

## Appendix D: Tests and Equipment

While the purpose and objective of this LIMS implementation within the Lao PDR laboratories is to ensure that the laboratories can provide timely and accurate services and information to support public health infectious disease testing, it is recognized that these same laboratories must also respond to service and information requests for other testing services. Consequently, the proposed LIMS should have the capability of capturing and reporting data for the range of clinical diagnostic tests associated with diseases of public health and the possibility to include water and environmental testing. The following list represents potential tests that could be analyzed in the Phase 1 laboratories and should be included in any LIMS. Not all laboratories will have the capability of performing all these tests and there may be other tests performed that are not on this list. This list, however, represents some of the tests performed for selected priority diseases in the Lao PDR laboratories. Describe the capability of your LIMS to handle these tests and your plan for implementation.

Test in NexLab categorize into many types such as single test(one result), multiples test (many result for a test order), Text (long string), other(digitally data such as image, pdf, etc)

Test name/method	Tests in LIMS (check Yes if system meets)	
TB		
TB AFB Smear	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
TB Culture	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
GeneXpert MTB/RIF	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Test name/method	Tests in LIMS (check Yes if system meets)	
<b>HIV</b>		
PCR EID	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
HIV Viral Load	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
HIV-1/2 Ab	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
HIV p24 Ag	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Test name/method	Tests in LIMS (check Yes if system meets)	
Dengue		
Dengue ELISA IgM	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Dengue ELISA IgG	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Dengue Rapid Test Ag	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Test name/method	Tests in LIMS (check Yes if system meets)	
<b>Malaria</b>		
Malaria RDT	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Malaria Microscopy	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Test name/method	Tests in LIS (check Yes if system meets)	
Covid-19		
COVID-19 RT-PCR	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
COVID-19 Rapid Ag	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
COVID-19 Ab	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Test name/method	Tests in LIMS (check Yes if system meets)	
Others		
Full Blood Count	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Differential Count	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Urea	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Electrolytes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Creatinine	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
LFTs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

### 1. Equipment/instrumentation interfaces

For LIMS that are capable of interfacing with laboratory instrumentation, respondents should indicate the type and cost of interface devices that are required for the proposed LIMS. Explain the cost for each new instrument interface and the cost for an instrument you have already interfaced.

Please see Master cost sheet

- a. Describe how you will interface each instrument and accept data (i.e. uni-directional, bi-directional).

We have interface major vendor like Abbot, Roche, Beckman, Johnson & Johnson, Sysmex and many more which currently working here in Thailand for > 15 years' experience. Those vendor interfaces are mono, bi directional, text base (small devices).

- b. List the instruments your system has been interfaced with.

ABBOTT ARCHITECT I2000SR IMMUNOASSAY ANALYZER  
ABL800 BASIC  
ABL90  
ABL90FLEX  
ABL90FLEX RADIOMETER  
ALERE AFINION - POINT-OF-CARE TESTING  
ARCHITECT C8000  
ARCHITECT I2000SR  
BACTEC BLOOD CULTURE  
BD BACTECTM FX BLOOD CULTURE SYSTEM  
BECKMAN COULTER AU680 CLINICAL CHEMISTRY ANALYZER  
BIO SYSTEMS BA 400  
BIOMIC AST MACHINE  
BIOMIC V3 MICROBIOLOGY SYSTEM  
BIORAD GALILEO NEO IMMUNOCOR  
BIORAD IH500 ANALYZER  
BLOOD GAS ANALYZER (ABG)  
CAPILLARY ELECTROPHORESIS (CE)  
CHEMISTRY ANALYZER  
CLINITEK ADVANTUS- URINARY CHEMISTRY ANALYZER  
COAGULATION ANALYSER  
COBAS C111 ANALYZER  
COBAS E411  
COBAS E601  
COBAS INTEGRA 400 PLUS  
CYTOVISION SYSTEM  
ELISA ANALYZER  
ELISA READER MULTISKAN  
ERYTHROCYTE SEDIMENTATION RATE (ESR) ANALYSER UV VIEWING BOX FOR G60D  
SCREENING TEST  
G26  
GEM PREMIER 3500 SYSTEM - BLOOD GAS  
GENEXPERT RT-PCR  
GREENCARE A1C ANALYZER  
HEMATOLOGY ANALYSER

HPLC  
IMMUNOASSAY ANALYZER  
MICROSED SYSTEM  
MINDRAY BC3000  
MIXRATE X20  
OLYMPUS AU 400 CHEMISTRY ANALYSER  
QUICK READ GO  
REAL TIME RT-PCR  
RP500e SIEMENS  
SEDY40  
STAGO STA COMPACT  
STAGO STA-R EVOLUTION SYSTEM  
STAGO STA-R MAX  
SYSMEX CS2100I  
SYSMEX KX21  
SYSMEX XN1000  
SYSMEX XN-1000TM HEMATOLOGY ANALYZER  
SYSMEX XP100  
THERMO SCIENTIFIC PHADIA 100  
URINE ANALYSIS ANALYZER  
URISYS 1100  
UV VIEWING BOX FOR G6OD SCREENING TEST  
VITEK BIOMEREUX  
VITEK® 2 COMPACT SYSTEM  
VIVA E SIEMENS

c. Do you charge for support on each interface?

Yes, Please see the main cost sheet for more information.