Health Services
LOS ANGELES COUNTY

Los Angeles County
Board of Supervisors

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John R. Cochran III
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April 20, 2006

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn of Administration
500 West Temple Street
Los Angeles, CA 90012

APPROVAL OF AMENDMENT NO. 1 TO SOFTWARE AND SERVICES AGREEMENT WITH ATLAS DATABASE SOFTWARE CORPORATION
(All Districts) (3 Votes)

CIO RECOMMENDATION: [X] APPROVE [ ] APPROVE WITH MODIFICATIONS [ ] DISAPPROVE

IT IS RECOMMENDED THAT YOUR BOARD:

Authorize and instruct the Acting Director of Health Services, or his designee, to sign Amendment No. 1 to Agreement No. H-701820 with Atlas Database Software Corporation dba Atlas Development Corporation (Atlas), substantially similar to Exhibit I, to 1) increase the maximum County obligation from $912,050 to $1,408,211, an increase of $496,161, 100% offset by Centers for Disease Control and Prevention (CDC) Award No. U90/CCU917012-06, to revise the scope of work and add additional programming tasks and deliverables for the continued implementation of electronic interfaces at laboratories throughout Los Angeles County in support of bioterrorism preparedness activities, effective date of Board of Supervisors' approval through August 31, 2007; 2) approve a 12-month extension through August 31, 2008, contingent upon federal funding; 3) and delegated authority to accept additional funds up to 25% of the maximum contract sum.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION(S):

Board approval of this action will authorize the Acting Director of Health Services, or his designee, to sign Amendment No. 1 with Atlas to support additional enhancements related to electronic laboratory connectivity at laboratories throughout Los Angeles County to expedite electronic connectivity

for the exchange of electronic data specifications, message transport mechanisms, Health Level 7 (HL7) message profile specification, and testing of interface integration to support bioterrorism preparedness, surveillance, and epidemiological response systems, and to extend the term of the Agreement.

FISCAL IMPACT/FINANCING:

The CDC has approved the roll-over of unexpended grant funds from Fiscal Year 2003-04. Amendment No. 1 to the Atlas Agreement will increase the maximum County obligation from $912,050 to $1,408,211, an increase of $496,161, 100% offset by CDC funds. Funding is included in the Fiscal Year 2005-06 Final Budget and will be requested in future fiscal years. There is no additional net County cost associated with this recommendation.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS:

On September 10, 1996, the Board accepted funding from the CDC to develop and maintain a surveillance response to infectious diseases. On May 19, 1998, the Board approved the agreement with Atlas to assist the Department of Health Services (DHS or Department) in the development of the Visual Confidential Morbidity Report (VCMR) system.

Subsequently, the Board approved Amendments No. 1 through No. 5 to increase services, extend the term, and increase the maximum County obligation.

On August 6, 2002, the Board approved Amendment No. 6 to expand the scope of services with Atlas to enhance support of the communicable disease reporting system, develop laboratory interfaces and to upgrade local public health jurisdictions' preparedness ability to respond to bioterrorism. The funding source for this Amendment was 100% offset from the CDC Bioterrorism (BT) Supplemental Grant and Vital Records Improvement Fund (VRIF). In May 2003, the DHS Public Health Information Systems and County Chief Information Office approved the Bioterrorism Preparedness and Response Program's proposed development plan and strategic direction for information technology.

On August 27, 2003, the Board was notified that DHS was exercising its delegated authority to execute Amendment No. 7 to provide support/maintenance and enhancements for the existing VCMR system and develop plans for the migration of the VCMR system to a web-based

platform with expanded disease surveillance and epidemiologic response capabilities for bioterrorism. Amendment No. 7 laid the groundwork for migration of the VCMR system to a web-based platform based on CDC Public Health Information Network (PHIN) and National Electronic Disease Surveillance System (NEDSS) standards.

On August 17, 2004, the Board approved Amendment No. 8 to increase the maximum County obligation, provide additional maintenance and enhancements to the existing VCMR system, and develop and implement the Los Angeles County-Public Health Information Network (LAC-PHIN) application security gateway to facilitate access to VCMR. In addition, the amendment added a provision to the Agreement to extend the term for one twelve-month period through an administrative amendment between the Director and Contractor, from September 1, 2005 through August 31, 2006, pending future Federal funding.

On June 7, 2005, the Board approved Amendment No. 9 to increase the maximum County obligation and to add a provision for "Subcontracting" since Atlas needed to use a subcontractor to complete special programming tasks and deliverables, which was completed on August 31, 2005, with an additional $674,200 in funds from the CDC.

On November 1, 2005, the Board approved a retroactive renewal agreement to provide for additional software programming tasks and deliverables, which will be completed on August 31, 2006. Provisions in the Atlas agreement includes the option for a 12-month contract extension through August 31, 2007 in the event the CDC approves funds for additional services and enhancements, however, the amount of the funding being awarded by the CDC exceeds the delegated authority to the Department, thus requiring Board approval to utilize the additional funds.

Attachment A provides additional information. County Counsel has approved Exhibit I as to use and form.

The Chief Information Officer concurs with the Department's recommendation.

CONTRACTING PROCESS:

Atlas was awarded an initial sole source agreement because of its proprietary rights to the only available Graphical User Interface for the County's Automated Vital Statistical System (AVSS). Atlas was approved access to AVSS by the County for the development and implementation of the VCMR.

The Board approved the current sole source Agreement on May 19, 1998.

IMPACT ON CURRENT SERVICES (OR PROJECTS):

Approval of this Amendment will allow the continued utilization of funds as awarded by the CDC to enhance the Department's ability to respond to acts of bioterrorism.

When approved, the Department requires three signed copies of the Board's action.

Respectfully submitted,

Bruce A. Chernof, M.D.
Acting Director and Chief Medical Officer

Reviewed by:

Jon W. Fullinwider
Chief Information Officer

BAC: kke
Atlas Amendment #1.kke.wpd

Attachments (6)

c: Chief Administrative Officer
Chief Information Officer
County Counsel
Executive Officer, Board of Supervisors

CIO ANALYSIS

DEPARTMENT OF HEALTH SERVICES RENEWAL AGREEMENT WITH ATLAS DATABASE SOFTWARE CORPORATION AMENDMENT NO. 1 (All Districts) (3 Votes)

CIO RECOMMENDATION: ☒ APPROVE ☐ APPROVE WITH MODIFICATION ☐ DISAPPROVE

Contract Type:
☐ New Contract ☒ Contract Amendment ☐ Contract Extension
☐ Sole Source Contract

New/Revised Contract Term: Base Term Yrs: 1 # of Option Yrs 1

Contract Components:
☒ Software ☐ Hardware ☐ Telecommunications
☒ Professional Services

Project Executive Sponsor: Bruce A. Chernof, M.D., Acting Director and Chief Medical Officer

Budget Information :

Y-T-D Contract Expenditures	$ 912,050
Requested Contract Amount	$ 496,161
Aggregate Contract Amount	$ 1,408,211

Project Background:

Yes	No	Question
☐	☒	Is this project legislatively mandated?
☒	☐	Is this project subvented? If yes, what percentage is offset? 100%

Strategic Alignment:

Yes	No	Question
☒	☐	Is this project in alignment with the County of Los Angeles Strategic Plan?
☐	☒	Is this project consistent with the currently approved Department Business Automation Plan (BAP)? The 2005/2006 BAP does not reference amending the Agreement.
☒	☐	Does the project's technology solution comply with County of Los Angeles IT Directions Document?
☒	☐	Does the project technology solution comply with preferred County of Los Angeles IT Standards?
☐	☒	Has data for this contract and/or project been entered into the Information Technology Tracking System (ITTS)? Not required.

Project/Contract Description:

The Department of Health Services (DHS) is requesting your Board to delegate authority to the Acting Director of Health Services, or his designee, to sign Amendment No. 1 to Agreement H-701820, with Atlas Database Software Corporation (Atlas).

Under the California Code of Regulations, medical care providers and laboratories are required to report incidents of specific diseases or conditions to their local health department. DHS, with Atlas' help, developed the Visual Confidential Morbidity Report (VCMR) system to make disease investigation, tracking and reporting more efficient for the County. VCMR accurately manages the investigative cycle of a disease or outbreak from initial date of onset to the final resolution of a case report. DHS has been using VCMR since May 2000.

This amendment will extend the Agreement to August 31, 2007, with a 12-month extension through August 31, 2008, contingent upon federal funding availability and obtaining approvals from the Chief Information Office, Chief Administration Office, and County Counsel.

Upon the Board's approval of this Amendment, Atlas will develop interfaces to enable 29 laboratories to link their systems to VCMR. Interfacing the 29 laboratories to VCMR will replace the existing manual process of faxing reports to DHS and will reduce the staff's time needed to enter an average of 400 faxed reports per month.

Background:

On September 10, 1996, the Board accepted funding from the Communicable Disease Center to develop and maintain a surveillance response to infectious diseases. On May 19, 1998, the Board approved the Agreement with Atlas to assist DHS in the development of the VCMR system. The Board approved nine (9) amendments since 1998 to expand the scope of the project and on November 1, 2005, the Board renewed the Agreement to August 31, 2006.

Project Justification/Benefits:

Interfacing VCMR to 29 laboratories will automate the process of receiving reports from laboratories to DHS and will improve the data accuracy by eliminating data entry errors. DHS expects to reduce the staff's time needed to enter an average of 400 faxed reports per month by 50%.

Project Metrics:

Reducing the efforts needed to enter faxed reports by 50% and instantaneously receiving reports from laboratories are clear metrics of the benefits of this Amendment.

Impact If Proposal Is Not Approved:

- 29 laboratories will continue to fax reports and DHS staff will continue to manually enter an average of 400 faxed reports into VCMR.
- The VCMR database may include inaccurate data caused my human errors during data entry.

Alternatives Considered:

No other alternatives were considered. This new development and system enhancements leverage existing functionality residing in the existing VCMR system.

Project Risks:

There are no identified risks to the Department and County in undertaking this project.

Risk Mitigation Measures:

None

Financial Analysis:

There is no net County cost associated with the Agreement. This amendment is 100 percent offset by CDC Bioterrorism Supplemental Grant funds.

CIO Concerns:

None

CIO Recommendations:

The CIO recommends Board approval.

CIO APPROVAL

Date Received:	April 20, 2006
Prepared by:	Khaled Tawfik
Date:	April 20, 2006
Approved:	
Date:	April 20, 2006

ATTACHMENT A

SUMMARY OF AGREEMENT

1. TYPE OF SERVICE:

Atlas provides programming services to assist the Department in the development of internet-based reporting of communicable disease outbreaks and continued implementation of electronic laboratories interfaces at laboratories throughout Los Angeles County in support of bioterrorism preparedness activities.

2. AGENCY ADDRESS AND CONTACT PERSON:

Atlas Database Software Corp.
dba Atlas Development Corporation
26679 West Agoura Road, Suite 200
Calabasas, California 91302
Attention: Carl Hartzel, Chief Operating Officer
Telephone: (818) 340-7080
Facsimile: (818) 340-7079

3. TERM:

Effective upon the date of Board of Supervisors' approval through August 31, 2008.

4. FINANCIAL INFORMATION:

Amendment No. 1 increases the maximum obligation from $912,050 to $1,408,211, an increase of $496,161. Funding is included in the Fiscal Year 2005-06 Final Budget and will be requested in future fiscal years.

5. PRIMARY GEOGRAPHIC AREA TO BE SERVED:

All Districts

6. DESIGNATED ACCOUNTABLE FOR PROGRAM EVALUATION:

Irene Culver, Project Manager

7. APPROVALS:

Public Health:	John F. Schunhoff, Ph.D., Chief of Operations
Program Director:	Raymond Aller, M.D.
Contracts and Grants:	Cara O'Neill, Chief
County Counsel (approval as to form):	Christina Salseda, Deputy

Contract # H-701820

SOFTWARE PROGRAMMING AND SERVICES AGREEMENT
AMENDMENT NO. 1

THIS AMENDMENT is made and entered into this _____ day of _____, 2006 (the "Effective Date"),

by and between COUNTY OF LOS ANGELES (hereafter "County"),

and ATLAS DATABASE SOFTWARE CORPORATION (dba Atlas Development Corporation) (hereafter "Contractor").

WHEREAS, reference is made to that certain document entitled "SOFTWARE PROGRAMMING AND SERVICES AGREEMENT", dated September 1, 2005, and further identified as County Agreement No. H-701820 and any amendments thereto (all hereafter "Agreement"); and

WHEREAS, it is the intent of the parties to amend Agreement to provide for changes set forth herein; and

WHEREAS, said Agreement provides that changes may be made in the form of a written amendment which is formally approved and executed by the parties; and

NOW, THEREFORE, the parties hereby agree as follows:

1. This Amendment shall become effective upon the Board of Supervisors' approval.

2. Paragraph 5, TERM of the Agreement shall be amended to read as follows:

"5. TERM:

The term of this Agreement shall commence on September 1, 2005 and shall continue in full force and effect through August 31, 2007, with an automatic extension for an additional twelve (12) months, contingent on funding. In event funding is not obtained, County shall make every effort to notify Contractor of County's inability to extend the agreement as soon as possible. However, in no way shall County's inability to notify Contractor of lack of funding, impact County's right not to extend the agreement.

Automatic extensions are subject to review and approval by County Counsel, Chief Administrative Office and Chief Information Office."

3. Paragraph 8., CONTRACT SUM, Subparagraph 8.1 of the Agreement shall be amended to read as follows:

"8.1 GENERAL:

The Contract Sum under this Agreement shall be the total monetary amount payable by County to Contractor for supplying all Tasks, subtasks, Deliverables, goods, services and other work requested and specified under this Agreement. All work completed by Contractor must be approved in writing by County. If County does not approve work in writing, no payment shall be due to Contractor for that work. The Contract Sum, including all applicable taxes, authorized by County hereunder shall not exceed One Million Four Hundred Eight Thousand Two Hundred Eleven

Dollars ($1,408,211), for the two-year term of this Agreement. The total maximum Contract Sum for the extension period may be increased, at County's discretion, up to 25% of the prior year maximum Contract Sum."

Notwithstanding any other provision of this Subparagraph, Contractor shall fully perform and complete all work required of Contractor by this Agreement in exchange for the amounts to be paid to Contractor as set forth in this Agreement.

The Contract Sum shall not be adjusted for any costs or expenses whatsoever of Contractor."

4. Paragraph 9., INVOICES AND PAYMENTS, Subparagraphs 9.3, 9.4 and 9.5 of the Agreement shall be added to read as follows:

"9.3. Holdbacks:

Except for invoices for Maintenance Services and for License Fees accruing against Licensed Accounts acquired after Final Acceptance, County will hold back fifteen percent (15%) of the amount of each invoice (the "Holdback Amount"), approved by County, including invoices for Changes Orders. Other than for Change Orders that the parties intend will be completed after Final Acceptance, the aggregate Holdback Amount will be due and payable to Contractor following Final Acceptance, subject to adjustment for any amounts owed to County by Contractor, including any amounts arising from Paragraphs 9.5 (Invoice Discrepancy Report), 9.2 (County's Right to Withhold), and any partial termination of any Task, Subtask, or Deliverable set forth in Exhibit A, Statement of Work as

provided hereunder. As to Change Orders that are to be completed after Final Acceptance, the aggregate Holdback Amount for such Change Order will be due and payable to County upon final acceptance by County of the Work provided under such Change Order.

9.4 No Partial or Progress Payments:

No Partial or Progress Payments. Contractor shall be entitled to payment in respect of a Task or Deliverable, or other Work, only upon successful completion by Contractor and approval by County of such Task or Deliverable, or other Work. Except with regard to Maintenance Services, no partial or progress payments towards anticipated or substantial completion of Tasks or Deliverables, or other Work, will be made under this Agreement.

9.5 Invoice Discrepancy Report:

County Project Director or County Project Director's designee shall review all invoices for any discrepancies and issue an "Invoice Discrepancy Report" (or "IDR"), a form of which is attached hereto as (Invoice Discrepancy Report), to Contractor within ten (10) days of receipt of invoice if payment amounts are disputed. Contractor shall review the disputed charges and send a written explanation detailing the basis for the charges within ten (10) days of receipt of the IDR from County Project Director. If County Project Director does not receive a written response

within ten (10) days of County's notice to Contractor of an IDR, then County payment will be made, less the disputed charges."

5. Paragraph 66 , DEFICIENCIES shall be added to read as follows:

"66.1 Deficiencies.

As used herein, the term "Deficiency" shall mean and include, as applicable to any Work provided by or on behalf of Contractor to County: any malfunction, error, or Defect in the design, development, installation or implementation of Work; any error or omission, or deviation from the Specifications or mutually agreed upon industry standards, or any other malfunction or error (other than a defect, error, omission or deviation to the software application caused by County's modification), including the provision of negligent workmanship, which results in the software application, in whole or in part, not performing in accordance with the provisions of this Agreement, including the Statement of Work and Specifications, as determined by County Project Director, in County Project Director's sole discretion.

66.2. Corrective Measures.

County Project Director shall notify Contractor Project Director of any Deficiency in writing, or if not practicable, orally to either Contractor Project Director or Contractor Project Manager. Upon the earlier of (a) notice (orally or in writing) from County, or (b) Contractor's discovery of such Deficiency, Contractor shall promptly commence corrective

measures to remedy any Deficiency, and shall remedy such Deficiency, in accordance with the timelines set forth in Exhibit A, Attachment C (Dispute Resolution Procedure). Contractor acknowledges that, as part of Services provided to County, Contractor may be required to repair, replace, reinstall and test all or any part of the software application, or other material, or create an Update, in order to remedy a Deficiency.

66.3. Approval.

No Deficiency shall be deemed remedied until all necessary remedial action has been completed and approved in writing by County Project Director in accordance with the procedures set forth in Paragraph 4 (WORK)."

6. Paragraph 67, NEW TECHNOLOGY shall be added to read as follows:

"67. NEW TECHNOLOGY:

Contractor and County acknowledge the probability that the technology of the software and hardware provided under this Agreement will change and improve during the Term. County desires the flexibility to incorporate into the System any new technologies as they may become available. Accordingly, Contractor's Project Manager shall, promptly upon discovery and on a continuing basis, apprise County's Project Manager of all new technologies, methodologies, and techniques which Contractor considers to be applicable to the System. Specifically, upon County's request, Contractor shall provide, in writing, a

description of such new technologies, methodologies and techniques, indicating the advantages and disadvantages of incorporating same into the System, and provide an estimate of the impact such incorporation will have on the performance, scheduling, and price of the System. County, at its sole discretion, may request that this Agreement be amended to incorporate the new technologies, methodologies and techniques into the System pursuant to the provisions of Paragraph 7 (Change Notices and Amendments)."

7. Exhibit A (Part III), STATEMENT OF WORK, shall be amended to add Exhibit A-1 (Part III) and Exhibit A-1, Attachment A, attached hereto, and incorporated herein by reference.

8. Exhibit B (Part III), SCHEDULE OF DELIVERABLES AND PAYMENTS, shall be amended to Exhibit B-1 (Part III), attached hereto, and incorporated herein by reference.

9. The additional provisions set forth in paragraph 4 of this Amendment shall apply only to any new project or deliverable that originates under a Change Order or other agreement between County and Contractor that is entered into by the parties after the Effective Date.

10. Except for the changes set forth hereinabove, Agreement shall not be changed in any respect by this Amendment.

IN WITNESS WHEREOF, the Board of Supervisors of the County of Los Angeles has caused this Amendment to be subscribed by its Acting Director of Health

Services and Contractor has caused this Amendment to be subscribed in its behalf by its duly authorized officers, the day, month, and year first above written.

COUNTY OF LOS ANGELES

By _____
Bruce A. Chernoff, M.D.
Acting Director and Chief Medical Officer

Atlas Database Software Corporation
dba Atlas Development Corporation
Contractor

By _____
Signature

_____
Printed Name

Title _____
(AFFIX CORPORATE SEAL)

APPROVED AS TO FORM
BY THE OFFICE OF COUNTY COUNSEL:

COUNTY COUNSEL

By _____
Christina A. Salseda
Deputy County Counsel

APPROVED AS TO CONTRACT
ADMINISTRATION:

DEPARTMENT OF HEALTH SERVICES

By _____
Cara O'Neill, Chief
Contracts and Grants

Kke\H-701820-1 Final Wednesday, April 19, 2006

EXHIBIT A-1

STATEMENT OF WORK
ONE NEW TASK AND DELIVERABLE – AMENDMENT NO.1

VISUAL CONFIDENTIAL MORBIDITY REPORT (vCMR)

Contract No. H-701820
New Task No.20
CDC allocated $496,161
(Approximate $17,109 per lab x 29 labs)

1.39 **TASK NO. 20 – INCREASE ELECTRONIC LAB CONNECTIVITY:** Expedite electronic connectivity by successfully implementing exchange of electronic data specifications, creation of HL7 message profile specification, and identification and agreement on message transport mechanism. Specific Tasks per laboratory include but are not to exceed $17,109:

a. Project Preparation including work plan ($870)
b. Weekly HL7 specification and test plan meetings ($3,697)
c. Establish requirements for hardware and/or Software: Including creation of results workflow ($1,160)
d. Interface Preparation, including educating and assisting labs in steps to facilitate electronic transmission of lab results and development of business logic requirements needed to facilitate conversion process ($7,612)
e. Test Plan ($1,450)
f. Site Preparation ($580)
g. Interface Integration Testing and Acceptance ($1,740)

1.40 **DELIVERABLE NO.20 – INCREASE ELECTRONIC LAB CONNECTIVITY:** Contractor will expedite electronic connectivity by successfully implementing exchange of electronic data specifications, creation of HL7 message profile specification, and identification and agreement on message transport mechanism. Specific Tasks per lab include but are not to exceed $17,109:

a. Project Preparation including work plan ($870)
b. Weekly HL7 specification and test plan meetings ($3,697)
c. Establish requirements for hardware and/or Software: Including creation of results workflow ($1,160)
d. Interface Preparation, including educating and assisting labs in steps to facilitate electronic transmission of lab results and development of business logic requirements needed to facilitate conversion process ($7,612)
e. Test Plan ($1,450)
f. Site Preparation ($580)
g. Interface Integration Testing and Acceptance ($1,740)

Task No.20 – Increase Electronic Lab Connectivity

Funds of $496,161 will be used to recruit and establish electronic lab reporting with 29 public and private laboratories throughout LAC. LAC is working to increase the number of laboratories that are electronically submitting abnormal results for reportable diseases. To date, we have been successful in establishing electronic connectivity with three (3) labs. Successful implementation can take between 6 to 8 months. Atlas Development has over 20 years experience establishing laboratory interfaces throughout the country. Major milestones necessary in successful implementation of electronic lab reporting include: exchange of electronic data exchange specifications, creation of HL7 message profile specification, identification and agreement on message transport mechanism.

Hourly Breakdown of Interface Project Tasks ($145 an hour):
Total cost per lab = $17,109 Approximate ($17,109 per lab x 29 labs = $496,161)

1. Project Preparation
    a. Internal Meeting (1 hour)
    b. Phone Kickoff Meeting (1 hour)
    c. Produce Project Plan (2 hours)
    d. Review & Sign-off Project Plan (2 hours)
2. Schedule Meeting Sessions
    a. Establish Connectivity Meeting (1/2 hour)
    b. Health Level 7 (HL7) Specification Review Meeting (1/2 hour)
    c. Test Plan Planning (1/2 hours)
    d. Weekly Status Meetings and attend meetings (24 hours)
3. Establish Hardware and/or Software (as required)
    a. Exchange IP Addresses of sending and receiving servers (1 hour)
    b. Set up file folders and connectivity (2 hours)
    c. Create results flow from LIS (1 hour)
    d. Establish results filtering mechanism (PHIL) (4 hours)
4. Interface Preparation
    a. Analysis of LIS Requirements (1 hour)
    b. HL7 Review Meeting - meet with LIS vendor to discuss HL7 mapping (2-16 hours)
    c. Unit test HL7 messaging (2 hours)
    d. Produce HL7 data mapping documentation (4 hours)

   e. Sign off on HL7 data mapping (1/2 hour)
   f. Create cross-reference of lab order codes to LOINC/SNOWMED codes (15 hours)
   g. Decide on process for results received for patients in other jurisdictions (time estimate to be determined based on process)
   h. Create specified interface code (10 hours)
   i. Create and install interface code (4 hours)

5. Test Plan
   a. Test plan planning meeting (2 hours)
   b. Develop test scenarios (2 hours)
   c. Work with client to develop standard test cases (2 hours)
   d. Test plan review (2 hours)
   e. Finalize test plan (2 hours)
6. Site Preparation
   a. Configure both sending and receiving sides of interface (4 hours)
7. Interface Integration Testing and Acceptance
   a. Data file movement validation (2 hours)
   b. Workflow validation (2 hours)
   c. LIS results verification (6 hours)
   d. Certify integration testing complete (2 hours)
   e. Sign Off On Testing
   f. Provide Project Acceptance

Definitions:

- **IP: Internet Protocol**
- **LIS: Laboratory Information System**
- **PHIL: Public Health Information Link**
- **SNOMED: Systematized Nomenclature of Medicine**
  - **a standardized logically interrelated medical vocabulary**
- **LOINC: Logical Observation Identifier Names and Codes**
  - **a standardized set of codes for representing laboratory result terms**

Atlas Development/ Visual Confidential Morbidity Report (vCMR) Problem Escalation Procedures

a. Problem Intake and Evaluation

Help Desk calls are first handled by a customer support specialist who is responsible for "triaging" Problems as they are received. Each Problem is logged at intake into ATLAS's Incident Tracking Log (Issue Trac) and assigned an incident number for the client's future reference. Response, Defect Analysis, Interim and Final Resolution are documented using this log to ensure continuity throughout the process and to provide future reference for others encountering similar issues.

If the customer support specialist determines that the incident is not a Problem that requires engineering evaluation (for example, if customer is unfamiliar with the operation of the Supported Software, the Supported Software documentation is incorrect or incomplete, or the incident is unrelated to the Supported Software, such as a hardware or third-party software problem) then he/she assumes responsibility for the incident until Final Resolution. If it is characterized as a Problem properly handled by an engineer, it is referred to a support engineer.

b. Escalation Procedures for Problems

The following table and accompanying text summarize Atlas Public Health's response commitment to all clients contracting for support and maintenance. Such commitments are subject to the full and timely cooperation of CLIENT and any third party whose software, hardware or services may affect the operation or performance of the Supported Software or otherwise may affect ATLAS's ability to meet its obligations to CLIENT hereunder. Problems are categorized as "Critical", "High", etc. using the criteria set forth below for Defect categorization, and are handled according to the escalation procedures described in this section, until such time as they are characterized as a Defect or a Support Issue. The escalation procedures represent a commitment to respond and resolve Defects within the time prescribed. In resolving Support Issues, ATLAS will apply its best efforts to achieve a Final Resolution within the time prescribed, *provided, however*, that CLIENT may at any time instruct ATLAS to suspend efforts to achieve a Final Resolution. In that event, CLIENT shall be responsible only for fees for the support hours expended to the point ATLAS was instructed to cease efforts.

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Table I: Escalation Procedures

Defect Category	Response	Defect Analysis	Interim Resolution	Final Resolution
Critical	Two (2) hours if during help desk hours; Four (4) hours if during After Hours Help Desk Coverage	Four (4) hours following the Response	) Eight (8) hours following the Response	Within two (2) business days following Interim Resolution
High	One (1) business day	Two (2) business days following the Response	Three (3) business days following the Response	Within ten (10) business days following Interim Resolution
Medium	Two (2) business days	Five (5) business days following the Response	Ten (10) business days following the Response	Next Release
Low	Three (3) business days	Ten (10) business days following the Response	Thirty (30) business days following the Response	Next Release

Note: Defect categories shall be assigned by mutual agreement of the parties.

1. Critical Defects. With respect to Critical Defects, following receipt of notice thereof, ATLAS shall provide: (a) A Response within two (2) hours if notice is received during regular telephone help desk hours, and a Response within four (4) hours if notice is received after regular telephone help desk hours; (b) a Defect Analysis within four (4) hours of the Response; (c) an Interim Resolution within eight (8) hours of the Response (which may include the provision of a temporary workaround); and (d) a Final Resolution within two (2) business days after implementation of the Interim Resolution. ATLAS personnel shall continuously attempt to resolve such Critical Defect until an Interim Resolution is reached.

2. High Defects. With respect to High Defects, following receipt of notice thereof, ATLAS shall provide: (a) a Response within one (1) business day; (b) a Defect Analysis within two (2) business days of the Response; (c) an Interim Resolution within three (3) business days of the Response (which may include the provision of a temporary workaround); and (d) a Final Resolution within ten (10) business days after implementation of the Interim Resolution.

3. Medium Defects. With respect to Medium Defects, following receipt of notice thereof, ATLAS shall provide: (a) a Response within two (2) business days; (b) a Defect Analysis within five (5) business days of the Response; (c) an Interim within thirty (30) business days of the Response; and (d) a Final Resolution in the next release of the affected component of the Supported Software.

4. Low Defects. With respect to Low Defects, following receipt of notice thereof, ATLAS shall provide: (a) a Response within three (3) business days; (b) a Defect Analysis within ten (10) business days of the Response; (c) an Interim Resolution within thirty (30) business days of the Response; and (d) a Final Resolution in the next release of the affected component of the Supported Software.