

April 21, 2021

**CLARIFICATIONS No. 4**

Re: Solicitation No. 8005428 Automated Access Control system Installation and Maintenance Services

Please be advised of the following clarifications to the above referenced Solicitation.

- Q1. The sample project plan for both Phase 1 and Phase 2 indicates establishing 3 environments, furnish and install both PACS and PSIM software, and configure software/servers for 3 environments within 43 days for (PACS) and 72 days for (PSIM) from NTP, prior to requirements validation and review. Please clarify.
- A1. The sample project plan depicts establishment of the three environments in order to best prepare for the required follow on tasks.
- Q2. What are the Offeror's responsibilities for test/training lab build out? Workstations, network cabling, furniture? Is this existing and will be used as is or expanded?
- A2. Unless requested as part of a delivery order, under the IDC portion of the work, furniture is not a responsibility of the contractor. The RFP requests the Bidder to identify the hardware and software required (See Tab 8) which will be procured via DFW or (see Attachment A (SOW) Table 4) if the Alternate 1 and/or 2 are selected, will be provided by the Contractor.
- Q3. It is expected that changes to the new PSIM and new PACS configurations will happen frequently. New device types will be added, new locations will need to be supported, new integrations will be added, new operational procedures will be added, and new functionality may be added. It is important all these changes are developed and controlled in a standalone development environment. The Development Environment will implement redundant servers in order to be able to test failover and HA capabilities. These redundant servers do not need to be in diverse data centers. Workstations for the Development Environment will be housed in a AACS Development/Test Lab. Three workstations will be available for development and testing in the Development Lab. Once completed in the development environment any modifications, fixes, upgrades to either the PSIM and/or the PACS will be thoroughly tested in the Test/Training Environment. Question: Does the Development environment need to be on its own infrastructure? Or can it be run on the same infrastructure as production?
- A3. The Development Environment will be installed on a controlled infrastructure.
- Q4. Does the Development environment need to replicate back to the Secondary DR Site?
- A4. No, however, the Development Environment will implement redundant servers in order to be able to test failover, DR, and HA capabilities.

- Q5. Do you want two separate systems in the Development system to do local replication and DR testing? Or do you just want one highly available system with local High Availability and Fault Tolerance for Development?
- A5. The Development Environment will implement redundant servers in order to be able to test failover, DR, and HA capabilities.
- Q6. How large should the Development systems be sized? Percentage of the production environment, Certain number of users/portals, etc.
- A6. The Development System needs to be the same size as production.
- Q7. The Test/Training environment will be used to test new functionality, integrations and other software changes. This environment can be used as a pre-production testing environment. No changes will be made to the production environment until they pass tests in the test environment. This environment will also serve as the training platform for conducting all training on the AACS. It will be used for training all staff prior to implementation. Following implementation, it will be used for training new staff and recurring training for existing staff when new functionality is added to the AACS. Workstations for the Test/Training Environment will be housed in a Test/Training Lab. The Test/Training Lab will have 7 AACS workstations available for use in testing and training activities. Question: Does the Test/Training environment need to be on its own infrastructure? Or can it be run on the same infrastructure as production?
- A7. The Test/Training environment will be installed on controlled infrastructure.
- Q8. Does the Test/Training environment need to replicate back to the Secondary DR Site?
- A8. No. Please note that the Test/Training environment will be used to test new functionality, integrations, and other software changes. This environment can be used as a pre-production testing environment. No changes will be made to the production environment until they pass tests in the test environment.
- Q9. Or do you just want one highly available system with local High Availability and Fault Tolerance for Test/Training?
- A9. Yes. Note that the Test/Training environment will be used to test new functionality, integrations and other software changes. This environment can be used as a pre-production testing environment. No changes will be made to the production environment until they pass tests in the test environment.
- Q10. How large should the Test/Training systems be sized? Percentage of the production environment, Certain number of users/portals, etc.
- A10. The Test/Training System needs to be the same size as production.
- Q11. Requirements matrix 3.04 doesn't indicate that the test environment needs to be redundant. Normally this environment is an exact duplicate of the production environment – please confirm
- A11. The Test/Training System needs to be the same size as production.
- Q12. Due to AACS being classified as a mission critical system to airport operations, the production environment will be architected for continuity of operations. It will have built in redundancy in hardware, software and communications to enable resiliency, so that if one component fails the backup will take over in near real time. Questions/Clarification: Do you need local Fault

Tolerance in addition to remote secondary site availability? Meaning if a VM should fail at the production site, it will have a Fault Tolerant VM that can take over the workload without an outage? Or is a small outage (under a minute) acceptable for VM failover to occur in the local production system?

- A12. The AACS must support a 24x7 operation with 99.999% up time. See Attachment B Section 3.03 for the Production Environment's requirements. See also Attachment B Section 4.03.
- Q13. The new AACS and the new PACS application will reside on virtualized servers in the data centers. These redundant data centers are geographically diverse for disaster recovery preparedness. Question: How much rack space is available in each site?
- A13. DFW Will allocate sufficient space to support the new PACS equipment.
- Q14. Where will the two sites be located? And how much distance in miles is in between the two sites?
- A14. The Data Centers are located on the DFW Campus. They are connected via fiber. Specific locations of DFW's Data Centers will be provided after award.
- Q15. Architecture requirement 4.05 states that the existing Saab platform and the new PACS will be connected to the F5 load balancing appliance. Does this also include the new PSIM?
- A15. Yes. Note that the new PSIM will be built on the existing Saab Platform.
- Q16. Please confirm that the emergency power and cooling in the Data Centers are provided by the airport.
- A16. Yes, as indicated in Attachment B Section 4.07
- Q17. The new PACS redundant servers shall be physically separated in two diverse DFW data centers and supplied with appropriate emergency (UPS or generator) power and cooling. The existing Saab Platform currently are. Question: Can the PACS VMs be run on the same infrastructure as the PSIM VMs? Or do they need to have their own systems?
- A17. As indicated in the documents, the new PSIM will be built on the existing Saab Platform. The new PACS Server will be run on separate infrastructure. See Attachment B Figure 1 for a high level Architectural diagram.
- Q18. What are the thin-client requirements?
- A18. The Attachment A SOW and Attachment B System requirements Specification call for the contractor to size the workstations based on the specified requirements, and document them in their RFP response under Tab #8. (7.2.4.12)
- Q19. Is there an existing back-end for thin-clients?
- A19. All workstations to be implemented under this contract will be new, and sized based on the specified requirements for the implementation of the new PACS and new PSIM.
- Q20. Should thin-client workstations spec's be included within the proposal response's Tab 7 Workstation Hardware?
- A20. All Hardware required is to be listed with the Bidder's response under 7.2.4.12 - TAB 8.

- Q21. Architecture requirement 4.12 states that TacComm and CBP users will access shared desktop resources in both DCs via network transit. Please clarify network transit in more detail.
- A21. Each workstation will have a minimum of 2 Ethernet Cat. 6A connections run to it for physical diversity to different network switches. See Attachment B, Section 4.12.
- Q22. Please provide the amount of storage currently consumed by the existing PACS and PSIM, and the historic annual increase in storage consumed. Also, please provide the current number of zones/areas, user roles, access levels.
- A22. See Attachment A (SOW) Section 16 and Attachment B Section 5.05. Additional specific security related data will be provided after award.
- Q23. Please confirm that the network infrastructure connecting the two data centers includes 10GBPS Ethernet connections. These will be necessary for supporting the availability requirements.
- A23. The Data Centers are connected via fiber. See Attachment A (SOW) Section 16.11.
- Q24. AACS database and server requirements 5.05 states that servers shall be sized to support the listed quantities plus 50% growth. Please specify whether application licensing from Lenel and Saab should be sized for the 50% growth figure as well.
- A24. System licenses should be based on supporting of the MINIMUM requirements listed in Attachment B Section 5.04 and 5.05. Servers shall be sized for 50% growth.
- Q25. Lenel OnGuard Pro requires licensing for reader counts beyond 128 readers, how many reader licenses are to be provided for the Development and Test/Training environments?
- A25. LenelS2 has advised DFW that they will be providing DFW Airport the equivalent LenelS2 OnGuard software to the current Picture-Perfect system at no cost, this would include OnGuard PRO tier software, licensed for 2,048 readers, all required (73) alarm monitoring and system administration client licenses, (11) badging client licenses, and a secondary OnGuard PRO software license for redundancy purposes. LenelS2 will also be providing DFW OnGuard software to be used for the (a) development Environment system and for the (a) test Environment system matching the aforementioned parameters at no additional cost.
- Q26. If VMWare and VSAN are selected to provide Hypervisor, Software Defined Storage and Software Defined Networking functionality, what additional features that are only present in the Windows 2016 Datacenter SKU is the customer requiring?
- A26. VMs should be deployed to meet the system specifications of the PACS manufacturer (Lenel OnGuard), as stated in Attachment B Section 5.06,
- Q27. Is the requirement for all the items to be displayed simultaneously? If not, please clarify desired display functionality.
- A27. Yes, see Attachment B (AACS Functional Requirements).
- Q28. Requirement 22.03 mentions integration with driver's license readers to log visitors coming through AOA gates. Is the assumption that these readers will be connected directly to the PSIM workstations and that the data is to populate the PSIM? Or is the data populating the AACS and then read by the PSIM in a data exchange?

- A28. Yes, the driver's license readers will be connected directly to the PSIM workstation to support the ASD officers. The specifics will be worked out during the design, user requirements validation and integration efforts, the intent, as stated in Attachment B Section 22.03.
- Q29. Support multi-tenancy platform, enabling connections from cloud to on premise, and on premise to on premise for internal and external systems. Question: What functions need to be run in the Cloud? Backups, Production workloads, DR, etc.
- A29. Specific security related functions will be reviewed with the contractor after award. It must be noted that DFW has a number of technology initiatives which will require enabling cloud connectivity.
- Q30. Is there a preference for a cloud vendor?
- A30. Microsoft Azure
- Q31. Does this only apply to the AACS applications or do you need cloud connectivity for data too?
- A31. Some select data may be available via the Cloud.
- Q32. Will this require multiple functional testing of all associated portals, until Mercy panels are mounted in final position and then a final test?
- A32. At the present time, it is anticipated that each portal will be tested and accepted at the point of transition, with final Lenel / Mercury Intelligent Controller (IC) Acceptance Test, per IC panel.
- Q33. Will test Lab simulation of every individual panel be required prior to cutover in the field?
- A33. That has not been specified nor is it being required.
- Q34. Will each individual Mercy panel need to be tested for Endurance prior to field implementation? If so, how long is the endurance test for each panel configuration?
- A34. Each Lenel / Mercury Panel will not be endurance tested. That has not been specified nor is it being required.
- Q35. In Section 14.03 under Active Alarm / Event Display Requirements of the Technical Specs it indicates that the AACS must display all active alarms/events in a unified list and on a map in sub-bullet 14.03.01. Can DFW indicate if this refers to the PSIM or the AACS
- A35. The PSIM. See Attachment A SOW, Section 8.1, and note 8.2 that "" The PSIM.....shall be configured as the primary platform for integrating, managing, visualizing, controlling, aggregating as needed, and reporting on security events, data, and information from all the other sub-systems through a single, comprehensive interface.....""
- Q36. In 14.03.04 it is stated that "Upon clicking on an event in the active events list the AACS via the PSIM will display the alarm/event details. Details should include, (but not limited to) . . . . . Can DFW clarify how the AACS is different from the PSIM ?
- A36. See A35 and also see Attachment A SOW, Appendix 2.
- Q37. In Section 14.04.01 of the Tech spec, it appears the PSIM is the AACS as the PSIM is the User interface that would deliver this functionality requested. If not the PSIM, then what system would it be?



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