

Reference No 2019-BAC01- 691

11 November 2019

SUBJECT: Bid Bulletin No.4

Dear Prospective Bidder

This serves as the official transmittal of Bid Bulletin No. 4 for the Procurement of Supply, Installation Support and Maintenance of Automated Biometric Identification Systems (ABIS), for Philippines Identification System (PhilSys). This bulletin is being issued to amend the Bidding Documents and clarify queries from prospective bidders.

Please be informed that the contents of the Bidding Documents that have not been modified shall remain in full force and effect.

The bulletin shall be posted on both the PHILGEPS and PSA websites.

Truly yours,

CANDIDO J. ASTROLOGO, JR.

Chairperson, PSA-Bids and Awards Committee

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Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-001		Reduction of the requirement that the company should have been in the biometrics business for at least ten (10) years.	The ten (10) years requirement remains.
BB4-002	PBD Vol 2, Page 56, Sec 12.14 Biometric Hosting Requirement	Can you please be more specific with this requirement. Does the BioSP has to refresh all the hardware after a certain time?	Please refer to BB3-069.
		What exactly means "if needed"?  Do you excpect that the vendor will replace all hardware components in DC and DR after a certain time (e.g. 5 years)?	
BB4-003	PBD Vol 2, Page 35, 11.2 Management	The management related functions stated in section 11.2 is not aligned to the management functions stated on MOSIP website. To be clear, 'Clear' and 'Configure' commands are not stated on MOSIP website while 'GetPendingRequests' and 'GetReferenceCounts' are not stated in the tender specifications. Please clarify the management commands to be supported.	The functions stated in the MOSIP github documentation are the default, and is customizable/configurable. Bidders should comply with the management commands included in the PBD.
BB4-004	PBD Vol 2, 11.4 Data Storage Requirement, Page 36	Can export be achieved via an ABIS API?	The BioSP can propose the design for how export can be achieved, provided that the exported data must be in industry standard format readable using open source tools and compliant with the standards set in Table 4.
BB4-005	PBD Vol 2, 12.3 Capacity Planning, Page 50	Based on the above requirements, we are required to submit 2 set of BoMs. In terms of price tender submission, do we base on the 110M records or 150M records?	Please refer to BB3-106.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-006	General	Can we either have extension to submit the bid or an option to submit Philgeps certification at a later stage?	The deadline for submission of bids remains on 19 November 2019, 1:30 p.m. as stated in BB1-01.  Please note the correction on BB3-140, as follows, "However, during the opening of bids the bidder must submit all the required documents listed in Annex A." be changed to "However, during the opening of bids the bidder must submit all the required documents listed under Class "A" documents."  Also please check GPPB Resolution
BB4-007	General	We respectfully ask for a time extension. Or better yet, to allow sub contracting for some parts of the bid so that only the local partner would need the PHILGEPS platinum certification	No. 26-2017, dated 31 July 2017.  Please refer to BB4-006
BB4-008	PBD Vol 2, 19. Service Level AgreementCategory- II: ABIS Solution- Related Performance Levels, Page 85	Based on the SLA requirement, Is it possible to add a prerequisite clause based on minimum quality level on biometric data received? Example:  a) 10 fingerprints of good quality (NFIQ 1-3) b) 2 iris of good quality (quality images that meet ISO/IEC 19794-6. Especially, the iris radius > 100 pixels)	Bidders should consider the Biometric standards as defined in Table 4.  Specifications under Category-II: ABIS Solution-Related Performance Levels remains.
BB4-009	PBD Vol 2, Technical Specifications, 13.3 Acceptance, Page 61 and 17 Implementation Schedule, Page 77	Para 13.3 mentioned Acceptance of Solution is only after 30 Working days after Go- Live and Yet Table 12 Showed that Solutions will Go Live only after Acceptance of Solution. This seems to contradict each other. Can PSA clarify which is correct and then update the respective section accordingly.	Table 12 Implementation Schedule item No. 9 is hereby revised from "Acceptance of Biometric Solution" to "UAT of Biometric Solution".

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-010	19 - Liquidated Damages onPage 54 General Condition of Contract	Can PSA give an example showing how the Liquidated Damages would be calculated using as it is unclear these two separate clauses.	For the procurement of goods, the procedure on computation of liquidated damages is clearly and expressly specified in PBD Vol 1, Section IV, Clause 19.
	19.4.4 Liquidated Damages ( Page 82 of Vot 2 Technical Specifications)		The liquidated damages in Sec 19.4.4 of PBD Vol 2 specifies the penalties based on the severity level of performance.
			The details of categories of service levels are specified in PBD Vol 2 19.4.5.
BB4-011		The PhD requirement will be restrictive and will be unnecessarily eliminate some of the biggest Tier 1 biometric providers. May we request that this be changed to "Bachelor's degree in Imaging Science or related fields" as long as they have relevant experience of at least 5 years.	The PhD requirement remains.
BB4-012	PBD Vol 1, Section II - Instructions to Bidders - 12.I.(a).(ii) Checklist of Eligibility Requirements - #2, Page 20	With reference to the revised RA9184 Page #31; Please confirm that the completed contract (other than SLCC) is not required?	Please refer to PBD Vol. 1 12.i.(a).ii, Page 20
BB4-013		Can we clarify which editions of ISO 19785, ISO-19794-2, ISO 19794-4, ISO-19794-5, ISO 19794-6 and JPEG2000 is to be adopted for MOSIP compatibility?	The latest edition of ISO standards as mentioned in Table 4.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-014	PBD Vol 1, 11.3 Payment Milestone of SCC, Page 66	As the tenders for the SI and Card printing are yet to be released, the milestones defined for Philsys Go Live in BB2-098 will be dependent and affected by the winning bidder's delivery and performance in their respective contracts which may in turn affect the delivery/performance of the BioSP for this milestones for causes not attributable to the BioSP.	The provision on payment milestone in BB2-098 remains.
		Can the bidder propose for this payment milestone to be qualified as "PhilSys Go Live or T+9 Months (270 days) after the NTP, whichever is earlier",	
BB4-015	PBD Vol 1, 11.3 Payment Milestone of SCC, Page 66	This payment milestone constitute 20% of the contract value on the basis of migration dependent on PSA giving BioSP three (3) months' notice when the interim data centre is reaching saturation point. There is no specific timeline provided which will entail for the BioSP to continually maintain resources available to anticipate the migration for an undetermined period.	The provision on BB2-099 remains.
		Can the bidder propose for the following split of this milestone:  - 10% payable within T+9 months (270 days) after NTP or after successful migration to Permanent DC/DR, whichever is earlier  - 10% payable within T+12 months (360 days) after NTP or after successful migration to Permanent DC/DR, whichever is earlier.	
BB4-016		Other than PSA provided data center, can we confirm that servers and other IT infra will also be provided by PSA for the Sandbox hosting?	Sandbox to be provided by the Bidder should be end-to-end solution, including hardware to be hosted in the PSA provided Data Centers.

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BB4-017		Pursuant to provisions of Section 3.2 of Annex D of the IRR of RA 9184 and the spirit of GCC 19 of the ITB, please confirm that the maximum performance penalty deduction for the project shall not exceed 10% of the total amount of the contract.	Yes.
BB4-018		Minutiae Interoperability Exchange (MINEX) III is a test to provide measurements of performance and interoperability of core template encoding and matching capabilities. In the ABIS tender, PSA have emphasised on the importance of interoperability. To safe guide PSA; propose to PSA that the bidder should provide the MINEX III report and proof they have Pass the MINEX III test.	Please refer to BB1-17.
BB4-019	PBD Vol. 2, Table 12, Implementation Schedule	Given the above conditions:  1. If Go-Live is a dependency of Acceptance, why does Acceptance precedes the Go-Live in the Implementation Schedule?  2. If only UAT Approval constitutes Go-Live, and UAT and Benchmarking should not be concurrent activities, on the Assumption that Benchmarking typically comes after UAT:  - Is the expectation correct that Benchmarking will be done after ABIS has gone live already?  - Is the Training also expected to be conducted after ABIS has gone live already?  Kindly clarify the inconsistencies of the stated requirements for Acceptance and Go-Live, with the expected Implementation Schedule by PSA.	ABIS Go-Live is different from PhilSys Go-Live.  Please refer to BB4-009.  No. Benchmarking of Biometric Solution shall be done before ABIS Go-Live. ABIS Go-Live constitutes the formal approval from PSA after successful completion of the UAT.  Benchmarking as specified in 13.1 shall cover the entire PhilSys including but not limited to biometric solution, PhilSys Data Store and all related interfaces.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-020	PBD Vol 2,14.9, Indicative Deployment Schedule, Page 163	Is this requirement applicable for the entirety of the 5-Year Warranty & Maintenance period?  If not, until what point After Go-Live will PSA require the Project Manager to be Part-Time Onsite, 7 days in a month?	The requirement is applicable for the entire duration of the contract which is 5 years from NTP. Please refer to 14.9 Indicative Deployment Schedule.
BB4-021	PBD Vol 2, 12.14.1,Biometric Solutions Hosting Requirements Data Center resources, Page 153	For clarification with PSA on the extent / details of the Data Center Resources they will provide (i.e. Physical Space, Cooling, Power, Network cabling).  Based on Sec 12.14.1 Vol. 2 of the PBD, ABIS Hardware implementation design must be able to support a Tier-3 Data Center configuration.  For confirmation that PSA will provide a Data Center infrastructure which will be Tier-3 compliant, for the following sites: - Interim Data Center site - Interim Disaster Recovery site - Permanent Data Center site	Yes, the PSA will provide the Tier-3 interim and permanent Data Center and DR Sites.
		- Permanent Disaster Recovery site	
BB4-022	PBD Vol 2,12.14.1,Biometric Solutions Hosting Requirements Data Center resources, Page 153	Will PSA provide a redundant, Data Center- grade Cooling system? (i.e. CRAC - Computer Room Air Conditioning or PACU - Precision Air Conditioning Unit)	Yes.
BB4-023		Will PSA provide Power in the Data Center up to the Rack Level? (i.e. Rack PDUs will just plug to a Power Receptacle that PSA will provide with a 5 KVA power supply)	Yes.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-024	PBD Vol 2, 12.14.1,Biometric Solutions Hosting Requirements Data Center resources, Page 153	Will PSA cover the other requisite Power / Electrical components in a Data Center such as Electrical Wirings, UPS, Generator Set, Circuit Breakers, Main Power receptacles for Server Racks, etc.? Will these be redundant?	Yes.
BB4-025	SCC 11.3(b) iii, Payment Milestone, Page 66	When will the bid of SI for Philsys be issued? When is the expected date of Philsys Go-Live? We need to know because payment milestone is dependent on the Philsys readiness.	The PSA will published the SI documents when ready. Please monitor the PSA website and the PhilGEPS for updates on when the SI documents will be published.  The PhilSys Go-Live is expected to be in Quarter 3 of 2020.
BB4-026	ITB Clause 5.iv, SLCC, Experience, Page 41 and 71	We would like to seek consideration regarding the requirement for an installation of 40 million records for at least one of the three modalities as stated on Page 41, ITB Clause 5.iv and on Page 71, Technical Specifications.  If we may, there are only 29 countries with over 50 million (or 35 countries with over 40 million) population and not all of them have automated (or digital) national id systems nor more specifically the use of ABIS technology in place. We have one reference site that is more than 60 million but the government, for national security reasons, would not divulge the exact number of records. Given this and for the interest of increasing the number participants for this bid, may we kindly request to amend the requirement of a single installation of at least 40 million records to two (2) installations of at least 20 million records each.	The provisions in the requirement for an installation of 40M records remains.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-027	ITB Clause 5.iv, SLCC, Experience, Page 41 and 71	"Given the potential size of the PhilSys database, we understand why one of the requirements is that the bidder should have an installation of 40 million gallery size. For your consideration, we have successfully delivered, completed and was satisfactorily signed off - a Biometrics system that was configured to process more than 50 million personal records. The exact number of records cannot be disclosed due to the prerogative of our client.  In light of this situation, may we kindly request that a single installation having the capability to process more than 40M records be acceptable instead of having a single installation of 40M records."	The provisions in the requirement for an installation of 40M records remains.
BB4-028	19.4.6, Service Levels and Targets, Page 182	Since the area of the iris is relatively small, we think the specification of iris image is very important to secure the required service level, and we think the iris image should have size of more than 640 x 480 pixels and 500 dpi. Based on this, please tell us the image size (pixels) and resolution (dpi) of iris image which will be provided by PSA?	Please refer to Table 4 on Biometric Standards.
BB4-029	11.18, Licensing Requirements, Page 141	Regarding the sentence "PSA shall have the right to deploy the SDK on additional Authentication servers to meet the horizontal and/or vertical scalability requirements to support peak authentication requests at the specified response time level", what is the definition of Authentication servers? Is it "PC/Server (physical machine)" that Authentication application (SW which is developed by SDK) runs on?	For the multimodal SDK to be used for authentication, there shall be no additional license payment for scaling up the authentication service.

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
BB4-030	11.18, Licensing Requirements, Page 141	Regarding the sentence "PSA shall have the right to deploy the SDK on additional Authentication servers to meet the horizontal and/or vertical scalability requirements to support peak authentication requests at the specified response time level", who will provide this additional Authentication servers? And how many additional Authentication servers will be provided?	The PSA will provide the authentication servers where the SDKs shall be deployed.  The authentication solution is estimated to handle 2 Million peak transactions per day.
BB4-031	Appendix B, Data Center	Minimum Technical Requirement Specifications for Data Centers	<ul> <li>The PSA will provide a Tier 3 compliant Data Center including wiring, physical space, cooling, power, and necessary cables.</li> <li>The Interim Data Center will be in Metro Manila.</li> <li>The Primary Data Center is expected to be located within Metro Manila or within Region III.</li> <li>The Disaster Recovery Site is located at least 50km radius from the Primary Data Center.</li> <li>Network connections within ABIS Solution shall be provided by BioSP.</li> <li>Network connections between PhilSys Components shall be provided by PSA.</li> <li>Network cabling within data centers is provided by the PSA or its appointed party.</li> <li>ABIS solution in Primary Data Center and Disaster Recovery site will be maintained in an Active-Passive configuration.</li> <li>PSA or its appointed party will be responsible for network connections between the Primary and Disaster Recovery Data Centers.</li> <li>The minimum power capacity per rack is 5 KVA. The maximum power capacity per rack is 15 KVA. The</li> </ul>

Bid Bulletin Reference Number	Specific Page/ Section in the Bidding Docs	Query/Issue	BAC Response
			<ul> <li>bidder can include in its Technical Proposal its recommended power rating per rack.</li> <li>Only one migration is envisaged including DC and DR.</li> <li>The BioSP shall shoulder the costs including, but not limited to, transportation, security and insurance, for at most one (1) migration of the data center.</li> <li>The BioSP should provide an overall strategy and approach for migration of sites (including data) as part of their Technical Proposal.</li> <li>The responsibilities of the BioSP for Transition and Migration of Data Center is specified in Sec 12.13 of the PBD Vol. 2.</li> <li>The PSA shall use the sandbox for 1:N deduplication of pilot registration records. The sandbox shall be hosted at PSA Data Center.</li> </ul>
BB4-032	Compliance Form, Vol. 1 Section VII Technical Specification	Updated Section VII. Technical Specifications Compliance Form	See section and table below.

## Section VII. Technical Specifications

# **Technical Specifications**

Item	Specification	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.i(a)(ii) and/or GCC Clause 2.i(a)(ii)
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## TECHNICAL SPECIFICATIONS

Category	Specification	Statement of Compliance
Bidder		
Proposed ABIS Customization	<ul> <li>Bidder must be able to customize their proposed ABIS for fingerprint, face and iris according to the requirements of PhilSys.</li> <li>Bidder must be able to provide brochures or documents related to the customization of their ABIS (for ABIS technical requirements)</li> </ul>	

Experience	Bidder must provide ABIS-related project references from at least two (2) completed projects in any country, as proof of their competence.	
	<ul> <li>Bidder must be: (1) an Original Design Manufacturer of the ABIS, where Original Design Manufacturer is defined as having ownership of the Intellectual Property for ANY (face, iris, or fingerprint) Biometric Solution; and (2) in the biometrics market for at least ten (10) years in order to ensure that only well-proven and matured technology will be supplied. This should be proven by related company documents.</li> <li>Bidder must have a Biometric Solution installation with at least forty (40) million</li> </ul>	
	records of at least one of the three (3) biometrics modalities (fingerprint, iris or face) in the database. This should be proven by related reference letters/documents.	

The  $Compliance\ Form\ -\ Technical\ Requirements\ -\ Bidder$  is provided below.

The Statement of Compliance to Technical Specification Requirements (Volume 2).

Technical Specification Requirements	Statement of
(PBD Volume 2)	Compliance
10. Biometric Solution	
10.1 ABIS solution design principles	
10.2 Biometric standards	
10.3 Interoperability Standards	
10.4 System Architecture Requirements	
10.5 Biometric Components	
10.6 ABIS Biometric Matcher	
11. Functional and Technical Requirements	
11.1 Enrollment	
11.2 Management	
11.3 Verification	
11.4 Data storage requirement	

Technical Specification Requirements (PBD Volume 2)	Statement of Compliance
11.5 Logging and monitoring	
11.5.1 ABIS Log	
11.5.2 Verification Log	
11.5.3 Management Functions Log	
11.6 Security Requirements	
11.7 Operator Interface Requirements	
11.8 Biometric Middleware	
11.9 Multimodal SDK	
11.9.1 Fingerprint 11.9.2 Iris	
11.9.2 ms 11.9.3 Face Photo	
11.10 Standards requirements	
11.11 Reliability Requirements	
11.12 Security Requirements	
11.13 User Interface Requirements	
11.14 Platform requirements	
11.15 Biometric Middleware	
11.16 Authentication Solution (SDKs and Integration Support)	
11.17 Biometric Manual Adjudication Solution	
11.18 Licensing Requirements	
11.19 Load Requirement	
12. Scope of Work	
12.1 Overview of scope of work	
12.2 Project Planning and Initiation	
12.3 Capacity Planning	
12.4 Requirements Analysis	
12.5 Solution Design	
12.6 Supply, Customization and Implementation of Biometric Solution	
12.7 Set up of Biometric Solution	
12.8 Integration Requirements	
12.8.1 Integration Requirements for PSA or its appointed party	
12.8.2 Integration Requirements for BioSP	
12.9 User Acceptance Testing (UAT)	
12.10 Roll out of Biometric Solution – ABIS Go-Live	
12.11 Conditions for Re-templatization	
12.12 Setup of Data Center Sites	
12.12.1 Data Center Strategy	
12.12.2 DC/DR Set up in the Interim	
12.12.3 Permanent DC/DR Set up	
12.13 Transition and Migration of Data Center	
12.14 Biometric Solution Hosting Requirements	
12.14.1 Supply of Hardware	
12.14.2 Environment Creation	
13. Benchmarking, Acceptance and Go-Live	

Technical Specification Requirements (PBD Volume 2)	Statement of Compliance
13.1 Benchmarking	
13.2 Commissioning	
13.3 Acceptance	
13.4 Go-Live	
14. Manpower Requirement	
14.1 Guidelines for staffing and provisioning of manpower	
14.2 BioSP functions that can be performed off-site	
14.3 Replacement of Personnel	
14.4 Removal of Personnel	
14.5 Logistics requirements of the Personnel	
14.6 Escalation Matrix	
14.7 Deployment of Resources	
14.8 Profile Qualifications	
14.9 Indicative deployment schedule	
15. Ongoing Maintenance	
15.1 Maintenance Management	
15.2 Biometric Solution Management	
15.3 Infrastructure Management 15.4 Information Security	
15.4.1 ISO Certification Readiness for Information Security	
Management	
15.4.2 Responsibility for the Overall Security of the Biometric	
Solution	
15.5 Help Desk Support	
15.6 Business Continuity Support	
15.7 Warranty and Annual Technical Support (ATS)	
16. Project Management	
16.1 Project Status Monitoring and Reporting	
16.2 Risk and Issue Management	
16.3 Change Control Management	
16.4 Transition and Migration to new Data Center sites	
16.5 Training	
16.6 Reporting	
16.6.1 ABIS Reports	
16.6.2 Data Quality Monitoring & Reporting	
16.6.3 Incident and Issue Reporting	
16.6.4 SLA Reporting	
17. Implementation Schedule	
18. Knowledge Transfer & Exit Management	
18.1 Knowledge Transfer	
18.2 Exit Management Plan  19. Service Level Agreement	
19.1 Service Levels	
19.1 Service Levels  19.2 Definition of Terms	
19.3 Service Levels and Targets	
17.3 Del vice Le vels and Targets	_1

Technical Specification Requirements (PBD Volume 2)	Statement of Compliance
19.4 SLA Framework	
19.4.1 Responsibilities of Parties	
19.4.2 Reporting Procedures	
19.4.3 SLA Change Process	
19.4.4 Liquidated Damages	
19.4.5 Category of Service Levels	
19.4.6 Service Levels and Targets	

Supply, installation, support and maintenance of Automated Biometric Identification Systems (ABIS) for Philippine Identification System (PhilSys)

## SUPPLEMENTAL BID BULLETIN NO. 4

# **Compliance Form Technical Specification Requirements - Bidder**

## 1. Proposed ABIS Customization

Bidder to provide details on how to customize the proposed ABIS according to the requirements of PhilSys. Please provide a short description in the space provided. Please use extra sheets if necessary.

a.	For Fingerprint modality:
Brochi	are or document related to the fingerprint modality customization attached as Annex(es)
b.	For Face modality:
Brochi	are or document related to the face modality customization attached as Annex(es)
c.	For Iris modality:

#### Philippine Statistics Authority

Supply, installation, support and maintenance of Automated Biometric Identification Systems (ABIS) for Philippine Identification System (PhilSys)

## SUPPLEMENTAL BID BULLETIN NO. 4

## 2. Bidder Experience

## a. Project References

Bidder to provide ABIS-related project references from at least two (2) completed projects in any country, as proof of its competence. Please use extra sheets if necessary.

Name of Project	Project Description (Include as Annex supporting documents such as certificate of completion, end-user's acceptance, company documents, etc)
	Refer to Annex(es)
	Refer to Annex(es)

#### Philippine Statistics Authority

Supply, installation, support and maintenance of Automated Biometric Identification Systems (ABIS) for Philippine Identification System (PhilSys)

#### SUPPLEMENTAL BID BULLETIN NO. 4

## b. Biometrics Market Experience

Bidder must be: (1) an Original Design Manufacturer of the ABIS, where Original Design Manufacturer is defined as having ownership of the Intellectual Property or ANY (ace, iris or fingerprint) Biometric Solution; and (2) in the biometrics market for at least ten (10) years in order to ensure that only well-proven and matured technology will be supplied. This should be proven by related company documents. Please use extra sheets if necessary.

Relevant Year(s)	Product/Technology Model	Description and Developments (include related company documents)
		Refer to Annex(es)
		Refer to Annex(es)
		Refer to Annex(es)
		Refer to Annex(es)
		Refer to Annex(es)

#### Philippine Statistics Authority

Supply, installation, support and maintenance of Automated Biometric Identification Systems (ABIS) for Philippine Identification System (PhilSys)

## SUPPLEMENTAL BID BULLETIN NO. 4

## c. ABIS Installations

Bidder must have a Biometric Solution installation with at least forty (40) million records of at least one of the three (3) biometrics modalities (fingerprint, iris or face) in the database. This should be proven by related reference letters/documents.

Biometric Installation (include related reference letters)	Biometric Modality (Fingerprint, Face, and/or Iris)	Number of Records
Refer to Annex(es)		
Refer to Annex(es)		

- nothing follows -