both Main & DR sites), RTO/RPO for DR to resume online operations?</p>	<p>Colocation facilities and related service will be provided by PTD.</p> <p>Training is for staff of MoTC and PTD.</p>
41	<p>REQ 22</p> <p>What is the LD for security breaches?</p>	Not defined yet
42	<p>REQ 26</p> <p>What is considered reasonable operation SLAs on response times?</p>	Not defined yet
43	<p>REQ 27</p> <p>What is ABIS response time requirement for 1:N & 1:1?</p>	Please see Answer for Question (29)
44	<p>REQ 27</p> <p>Can we confirm that the Fingerprint format provided will be of international standard ie.WSQ and Facial be of ICAO standard and JPEG format?</p>	YES.
45	<p>REQ 27</p> <p>Please clarify this requirement? What is the meaning of reuse/upgarde concept of ABIS in connection with the population ABIS?</p>	Common Databse may require to reuse/upgrade against Population Database for consistency in the future.
46	<p>REQ 29</p> <p>Please clarify? i.e. Is customer expecting an ESB behind the API Gateway?</p>	YES
47	<p>REQ 30</p> <p>Need to clarify the level & type of information to be supported post-implementation.</p>	May vary upon the needs.
48	<p>REQ 33</p> <p>Please clarify non-proprietary devices? Is it part of the tender requirement to provide biometric devices?</p> <p>If yes, please provide the requirement and qty</p>	<p>The devices shall not be locked with only one manufacturer. The devices shall be able to developed with SDK.</p> <p>Procurement of biometric enrollment devices is not under the scope of this REQ.</p>

No	Questions	PTD Answers
49	REQ 34 1) What is the architecture for front-end enrolment and SIM registration application? 2) Please elaborate how is Mobile App applicable?	The architecture for front-end enrolment and SIM registration application shall be proposed by the bidder. The list of compatible enrolment devices shall work with multiple platforms including mobile app.
50	REQ 35 Need to clarify the platforms to support	Multiple platform
51	REQ 36 Please elaborate	Any integration issue with enrolment devices to the system.
52	What is the timeline for the 4 MNO SIM card registration system and biometric devices readiness? When is the planned integration between the Common DB and MNO front end applications?	Common Database shall be implemented within 6 months after contract signing. The Database shall be ready to intergrate with MNO front end application by that time.
53	What are the criteria for system acceptance? Is end 2 end testing with all 4 MNO required to complete system testing?	YES.
54	What is the timeline for the GO-LIVE?	TBC
55	What are the payment milestones?	Please see Answer of Question (20)
56	In previous RFP, requirement was 30 million records, with optional batch increases of 10 million records, up to a total of 60 million records. Could we confirm this is still valid? (REQ.27)	Previous RFP is not valid anymore.
57	As per REQ.27, we assumed ABIS system will be storing fingerprints only. However, REQ.1 is mentioning portrait with liveness detection. Is it expected to store portrait in the ABIS system? (REQ.1)	Please see Answer of Question (32) for the purpose of face photo.
58	As for now, ABIS database is only storing biometrics. Does PTD want to include individual biographic details in the ABIS database? If yes, the list of attributes will need to be specified. For simplicity, we recommend to store these attributes outside of the ABIS system. (REQ.1)	ABIS database shall store only biometrics.
59	As per RFP, disaster recovery is to be quoted as optional in our offer. Given the system requirements, we recommend to have an Active/Passive DRS. Could you confirm this assumption is correct? (REQ.27)	Active-Standby
60	Could you confirm that only two fingerprints per record is expected to be stored in the ABIS system? (REQ.27)	YES
61	In previous RFP, requirement was 30 million records, with optional batch increases of 10 million records, up to a total of 60 million records. Could we confirm this is still valid?	Not valid anymore
62	As per REQ.27, we assumed ABIS system will be storing fingerprints only. However, REQ.1 is mentioning portrait with liveness detection. Is it expected to store portrait in the ABIS system?	See answer of question (58)

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63	As for now, ABIS database is only storing biometrics. Does PTD want to include individual biographic details in the ABIS database? If yes, the list of attributes will need to be specified. For simplicity, we recommend to store these attributes outside of the ABIS system.	See answer of question (58)
64	As per RFP, disaster recovery is to be quoted as optional in our offer. Given the system requirements, we recommend to have an Active/Passive DRS. Could you confirm this assumption is correct?	Disaster recover site shall be mandatory.
65	Could you confirm that only two fingerprints per record is expected to be stored in the ABIS system?	YES
66	Does it imply that the maximum size is 1MB for each record in the ABIS system?	NO. It does not imply for ABIS record. 1MB refer to maximun size of the captured image (face photo and ID scanned copy)
67	From the prebid meeting, our understanding is that each record from the ABIS system will include 2 thumbprints and 1 liveness portrait. Therefore, there is no individual details to be stored. Do you confirm that this information is correct?	See answer of question (58)
68	We understand that the purpose of a common database is to regulate the subscriptions in Myanmar. In order to reduce potential frauds, the ABIS system would verify each thumbprint against the entire existing database, regardless if it's the right or left one. Could you confirm that our understanding is correct?	Both left and right fingerprints shall be verified against the entire existing database.
69	Does the existing SIM registration database include any biometry such as thumbprint and liveness portrait?	NO. There is no biometric information.
70	matching (1:N, 1:1), Shall Bidder propose the response time for both 1:N and 1:1?	Please see answer of question (35)
71	What is the maximum storage capacity of registration user on common database? (Eg: 20 million, 30 million?)	60 million
72	How many fingers should have enrolled in single user registration? (EG: One finger or two finger)?	two fingers
73	Is there deadline for database development after elected?	It is already mentioned in the RFP clearly.
74	Does liveness in REQ1 refer to facial liveness and fingerprint liveness? (RFQ)	See Question (32)
75	Is the requirement to collect two fingerprints in total? Or 4 fingerprints in total? (RFQ- 1, 21)	two fingers print
76	Would you consider the collection of more fingerprints, as customer base is large and for uniqueness we need more fingerprint information (RFQ- 1, 21)	Currently PTD has no plan to collet more fingerprint
77	Over what period will all customers be re enrolled with biometrics? (RFQ- 1)	It depends on system readiness and customer behaviour. PTD expects to finish re-registration within 6 months after system implementation.
78	What will be the expected response time for an Identification/ De Duplication (1 : N) Search (i.e. the time expected for a full search) (General)	Please refer to answer of question 29

No	Questions	PTD Answers
79	What will be the expected response time for a Verification (1 : 1) Search (i.e. the time expected for a match) (General)	Please refer to answer of question 29
80	In the case where multiple matches for a fingerprint are found, will it go to human approval? (General)	In case of multiple matches for a fingerprint, the system shall reject the enrolment.
81	Will we be required to rematch against the government database at a later stage (RFQ- 27C)	The finger print may require to rematch against the government database at later stage
82	REQ 17 requests a DR Site "One Datacenter and Identical Mirror at DR site" REQ 27 says optional DR Site "Optional disaster recovery site" Do you require a primary site and a secondary site (dr) or is this optional	Disaster recover site shall be mandatory. Please also see answer of Question (64).
83	How many devices do you require the SDK for? (RFQ -35)	It is not in the scope of this REQ
84	REQ18 " Design and implementation for all required Services/Systems to manage MS Windows clients and user centrally based on MS Active Directory" Which windows clients does this refer to? Are these The Windows clients used by the MNO?	It refers to the window client of the system, but not the windows clients used by MNOs.
85	Is the 500 1 : N per minute an average or peak load? (RFQ 27a)	Peak load. 500 1:N operations per minute and 1000 1:1 operations per minutes are considered as ABIS system throughput.
86	Has the type of fingerprint scanner that will be used been preselected or is this open to recommendation, If it has been selected please provide the model (General)	Open to recommendation
87	In the case where a secure duplicate is found, shall the duplicated instance also be kept in the database to enhance the possibilities to find further attempts? (General)	Not necessary
88	What is the acceptable probability of missing a duplicate that is expected (General)	N/A
89	Is there existing information on subscribers including biometrics, demographics or other that can be imported? (General)	Nop
90	What is the allowed downtime? (General)	99.9% uptime
91	In the case where there is a DR site, what is the distance between the two sites (General)	Please see answer of question (1)
92	Is there any thirdparty services that can be queried to check the integrity of information such as name,surname,gender against a presented id card? (General)	NO
93	Will there be a link to immigration services? To query their biometric systems? (General)	There will be no link currently.
94	What will be the acceptable forms of identification? (General)	All the ID cards allowed by the Immigration law
95	What is the minimum age for a person for enrolment? (General)	according to the Immigration Law (10 years)
96	Is High Availability required for both DC and DR sites? (General)	99.9% uptime
97	- SIM Registration process?	Bidder shall propose business logic for SIM registration
98	- SIM Registration online and/or real time process?	real time
99	- need to capture identification number from scanned ID card?	Optional

No	Questions	PTD Answers
100	- need Face & Liveness detection in the SIM registration process or not?	Required
101	- need to check/authenticate the scan ID card with DOPA and get photo from DOPA?	NO
102	- Face detection - match subscriber photo with photo from DOPA and/or photo from scan ID card?	NO
103	- Biometric link to documents (REQ 10) - how to capture documents,	YES
104	please elaborate the rule/scope of the verification process. (REQ.3)	System integration with 4MNOs is not real time. The enrollment shall have real time connection to common database to check and register the finger print of the subscriber and its SIM card number. Enrollment station shall not connect to common database via MNO Backend system. Please also refer to answer of Question 36.
105	Based on 5,000 transactions and 5 second response time, the estimated TPS is 1,000? (REQ.5)	YES
106	What is the duration of storage of inactive registration records in CDB? (REQ.8)	Not defined yet
107	Need further clarification. If not mistaken ESB is a product of IBM, does it mean the bidder need to use IBM's ESB system? (REQ.29)	Not limit to IBM's ESB
108	what are the point of sales used by the MNO? Can list out some of the brands or models? (REQ.34)	Not valid under this REQ
109	5. တင်ဒါအာမခံကြေးဆိုတာ Bank Grantee or P.O cheques	Bank Gurantee for bid security
110	matching (1:N, 1:1), Shall Bidder propose the response time for both 1:N and 1:1?	Please see answer of question (29)
111	PTD need to clarify is “ENROLMENT DEVICES” refer to biometric data capturing device such as fingerprint scanner or camera.Else these two requirements are contradicting each other.	ENROLMENT DEVICES refer to device or devices that can collect and access and retrieve customer information including biometric data.
112	PTD to confirm ABIS DR is mandatory since there is requirement of DR mirror ?	ABIS is mandatory in DR
113	Server volume shall be assessed and determined according Vendor proposed 1:N and 1:1 response time for 8 TPS of 1:N 16 TPS of 1:1 PTD need to confirm the use case of 1:N and 1:1.	Please see answer of question (29)
114	NIST MINEXIII is ongoing test and One time assesement for the test is valid 5 years .(Ref:nist.gov/minexIII-compliance-guideline), Vendor who has test result within last 5 years from 2019 is eligible to submit ? (REQ.27)	YES
115	REQ.1 Please elaborate on the requirement for liveness detection when capturing face photo. Is this feature required both during enrolment and authentication?	Refer to answer of question (32) . (not required for authentication)

No	Questions	PTD Answers
116	<p>REQ.1</p> <p>Please confirm if we have to issue a unique subscriber ID to every person who gets enrolled into the DB. Will this DB will be owned by PTD? How will the seeding of this DB with the sim details from various MNO's happen?</p>	<p>Yes. System will have to issue a unique subscriber ID to every person who gets enrolled into the DB.</p> <p>DB will be owned by PTD.</p> <p>The seeding of this DB with SIM details from various MNO's shall include in the business logic proposed by the bidder.</p>
117	<p>REQ.1</p> <p>1. We are assuming that supply of enrolment devices is in the scope of supplier. Considering that this project involves enrolment and then verification transactions, does the department expect a handheld device with all functionalities in one device or expecting a modular approach with discrete components?</p> <p>2.Please confirm total number of POS outlets so that number of devices can be calculated. OR please explicitly provide number of devices budgeted for this project.</p>	<p>Enrollment devices procurement are not under the scope of this REQ.</p>
118	<p>REQ.2</p> <p>Please clarify which image is being referred to when the size should not exceed 1MB. Is this size of each fingerprint image capture/size of face image captured/size of fingerprint + face image captured/size of the full data packet including fingerprint, face, demographic details, photo of ID card,etc?</p>	<p>captured image refer to face image captured and scanned ID card.</p>
119	<p>REQ.3</p> <p>Please confirm if we also have to return face image back to the requesting client during verification (1:1).</p>	<p>Not required.</p>
120	<p>REQ.4</p> <p>Will there be one common app from PTD to enrol and verify persons at the point of purchase with a drop down option for various MNOs? OR will every MNO have its own app with an API call to the PTD DB. This is important to know as it will define the logic for updating the common DB with number of sim registrations.</p>	<p>Not defined yet.</p> <p>Both assumptions are valid.</p>
121	<p>REQ.5</p> <p>We would like to understand what kind of connectivity is available between retail outlet points and central DB Please confirm.</p>	<p>Public Mobile network or WiFi Network (at most POS).</p>
122	<p>REQ.5</p> <p>Please clarify what is meant by 5000 read/write concurrent requests. Does it mean 2500 enrolment requests per second/minute/hours and 2500 verification requests per second/minute/hours? This is important to arrive at a TPS and practical scenario while the solution is deployed in the field. Is there any recommended baseline for TPS and SLA?</p>	<p>It can be any read/write request. Please see the answer of Question (36)</p>

No	Questions	PTD Answers
123	<p>REQ.6</p> <ol style="list-style-type: none"> 1. What is the different between business SIMs and Corporate SIMs. 2. What should be the business logic used for non-individual SIMs? 3. What is the specification of enrolment devices to be deployed at POS? Or is this upto the bidder to recommend? 	<p>This logic will be discussed upon the implementation.</p> <p>The limitation of SIM card no: may be different and the system shall be able to configure according to different needs.</p> <p>For enrolment devices, please see answer of Question (86)</p>
124	<p>REQ.7</p> <p>We recommend to have a high available system for both DC and DR so that there no failure whatsoever. Please confirm that this is expectation of PTD and it should be mandated into the specifications.</p>	<p>99.9% uptime</p>
125	<p>REQ.14</p> <p>We are assuming that backend infrastructure will be size based on High Availability to conduct both operations irrespective of downfall.</p>	<p>99.9% uptime</p>
126	<p>REQ.10</p> <p>While we can design a system based on these specifications, please confirm that there will be a unique id issued to each subscriber which will be the primary key into the DB. Various ID documents can be stored for a unique person across this unique ID.</p>	<p>Please see answer of Question (116)</p>
127	<p>REQ.14</p> <p>Please clarify that asynchronous call will be during enrolment and synchronous call will be during verification.</p>	<p>Both synchronous and asynchronous calls may be required for enrollment (registration) and verification.</p>
128	<p>REQ.14</p> <p>Can we propose innovative offline verification products for this opportunity?</p>	<p>Yes (please also refer to answer of question (26))</p>
129	<p>REQ.17</p> <p>We assume that the infrastructre requirements around power supply, space and bandwidth is only to be specified in the response. PTD will make arrangements for this and ensure they are all in place before project kick-off.</p>	<p>Please refer to answer of question (40)</p>
130	<p>REQ.17</p> <p>Please clarify why are Windows clients being mandated with user data stored in AD. Where will these Windows Clients be deployed? Can we suggest a better way to implement the solution instead of using Windows clients?</p>	<p>Officials who will manage the system are familiar with Windows Clients. Other solutions may require additional trainings.</p>

No	Questions	PTD Answers
131	<p>REQ.19</p> <p>We request department to clarify why they have shared the given server specification. Ideally ABIS server sizing is to be given by the bidders as each Biometric OEM SDK's has different Image and Template size which will impact the overall server sizing. Are we supposed to only work with this server specification?</p>	Bidder is supposed to work with the server specification.
132	<p>REQ.23</p> <p>We are assuming that the expectation of dept is central redundancy can be created by Vmware virtualization with no fail over mechanism with synchronise function. Can we suggest any alternatives which may be cost effective?</p>	NO.
133	<p>REQ.27</p> <p>ABIS deals in 1:N matching which is conducted on proprietary templates. We recommend to specify WSQ image formats for fingerprint images which are a standard across large scale DBs and also help to reduce size of enrolment packets.</p>	Any WSQ image format which meets the requirement of REQ 27.
134	<p>REQ.17</p> <p>We assume there should be High availability for DC by virtualization but while DR will be replica for DC without high availability. Please confirm our assumption also please confirm Is replication of data on DR side will be real time??</p>	Active-Standby
135	We request department to share the financial format if any in which we have to respond to the commercials	No financial format
136	Please provide the scoring system for various non-commercial heads under which bids will be evaluated.	See the attached for scoring criteria.
137	Please confirm if OEM of ABIS software qualifies as partner organization where the OEM gives a MAF to the bidder company which is registered in Myanmar. In all the tenders of this nature, it is a common practice to provide experience of OEM in implementing projects involving building biometric database.	YES. The experience of OEM of ABIS software can provide as the experience of partner organization.
138	<p>Any idea what "partner management" refers to (row 40)?</p> <p>- Which role "partners" play in the SIM registration process?</p>	Any partner involves in SIM registration process including MNOs, equipment vendor, etc.
139	<p>What row 50 means, in case backup workplan of enrollment devices at POS ?</p> <p>- can clarify and explain as enrollment devices is out of scope of this project</p>	<p>Please refer to answer of question (51).</p> <p>Enrollment devices is out of scope of this project.</p>
140	<p>Enrollment software include in the scope of this project to be provided by bidder</p> <p>or just to support SDK capability for enrollment devices ?</p> <p>How about the enrollment software? Who will build that?</p>	Please refer to answer of question 9.

No	Questions	PTD Answers
141	Please elaborate on the mix of requests (enrollment, identification, verification) in the transaction count.	Any or all of requests.
142	What biometric modalities will be prioritized?	Shall propose by the bidder.
143	How many enrollments will be there for starting?	No existing enrollment
144	Does PTD provide datacenter facilities including public ip, bandwidth and server colocation?	YES
145	Does PTD accept the vendor don't comply all test reports of NIST, but only one or two. OR Does PTD accept the vendor comply all test reports of NIST, but differs in specified year?	Vendor shall comply all test reports mentioned in REQ 27 (b)
146	How about the budget ?	Budget will be borne from Universal Service Fund
147	Req 1 - States Face Photo, however all other technical requirements are based on Finger print Only	Please refer to answer of question (32)
148	Req 3 - States we should pass back in Plain text, however various other Req state that all must be encrypted and that no plain text can be used due to security and confidentiality	Text format will be required when the system retruns back the fields of database.
149	Req 4 - What is the scope of the current collections by the MNOS and who is responsible for the data Migration	To have all the records of existing data of MNOs. Refer to answer of Question (35)
150	Req 6 , What is the workflow and integration with the MNO's to restrict over subscription, as the RFP does not detail this but infers that it will be a message to the sales agent.	Bidder is required to propose the business logic including the such workflow.
151	Req 7 - As the sales of the MNOs should not be stopped, how will the post processing be implemented to adhere to the "Restriction" in req 6	Refer to answer of Question (26) (except storage in the device)
152	Req 17 - States Main plus DR which is in conflict with other requirements,	Disaster recover site shall be mandatory (REQ 25)
153	Req 17 - Should all services be provided within Myanmar to ensure Data Sovereignty	YES
154	Req 18 - Should only Windows be supported ?	YES
155	Req 19 - Can the bidder offer a fully Virtual On Premise solution (Virtual Government Cloud) including Database virtualization and distributed SAN storage to increase availability and fault tolerance, as an alternative ?	cloud implementation is not allowed
156	Req 27 (a) - Does not include any storage requirements for documents, nor store criteria fro Face as per Req 1	Please refer to Question (44) (66) and REQ 2
157	Req 34, As compliance with the MINEXIII and PIV standard guarantee interoperability with a wide range of products freely available on the market, thus providing the MNOs with the best and most cost effective solution fro mass distribution. Should we there fore provide a list of all MINEX III and PIV compliment solutions available (in the context of AFIV and WEB/Mobil deployment) ?	Bidder can provide such list
158	b) What is the intended RPO/RTO for the DR site ?	99.9% uptime
159	c) How should the bidder deal (Priority) with conflicts between, stated requirements in the RFP and Technical Standards (also in the RFP) that would effect the interoperability and may cause and increase in cost for the MNOs with respect to mass deployment of the solution	PTD does not see any conflict. If in case of any conflict, RfP will be prioritized.

No	Questions	PTD Answers
160	e) Specifications are being used that are not in line with the MINEX III and PIV standards in terms of performance and interoperability, how should the bidder who is fully compliant with the standards and thus fully compliant with the interoperability aspect, view these additional criteria ?	Bidder shall comply with all requirement mentioned in REQ 27 (b)
161	REQ (35) Validity Date 3 month	YES
162	Does the PTD consider payment by USD?	NO
163	what will be the org architecture of system operation after launch?	N/A
164	Is there any ID verification process for integration?	NO
165	what's the plan for DR site deployment.	DR will be in Nay Pyi Taw at the existing goverment Data center.
166	Do we need to provide below inventory/Licenses: Servers, Switches, Biometric devices, Microsoft licenses, Software Licenses, Partner Installations?	YES
167	Can we use any Database to implement ?	YES
168	For Enterprise Service Bus, is it Okay to use Kafka?	YES
169	Myanmar Unicode Language for Search of Data - ?	YES
170	How many partners we need to manage ?	May vary upon the needs.
171	Parallel / Concurrent Sessions - Expectations ?	Refer to answer of Question (122)
172	DataCenter : Purchase for DR is parallel to this or not ? We recommend to build both active site and DR site from scratch and then rollout to public or MNO integration.	Refer to answer of Question (1) and REQ (17)
173	Can you clarify REQ-36 (The backup workaround plan to propose in case the biometric reader sensitivity at in POS is in issue.)	Refer to answer of Question (51)
174	For REQ-31, language support, is it means to Web Portal and Mobile App?	Yes. But it does not limit to web portal and mobile app only.
175	Regarding Biometric Verification: Are we required to ask them submit those information such a face, finger prints separately from the user or do we just request their NRC and rip the data from the NRC card?	N/A
176	Please elaborate on the requirement for liveness detection when capturing face photo. Is this feature required both during enrolment and authentication?	only for enrolment (registration). Please also refer to answer of question (32)
177	Can department provide a copy of identity cards that will be considered for this project as valid proof of identity? This is to check the quality of the card as well as the photo on the card to decide whether we can utilize this for additional checks.	No. This process is not necessary.

No	Questions	PTD Answers
178	We are assuming that supply of enrolment devices is in the scope of supplier. Considering that this project involves enrolment and then verification transactions, does the department expect a handheld device with all functionalities in one device or expecting a modular approach with discrete components?	Not decided yet.
179	Please provide the scoring system for various non-commercial heads under which bids will be evaluated.	see attached for scoring criteria
180	Please elaborate what is the full form of FAC.	Final Acceptance Certificate.
181	Since all MNO has different SIM registration process and have different data, Shall system need to support each existing SIM Registration Database or System can design and define the require copied data format for MNO submission	NO
182	Is it all existng SIM registration data already in the policy as 2 MNO biometric record (subscriber) per 2 SIM card from each MNO? Can we consider that exsiting SIM registration data will not be more than 2 records per MNO)	Existing database of MNO is not required to be migrated. Please also refer to answer of question (35) and (149).
183	Does valid identity documents contain smartcard(Chip)?	Not yet
184	Is MNO's point of sales consider only MNO official shop or include all retail shop by partner? What is the the estimate number point of sales of each MNO to be consider in this Tender.	N/A
185	For Business SIM and/or corporate SIMs, how many person/subscriber to represent the company?And how many SIM cards allowed per MNO? And across MNOs?	Not defined yet. Refer to answer of Question (123)
186	What is the expected growth of new customers being added to the system over the next 1-5 years?	System must be able to store up to 60 million biometric records.
187	1. Will the MNO do the approval of registration approval before storing the registration to common database?	YES
188	2. Based on understanding from the document, the system will expose the API to support these functions: Store Registration Information Get Registration Information Update Registration Information Delete Registration Information Verify Fingerprint Data What are other functions to support?	May vary upon the needs.
189	How many customers will be onboarded for initial deployment of services?	No existing enrollment

No	Questions	PTD Answers
190	၁။ Covid-19 Issue ကြောင့်အထွေထွေနေ့စဉ်နှင့်နီးကြန့်ကြာမှုများရှိသဖြင့် တင်ဒါတင်သွင်းရမည့်ရက်အား နောက်ဆုတ်ပေးရန်အစီအစဉ်ရှိ /မရှိ။	တင်ဒါတင်သွင်းမည့်ရက်အား (9.6.2020) ရက် နေ့ ထိ နောက်ဆုတ်ထားပါသည်။
191	၂။ Finger Print Registration စံနစ်ဖြင့်သာစစ်ဆေးရသည့် စံနစ်မဟုတ်ဘဲ အခြားသောနည်းပညာ (Face Recognition ဖြင့် Self Registration လုပ်နိုင်သည့်စံနစ်များ)အား လက်ခံနိုင်ခြင်းရှိ/မရှိ	Finger Print Registration စံနစ်ဖြင့်သာ ယခုအချိန်တွင် ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။
192	Database Migration လုပ်ရမည့် MNO တခုခြင်းစီ၏ ခန့်မှန်း Registration Data	Migration မလုပ်ပါ Refer to answer of Question (37)
193	Data Center သည် လက်ရှိ အခန်း(သို့မဟုတ်) အဆောက်အဦ တွင်ဆက်လက်ထားရှိမည်။	Refer to answer of Question (1)
194	(သို့မဟုတ်)အသစ် Data Center အား Access control များ ELV များဖြည့်သွင်း ပါဝင်သည့် full security system ထည့်သွင်းပေးရန်လိုအပ်မည်/မလိုအပ်မည်။	Refere to answer of Question (40)
195	၁၀၀% နိုင်ငံတော်ဘတ်ဂျက်လား?	အခြေခံဆက်သွယ်ရေးလိုအပ်ချက်ဖြည့်ဆည်းရေး ရန်ပုံငွေ (Universal Service Fund) ဖြင့် ဆောင်ရွက်သွားပါမည်။
196	Fingerprint ယူရမယ်လို့ ပြောထားပါတယ် အခု Covid-19 ကာလမှာ လက်ဓမ္မနိပ်တာကို ရောဂါကူးနိုင်တာကြောင့် တားမြစ်ချက်ထုတ်ပြန်ထားပါတယ်, အဲအတွက် Biometric အချက်အလက်ယူတာကို (Eye / Face) ပြောင်းလဲဖို့အစီအစဉ်ရှိပါသလား..	ပြောင်းလဲရန် အစီအစဉ်မရှိသေးပါ။
197	က) တင်ဒါဖွင့်ဖောက်မည့်ရက် တွင် တင်သွင်းမည့်တင်ဒါများကို Online မှ တင်သွင်း ခွင့်ပြုရန် (သို့မဟုတ်) လူကိုယ်တိုင် ယူဆောင် လာရန် ဖြစ်ပါက ရန်ကုန် တွင် တင်သွင်း နိုင်ရန် စီစဉ်ပေးပါရန် တင်ပြအပ်ပါသည် ။	Online မှ တင်သွင်း ခွင့်ပြုရန်အစီအစဉ်မရှိပါ။ လူကိုယ်တိုင် ယူဆောင် လာရန် ဖြစ်ပြီး Covid-19 အခြေအနေပေါ်မူတည်၍ တင်ဒါတင်သွင်းရမည့်နေရာ အပြောင်းအလဲ ရှိပါက ကြော်ငြာပေးသွားမည် ဖြစ်ပါသည်။
198	Common Database စနစ် တည်ဆောက်ရန် အိမ်ဖွင့်တင်ဒါ ခေါ်ယူရာတွင်အမှတ်စဉ် (၂ - ဃ) ၌ “Local Team” ဖွဲ့စည်းထားရှိရမည် ဟုဖော်ပြထားသော်လည်း အမှတ်ပေးခြင်း ပုံစံ ၏ ပေးမှတ် မပါရှိပဲ ၊ တင်ဒါတင်သွင်းသည့် ကုမ္ပဏီ (သို့မဟုတ်) ပူးပေါင်းမည့် ကုမ္ပဏီ ၏ ဝန်ထမ်း(သို့မဟုတ်) အဓိက ဝန်ထမ်း ကိုသာ ပေးမှတ် တွင် ဖော်ပြထားပါသည်။ ထို့ကြောင့် Local Team ဆိုသည်မှာ တင်ဒါ တင်သွင်းမည့် ကုမ္ပဏီ ၏ဝန်ထမ်း (သို့မဟုတ်) အဓိက ဝန်ထမ်း ကို ဆိုလိုခြင်း ဟုတ် ၊ မဟုတ်သိလိုပါသည် ။ ထို့အတူ ပူးပေါင်း ဆောင်ရွက်မည့် ကုမ္ပဏီ ၏ ဝန်ထမ်း (သို့မဟုတ်) အဓိက ဝန်ထမ်း များကလည်း Local Team ဟု အသိအမှတ်ပြု ၊ မပြုသိလိုပါသည်။ အကယ်၍ အထက်ဖော်ပြပါ ဝန်ထမ်း ၊ အဓိက ဝန်ထမ်းများ ကိုဆိုလိုခြင်း မဟုတ်ပါက မည်သို့သော Team ကို ဆိုလိုပါသနည်း ? မည်သို့သောသူများ ကို ဆိုလိုခြင်း ဖြစ်ပါသနည်း ? မည်သည့် ရည်ရွယ်ချက်ကြောင့် Local Team ကို ဖွဲ့စည်း စေချင်သနည်း? မည်သည့် အချိန်တွင် ဖွဲ့စည်းရမည်နည်း?စသည် တို့ကို ရှင်းလင်း ပေးပါရန် တင်ပြအပ်ပါသည်။	Local Team ဆိုသည်မှာ တင်ဒါခေါ်ယူထားသည့် project အား အကောင်အထည်ဖော် ဆောင်ရွက်ရန် တင်ဒါ တင်သွင်းမည့် ကုမ္ပဏီ နှင့် ပူးပေါင်း ဆောင်ရွက်မည့် ကုမ္ပဏီ တို့မှ ဖွဲ့စည်းထားသည့် အဖွဲ့ကို ဆိုလိုပါသည်။ ယင်းအဖွဲ့သည် project အား on-site support ပေးနိုင်ရန်အတွက် Project ကာလအတွင်း ပြည်တွင်းအခြေပြု အဖွဲ့အစည်း ဖြစ်ရမည်။ ယင်းအဖွဲ့သည် project စတင်ချိန်တွင် ဖွဲ့စည်းပြီးဖြစ်ရမည်။

No	Questions	PTD Answers
199	<p>အထက်ပါကဲ့သို့ Local Team ဖွဲ့စည်းရာတွင်လည်း ယခု စီမံကိန်း သည် နိုင်ငံတော် အဆင့် စီမံကိန်း ဖြစ်ပြီး လူဦးရေ သန်း (၆၀) ၏ Biometric အချက်အလက်များကို လုံခြုံစွာ သိမ်းဆည်းကာ စီမံခန့်ခွဲရမည့် စီမံကိန်း ဖြစ်ပါသည်။ မြန်မာနိုင်ငံတွင် ဤစီမံကိန်း ကဲ့သို့ အဆင့်အတန်း မြင့်မားပြီး အရွယ်အစား ပမာဏ ကြီးမားသည့် စီမံကိန်း ယခုအချိန်အထိမရှိသည်မှာ အထင်အရှားပင် ဖြစ်ပါသည်။ ထို့ကြောင့် မြန်မာ ကုမ္ပဏီများ အနေဖြင့် လက်တွေ့ အတွေ့အကြုံ ရှိသော ပညာရှင်များ ရှာဖွေခန့်ထားရန် အခက်အခဲ ရှိပါမည် ။ ထို့ကြောင့် မည်ကဲ့သို့ ပညာရှင်များ ကို အရည်အချင်းရှိသည်ဟု သတ်မှတ် ထားပါသလဲ ?</p>	<p>project ကာလအတွင်း on-site support ပေးနိုင်ရန်အတွက် ပြည်တွင်းမှ ဖြစ်စေ ပြည်ပမှ ဖြစ်စေ စီမံကိန်းနှင့်ဆက်စပ်သည့်လုပ်ငန်းအတွေ့အကြုံ၊ လုပ်ငန်းနှင့် သက်ဆိုင်သည့် ပညာအရည်အချင်း ရှိသူများ ဖြင့် ဖွဲ့စည်း ဆောင်ရွက်ရမည် ။</p>
200	<p>ထို့ကြောင့် အမှန်တကယ် ဤတင်ဒါလုပ်ငန်း နှင့် ညီညွတ်သော အဆင့်အတန်း ရှိသည့် Local Team ကို မည်သည့် အချိန်တွင် ဖွဲ့စည်း ရမည်နည်း ? (၂ ပမာ -တင်ဒါအောင်မြင်သည် ဟု ကြေငြာအပြီး (၇) ရက်အတွင်း ဖွဲ့စည်းရမည်) မည်သို့ဖွဲ့စည်း ရမည် ? (မည်သည့် အဆင့် ရှိသော ပညာရှင်များ ကို မည်သည့် အရေအတွက်ဖြင့် ဖွဲ့စည်းရမည်) စသည် တို့ကို သတ်မှတ်ပေးပါရန် တင်ပြအပ်ပါသည်။</p>	<p>လုပ်ငန်းအပ်နှံစာချုပ်ချုပ်ဆိုပြီး (၂)ပတ်အတွင်းတွင် တင်ဒါတွင် အဆိုပြုတင်ပြထားသည့် Local Team ကို ဖွဲ့စည်းပြီး ဖြစ်ရမည်။</p>
201	<p>REQ. 2 တွင်ဖော်ပြထားသော “xxx without any loss or compromise xxx” ဆိုသည့် စကားလုံး ကို “xxx WSQ Loss compression for fingerprints and JPEG for face images xxx” ဟု ပြင်ဆင်ပေးပါရန် တင်ပြအပ်ပါသည်။ ထိုကဲ့သို့ ပြင်ဆင် ပြောင်းလဲပေးပါက သိမ်းဆည်းရမည့် ဒေတာ ပမာဏ သည် 1 MB ထက် ပိုမိုခြင်း မရှိသော်လည်း လက်တွေ့ အသုံးပြုနိုင်သည့် Fingerprints နှင့် Face Image တို့ ၏ အရွယ်အစား တို့မှာ ပိုမို ကြီးမား သဖြင့် ဤကဲ့သို့ ပြင်ဆင် ပေးခြင်း အားဖြင့် လက်တွေ့ အသုံးပြုရာတွင် ပိုမို တိကျ မှန်ကန်နိုင်ပါသည်။ ထိုကဲ့သို့ ပြင်ဆင်ခွင့်ပြု ပေးခြင်း မှာလည်း နိုင်ငံတကာစီမံကိန်းများ တွင် ခွင့်ပြုလေ့ ရှိသော စည်းကမ်း အတိုင်း ဖြစ်ပါသည်။</p>	<p>The question is not related with REQ (2).</p>
202	<p>REQ. 5 တွင် “xxx at least 5,000 read/ write concurrent requests xxx” ဟု ဖော်ပြထားသော်လည်း pre sec (သို့မဟုတ်) per minutes (သို့မဟုတ်)per 10 minutes ဟု ဖော်ပြထားခြင်း မရှိသဖြင့် ရှင်းလင်းပေးပါရန်တင်ပြအပ်ပါသည်။</p>	<p>concurrent requests 5000 ကို response time 5 sec ဟု သတ်မှတ်ထားပါသဖြင့် TPS 1000 ကို ဆိုလိုပါသည်။ ယင်း သတ်မှတ်ချက်မှာ ABIS နှင့် သက်ဆိုင်သည့် Transaction များအတွက် မဟုတ်ပဲ non ABIS များအတွက် ဖြစ်ပါသည်။</p>
203	<p>(၂၉ - ၄ - ၂၀၂၀) ရက်နေ့ က Pre – Bid Online Meeting တွင် ရှင်းလင်း ပြောကြားချက် အရ (၁) လ လျှင် SIM Card (၇) သန်း ခန့် ကို မှတ်ပုံတင်လိုသဖြင့် ဤကဲ့သို့ သတ်မှတ် ရေးသားထားခြင်း ဖြစ်သည်ဟု ပြောကြားခဲ့ သဖြင့် ဤအချက်ကို အခြေခံ၍ တွက်ချက်လျှင် SIM Card တစ်ခု မှတ်ပုံတင် လျှင် (၁၀) မိနစ်ခန့် အချိန်ယူမည် ဖြစ် သဖြင့် “at least 5,000 read/ write concurrent request per 10 min” ဟု ယူဆ နိုင်ပါသည် ။ သို့ဖြစ်ပါ၍ 5000 requests / 10mins x 60 mins per hour x 8 hours per day x 30 days per month = 7.2 million requests per month ဟု တွက်ချက် နိုင် ပါသည်။ ထို့ကြောင့် “at least 5,000 read/ write concurrent request per 10 min” ဟု ယူဆ တွက်ချက်ခွင့် ပြုပါရန် တင်ပြအပ်ပါသည် ။</p>	<p>concurrent requests 5000 ကို response time 5 sec ဟု သတ်မှတ်ထားပါသဖြင့် TPS 1000 ကို ဆိုလိုပါသည်။ ယင်း သတ်မှတ်ချက်မှာ ABIS နှင့် သက်ဆိုင်သည့် Transaction များအတွက် မဟုတ်ပဲ non ABIS များအတွက် ဖြစ်ပါသည်။</p>
204	<p>REQ. 27 တွင် ဖော်ပြထားသော ကိန်းဂဏန်း များ နှင့် REQ. 5 တွင် ဖော်ပြထားသော ကိန်းဂဏန်းများမှာ ကိုက်ညီမှု မရှိသဖြင့် ဤစနစ် ၏ စွမ်းဆောင်ရည် ကို တွက်ချက် အဆိုပြုရာတွင် REQ. 27 ကို အတည်ယူ၍ တွက်ချက် ခွင့်ပြုပေးပါရန် တင်ပြအပ်ပါသည်။ အဘယ့်ကြောင့် ဆိုသော် REQ. 27 တွင် ဖော်ပြထားသော အချက် သည် ပိုမို တိကျ ပြည့်စုံသောကြောင့် ဖြစ်ပါသည်။</p>	<p>REQ (5) for non-ABIS and REQ (27) is for ABIS requirement.</p>

No	Questions	PTD Answers
205	REQ. 27 တွင် ဖော်ပြထားသော 1:N operation ကို “registrations” ဟု သုံးစွဲခွင့်ပြုပါရန် နှင့် “500 1 : N Operation per minutes on 60 million database” ဟု အခြေခံ၍ တွက်ချက် ကာ အဆိုပြု တင်ပြခွင့် ပေးပါရန် တင်ပြအပ်ပါသည်။	YES. Please also refer to answer of Question (29)
206	လုံခြုံမှု နှင့် လက်တွေ့ကျမှု တို့အရ REQ. 21 တွင် ဖော်ပြထားသော “able to enrol at least 2 fingerprint” အစား “able to enrol 10 fingerprint” ဟု ပြင်ဆင်ပေးပါရန် တင်ပြအပ်ပါသည်။ ဤကဲ့သို့ လက်တွေ့တွင် 10 fingerprint ကို မှတ်တမ်းယူ သိမ်းဆည်းထား မှသာ SIM Card မှတ်ပုံတင်သူ တစ်ဦး သည် ၎င်း၏ အခြား လက်ချောင်း ၏ လက်ဗွေရာကို အသုံးပြု၍ နောက်ထပ် SIM Card များ ကို တရားမဝင် မှတ်ပုံတင် သုံးစွဲခြင်း ကို စိစစ် နိုင်မည် ဖြစ်ပါသည်။	at least 2 fingerprint သာ သတ်မှတ်ပါသည်
207	တင်ဒါတင်သွင်းသည့် ကုမ္ပဏီ၏ စီမံကိန်းတွင် ပါဝင် ဆောင်ရွက်မည့် “အဓိက ကျသော ဝန်ထမ်း အရေအတွက် သည် အနည်းဆုံး (၃) ဦး ရှိ ရမည်” ဟူသော စကားရပ်အားရှင်းလင်းပေးပါရန် တင်ပြအပ်ပါသည်။	Common Database အား အကောင်အထည်ဖော်တည်ဆောက်ရာတွင် ပါဝင်ဆောင်ရွက်မည့်ဝန်ထမ်း အရေအတွက် (အနည်းဆုံး) ကိုဆိုလိုပါသည်။
208	အဘယ်ကြောင့် အနည်းဆုံး (၃) ဦး ဟု သတ်မှတ်ရသနည်း ? အပေါ်အောက် အဆင့်ဆင့် (High Level, Middle Level, Junior Level) (၃) ဦး ကို ခန့်ထား စေလိုခြင်းလား ? မတူညီသည့် ကဏ္ဍ (၃) ခု ချင်း စီ အတွက် အဓိက ဝန်ထမ်း (၃) ဦး ကိုဆိုလို သလား ? (၂ ပမာ - ငွေကြေး ကဏ္ဍ ၊ နည်းပညာ ဆိုင်ရာ ကဏ္ဍ ၊ စီမံရေးရာ ကဏ္ဍ) အခြား သတ်မှတ်ချက်များ ရှိပါက မည်သည့် အချက်များကို သတ်မှတ်ထားပါသလဲ ?	ကုမ္ပဏီမှ တင်ပြသည့် အဆိုပြုဖွဲ့စည်းပုံနှင့်သာ သက်ဆိုင်ပါသည်။
209	အဓိက ဝန်ထမ်း ဆိုသည်မှာ ယခု Common Database စနစ်တွင် အဓိက ကျသော နည်းပညာရပ်ပိုင်းဆိုင်ရာ ဝန်ထမ်းများ ကိုသာ ဆိုလိုခြင်း လား ? ဟုတ်ခဲ့ပါက မည်သည့် နည်းပညာရပ်များ က Common Database စနစ် အတွက် အရေးကြီးသည် ဟုသတ်မှတ်ထားပါသနည်း ?	Biometrics ဖြင့် SIM Card မှတ်ပုံတင်ခြင်းဆိုင်ရာ နည်းပညာနှင့် အတွေ့အကြုံရှိသော ဝန်ထမ်း များကို အဓိကဆိုလိုပါသည်။
210	တင်ဒါ အမှတ်ပေးစနစ် တွင် အမှတ်စဉ် (၁) ခု ချင်း အလိုက် ပေးမှတ်များ အား ဖော်ပြပါရန် တင်ပြအပ်ပါသည်။ (၂ ပမာ - အမှတ်စဉ် ၁ (က) (၁) အတွက် ပေးမှတ် ၊ အမှတ်စဉ် ၁ (က) (၂) အတွက် ပေးမှတ် ၊ စသည်ဖြင့်)	see attached for scoring criteria
211	အမှတ်စဉ် (၁ - ခ) နှင့် (၄ - ခ) ပါ “လုပ်ငန်းပူးပေါင်းဆောင်ရွက်သည့် ကုမ္ပဏီ” ဟူသော စကားရပ်အား ရှင်းလင်းပေးပါရန် တင်ပြအပ်ပါသည်။ ၂ ပမာ - ပူးပေါင်း ဆောင်ရွက်သည့် ကုမ္ပဏီ ဟူသည်မှာ Joint Venture ပြုလုပ်သည့် ကုမ္ပဏီ ကို ဆိုလို ခြင်းလား ? အလွတ်သဘော ပူးပေါင်းရန် LOI (သို့မဟုတ်) MOU ရေးထိုးထားသည့် ကုမ္ပဏီကို ဆိုလိုသလား? ၂ ပဒေအရ ချည်နှောင်မှု ရှိသော စာချုပ်စာတမ်း ဖြင့် ပူးပေါင်းရန် သဘောတူညီထားသော ကုမ္ပဏီလား? ရှင်းလင်းပေးပါရန်။	မည်သည့်သဘောတူညီချက်တစ်ရပ်ရပ်ဖြင့်မဆို လုပ်ငန်းပူးပေါင်းဆောင်ရွက်သည့် ကုမ္ပဏီ၊ ကုမ္ပဏီများ ကို ဆိုလိုပါသည်။
212	အမှတ် (၂-ခ) တွင် ဖော်ပြထားသော “စနစ်တကျ ဖော်ပြမှု” ဟူသော စကားရပ် နှင့် ပတ်သက်သော သတ်မှတ်ချက်များကို ရှင်းလင်းဖော်ပြ ပေးပါရန် တင်ပြအပ်ပါသည်။ (၂ ပမာ - မည်သည့် အချက်များ ပါဝင်သင့်သည် ၊ မည်သည့် ပုံစံဖြင့် ဖော်ပြသင့်သည် စသည်ဖြင့်)	Project ဆောင်ရွက်မည့်အစီအစဉ်အသေးစိတ်ကို ဖော်ပြရန်
213	နည်းပညာ စံချိန်စံညွှန်းများ နှင့် ကိုက်ညီမှု နှင့် ပတ်သက်၍ အမှတ်ပေးရာ တွင် Mandatory နှင့် Non - Mandatory တို့ကိုပါ အမှတ်ပေးပါသလား ၊ ဘယ် REQ ကို အမှတ် ဘယ်လောက် ပေးမလဲ ၊ REQ တွေ ကို ပေးတဲ့ အမှတ်တွေ က တူသလား၊ ဘယ်လို ခွဲခြား ထားပြီး အမှတ်ပေး သလဲ ၊ ရှင်းလင်း ပေးပါရန် တင်ပြအပ်ပါသည် ။	Mandatory သည် qualification criteria ဖြစ်ပြီး non-mandatory သည် ranking criteria ဖြစ်ပါသည်

No	Questions	PTD Answers
214	အမှတ် (၅) ပါ ကမ်းလှမ်းသည့် ဈေးနှုန်းကို အမှတ်ပေးရာတွင် မည်သို့ တွက်ချက် အမှတ်ပေးသည်ကို ရှင်းလင်း ပေးပါရန် တင်ပြအပ်ပါသည်။ (ဥပမာ -ဈေးနှုန်းများမှာ ကျပ်ငွေ (၈) ဘီလီယံ ၊ (၉) ဘီလီယံ ၊ (၁၀) ဘီလီယံ ၊ (၁၁) ဘီလီယံ ၊ (၁၂) ဘီလီယံ ဟူ၍ ကုမ္ပဏီ (၅) ခုက တင်သွင်းလာပါက မည်ကဲ့သို့ အမှတ်ပေးမည်ကို သိလိုပါသည်)	ဈေးနှုန်းအများဆုံးသည် ဈေးနှုန်းဆိုင်ရာအမှတ်အနည်းဆုံးရမည် ဖြစ်ပါသည်