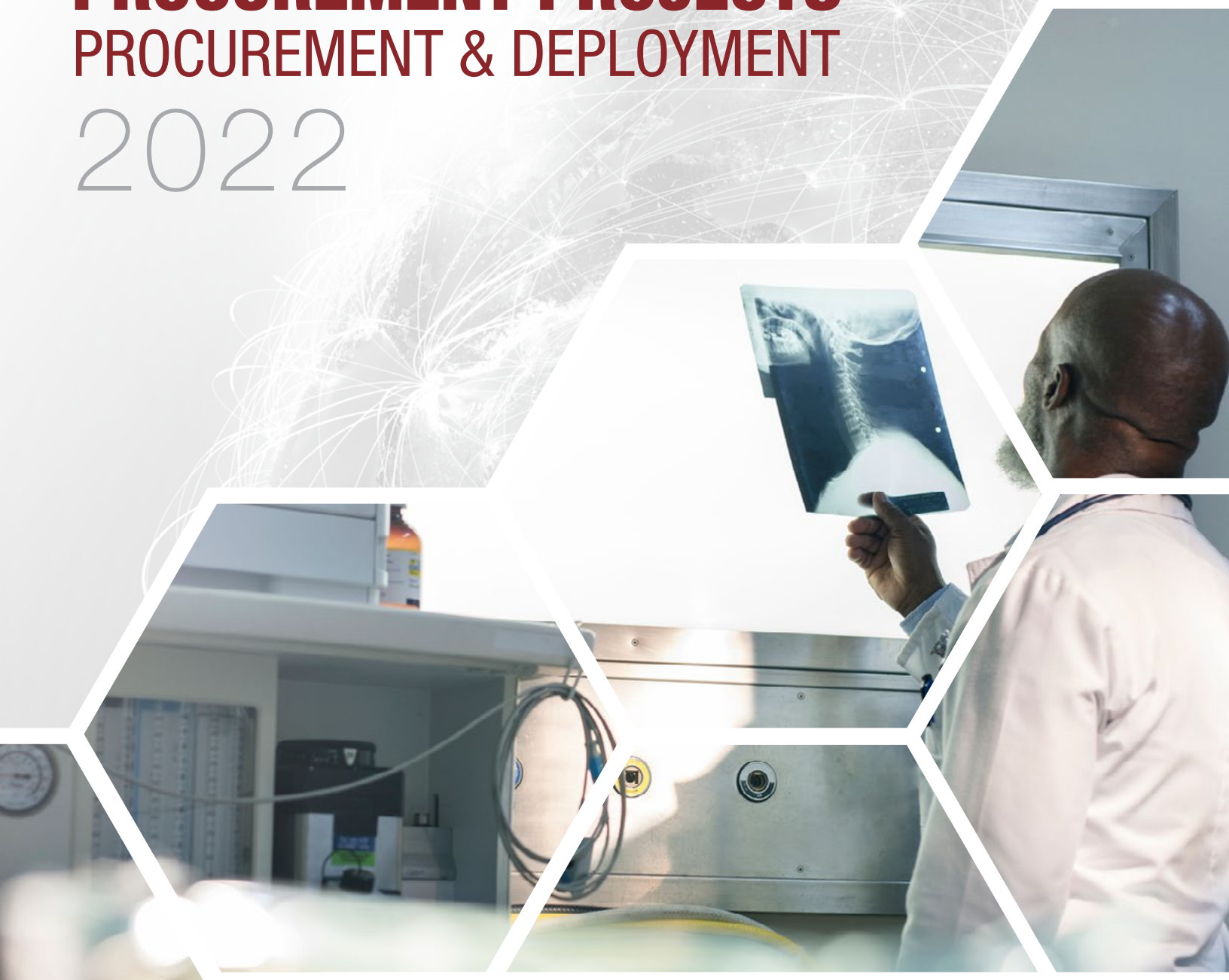
PFSCM
Partnership for Supply Chain Management
www.pfscm.org

PFSCM ROADMAP FOR CAPITAL EQUIPMENT PROCUREMENT PROJECTS

PROCUREMENT & DEPLOYMENT

2022



PFSCM's Quality Management System has been certified to ISO 9001:2015 Quality Management System Standard by DQS Inc. Ref Registration # 10012936 QM15

JSI RESEARCH & TRAINING INSTITUTE, INC.

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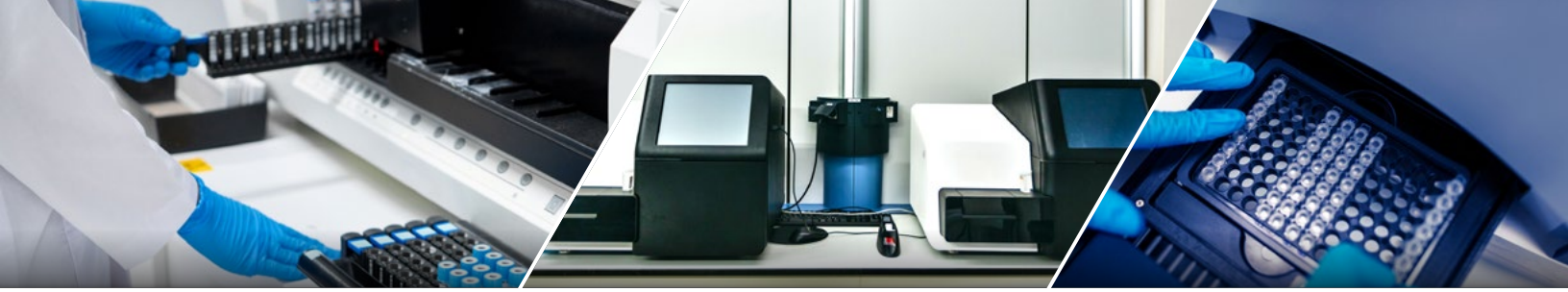


a. Background and Rationale

Access to laboratory and medical imaging services is crucial for the diagnosis, treatment, and prevention of diseases (both communicable and non-communicable) of public health concern. These services, however, require a combination of an adequate infrastructure that includes, but is not limited to well-maintained equipment, suitably trained personnel, and quality assurance programs. Both types of services have traditionally been characterized by shortages in equipment and skilled workforce.

Experience with global health pandemics such as HIV over the years, and more recently with COVID-19, has emphasized the need to further strengthen health systems, particularly in resource limited settings. As a result, there has been considerable progress made in increasing the availability of essential laboratory equipment. However, up to 40% of this equipment is often out of service, thereby negatively affecting the provision of reliable services necessary for good patient outcomes. Additionally, and as a result of COVID-19, there has been a shift to consider strengthening other specialized areas such as for sequencing and imaging services, through additional capital equipment investments as one of the interventions.

Implementation of major equipment (medical imaging and laboratory) in low-resource settings is very challenging and needs to be adapted to the local situation.

b. Purpose

The purpose of this roadmap is to establish a generic model for planning and implementation of major equipment (medical digital imaging and laboratory) projects to address and prevent frequent procurement challenges in project areas. It is to improve project implementation, and manage better overall value for money. It identifies the involved stakeholders, describes the process, and establishes the typical plan of actions for implementation.

c. Intended Audience

It will also be intended for departments and teams of the Partnership for Supply Chain Management (PFSCM).

The main actors involved are:

- The funding agencies (The Global Fund to Fight AIDS, Tuberculosis and Malaria).
- In-country representatives of the Global Fund.
- Principal Recipients (PRs) including Governments, and Facility Administrators.
- End users.
- PFSCM.
- Vendors and their local representatives.

d. Applications

These guidelines should be used to plan, acquire, appropriately install, and utilize major equipment to achieve best-value procurement.

e. Expected Outcomes

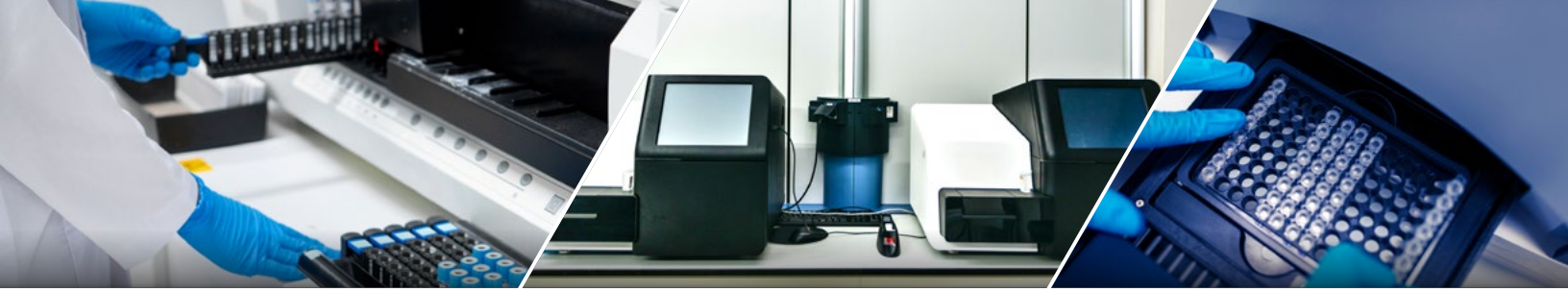
Implementation of these guidelines will facilitate exchanges regarding the requested equipment and will help the end user maintain a high level of performance and achieve best-value for the investment.

f. Key Considerations

The provision and operation of major medical equipment constitutes a multidimensional environment of which healthcare decision-makers are not aware. The choice, installation, and use of such equipment are complicated and expensive and advanced equipment might not be adapted for use in low resources settings, particularly in rural and semi-rural areas. Expert guidance is required to ensure the choice of the most suitable equipment for each hospital and that it will work successfully for a long time.

Key considerations include power availability, need for environmental controls, safety installations, equipment service and maintenance support, and available trained workforce, among others.

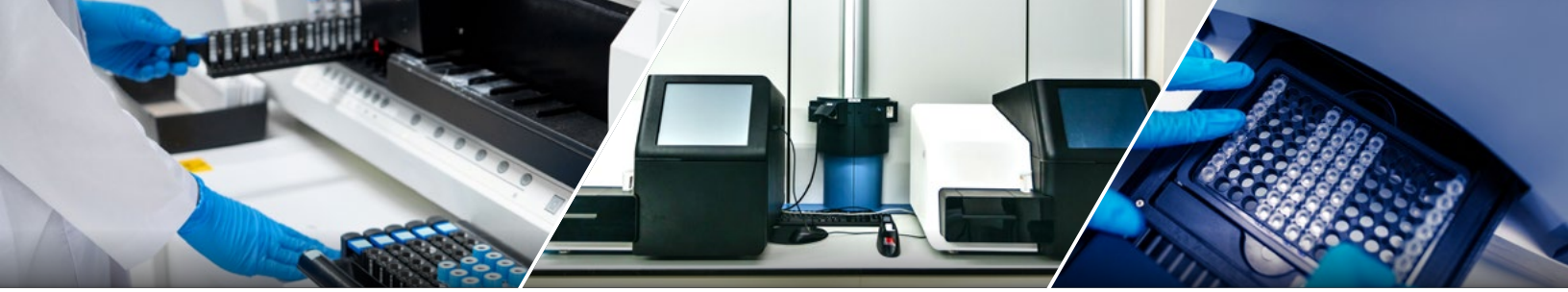
PFSCM would play a role in providing technical assistance to the recipient to better identify the end-user needs, prioritize, and shape the appropriate solution that fits the local settings.



g. Major Equipment Procurement Process

For products that are not complex in nature (e.g. reagents and test kits), there is a clear process for procurement, however, for major equipment acquisitions (imaging, waste management, sequencing equipment and analyzers etc.) that are not traditionally procured, a more elaborate approach is required to ensure that the right products and suppliers are identified and matched to the PR's actual need/requirements. In order to do this several steps need to be followed:

1. **Identify Project Team**
2. **Needs Assessment**
3. **Needs Analysis and Solution**
4. **Procurement**
5. **Pre-installation Verification/Checklist**
6. **Delivery and Commissioning**
7. **Equipment Performance Evaluation**
8. **User Training**
9. **Vendor Performance Monitoring and Evaluation of After Sales Services**



STEP 1: Identify Project Team

A project team with representatives of all stakeholders shall be identified to ensure determination of correct equipment requirements and will establish a plan of action to ensure sustainable follow-up on the implementation. It is essential that the PR is included in discussions regarding the implementation plan and are supportive of it; at an operational level, they will be directly involved in the implementation and introduction of the agreed changes to existing services with a clear matrix of responsibility.

STEP 2: Needs Assessment

This important step could involve information gathering to inform the acquisition of new equipment and determine the unmet equipment needs. Two scenarios would be encountered:

A needs assessment has NOT been performed
The end user in coordination with the PR shall establish the requirements by expressing its current clinical needs and services and the volume of the activity as well as short-, medium- and long- term needs (medical plan, list of planned services, type of examinations, number of patients, volume of activities, number of shifts/ working hours). This information is particular to each site. Annex 1 provides a basic needs assessment tool with critical considerations that could be addressed while filling the equipment specification form (Analyzer/ X-ray specifications existing templates).
Needs assessment has been performed
The PR will share the results of the assessment with PFSCM.

PFSCM's role in this step is simply to verify if there are available solutions that fit the expressed needs. If there is no available solution to offer then PFSCM will source an adequate one. (Refer to Annex 1: Equipment needs assessment tool).

STEP 3: Needs analysis and suggestion of an adequate solution

The project team would perform the needs analysis based on the gathered data (those provided by the PR and those available in the PFSCM data systems); a report per site shall be established with recommendations on the feasibility and appropriate solutions to be suggested.

In both scenarios, the PR shall validate the suggested equipment to address the unmet needs. Annex 2 provides an equipment selection checklist with key considerations.

Depending on whether the appropriate solution exists on PFSCM's OneNetwork system or not, a decision shall be taken regarding the action to be engaged:

- Requisition management by Client Services (CS) or
- Sourcing vendors

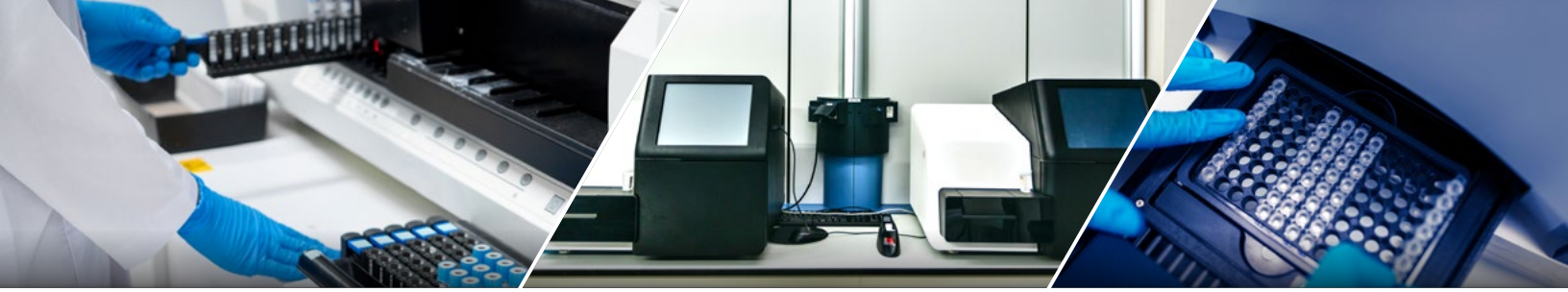
STEP 4: Procurement

The acquisition of new equipment through established procurement mechanisms and guidelines can be done using either of the following models:

Outright purchasing	Leasing and renting
Outright purchasing is the method of paying for the equipment in full (once-off payment). The big advantage that comes from buying a piece of company equipment for the business is ownership. The big disadvantage to outright purchasing company equipment is that the total fee of the equipment must be paid up front.	Leasing involves establishing an agreement or contract between the user and supplier for the possession of the equipment for a specified period at a specific cost.

Equipment leasing and rental agreement/contracts include:

Rental contract	Reagent rental agreement
Fixed payments for the initial term of the contract but allows for the purchase of the asset at any time during the term, with the application of a high fixed percentage of payments made going toward purchase. This structure is often used by laboratories in large companies that do not have the capital budget available.	Manufacturer provides a laboratory with an analyzer with the provision that the laboratory will purchase the reagents from the manufacturer. Reagents are purchased at a set cost per test, which varies with test volume, and this price incorporates a charge for the use of the equipment.



STEP 5: Pre-installation verification/checklist

It is important that the facilities be prepared for the installation of the equipment. Based on the site assessment earlier performed, a crosscheck of the selected equipment requirements with the current infrastructure conditions to identify if there is additional work to be performed. Follow the steps in Annex 3 Pre-installation considerations for equipment.

STEP 6: Delivery and Commissioning

All delivered equipment should be inspected as they arrive into the facility to be sure that they are in good condition and to verify that what is received is what was ordered. Annex 4 summarizes steps to follow when unpacking and inspecting delivered equipment orders.

In addition, the person receiving the equipment should:

- [ ] Sign with their name confirming the verification of receipt of equipment.
- [ ] Date each item received.
- [ ] Note equipment life span.
- [ ] Note supplied equipment spare parts in the spare parts bin card.
- [ ] Assign the equipment an in-house generated identification number and complete the equipment identification form provided.
- [ ] Update existing equipment inventory using information captured on the equipment identification form and develop a “book of life” or an “equipment file” for each piece of new equipment.
- [ ] Complete appropriate sections in the equipment commissioning form provided in Annex 5.

STEP 7: Equipment Performance Evaluation

It will be very important to evaluate the performance of new equipment prior to testing patient specimens in order to ensure the equipment is working correctly with respect to accuracy and precision.

Laboratories and testing facilities will have to verify the manufacturer’s performance claims, and demonstrate they can get the same results using the kits or equipment in the laboratory, with their trained personnel. The performance verification could be done either by:

- Establishing the stability and uniformity of the temperature, if equipment is temperature controlled or;
- by testing specimens with known values and comparing the results to the expected or certified value.

Equipment should also be validated by running specimens in parallel using both old and new equipment and methods for a period to determine that the expected results can be obtained.

STEP 8: User Training

Proper use of major equipment is essential to maintain its optimal performance and preserve the safety of patients as well as the staff operating the devices. Given the variation in technical characteristics of medical equipment, all staff should be trained to operate each device that they use.

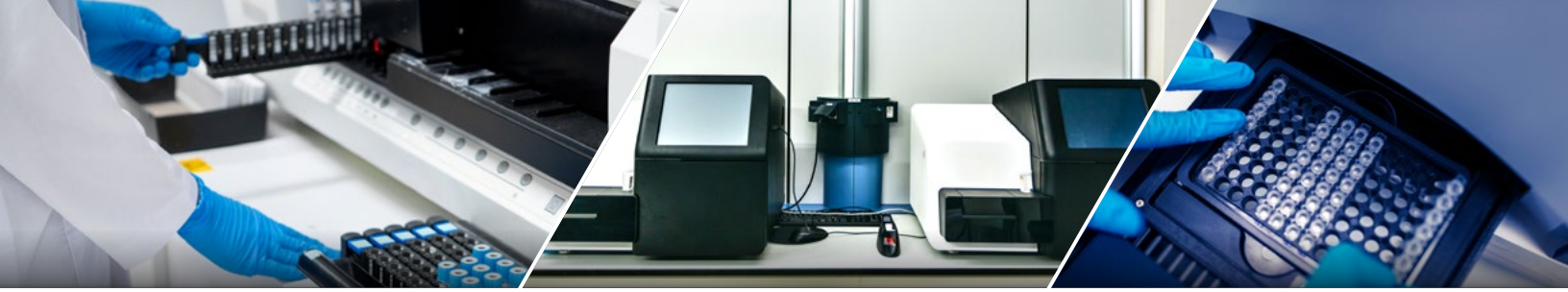
User training should cover:

- [ ] Equipment capabilities purpose and capabilities of the device.
- [ ] Awareness of different models and operational differences.
- [ ] Awareness of the expected life of the laboratory devices and the need for replacement.
- [ ] Knowledge of where/how to access user manuals and receive equipment updates.
- [ ] Operating procedures elaborating equipment: installation and inspection; performance verification; safe operation, handling and maintenance; and quality control managing equipment failure including arrangements for recognizing and responding to malfunctions.

Training can be provided either on-site or off-site. When purchasing new laboratory equipment, facility management can request that suppliers provide in-service training for equipment use, maintenance, and repair. Facility management can also send staff to the manufacturer.

STEP 9: Vendor Performance Monitoring and Evaluation of After Sales Services

This is an important aspect as it gauges the vendor’s production capacity, performance, risks, quality, and environmental impacts. This will also bring close working relationships with the vendors to streamline production timelines, minimize operating costs, and guarantee the quality of the equipment.



h. Plan of Action/Matrix of Responsibilities

The table below summarizes the above process and identifies stakeholders and their roles and responsibilities.

Task	Timeline*	Responsible	Accountable	Consulted	Informed
Requisition submission		PR			
Receipt of requisition and screening	3	PFSCM	PFSCM CS	PFSCM Product Technical Team (PTT) & Sourcing and Contracts (SC)	PFSCM QA team; TGF sourcing team
Request submission of: • Technical requirements • Intended use and • Other relevant information related to the requisition (e.g. current status of the facility including utilities, floorplan, work volume; staffing and other resources etc.)	15	PFSCM	PFSCM CS	PFSCM PTT & QA	PR
Project team assignment	5	PFSCM	PFSCM Project Management (PM)		PFSCM, TGF, PR
Needs analysis and equipment identification	20	PFSCM	PFSCM PM		
Supplier identification, engagement and collection of information		PFSCM	PFSCM PM	PFSCM CS, PFSCM SC PFSCM PTT, PFSCM Quality Assurance (QA)	
Procurement process: • RFP/RFQ preparation and publishing • RFP/RFQ response receipt and evaluation • Vendor selection	50	PFSCM	PFSCM PM	PFSCM CS PFSCM SC PFSCM PTT PFSCM QA	
Transaction management: • Supplier onboarding • SKU creation • Freight estimate • Order placement	45	PFSCM	PFSCM PM	PFSCM SC PFSCM CS	
Site readiness review: • Pre-installation checklist/ (Validation of the infrastructural works that need to be done) • Room layout (equipment placed to scale and signed- off by the vendor)	10	PR		Vendor PFSCM	
Delivery and commissioning of equipment: • Based on existing guidelines and a standardized equipment acceptance procedure	Variable	Vendor	Vendor	PR PFSCM	TGF PFSCM
Training: • End-user (equipment operator) • Technical (Biomedical engineers) • Documentation (IFU & technical manuals)	Variable	Vendor	Vendor	PR PFSCM	TGF PFSCM
Vendor performance monitoring and evaluation of after sales services	On-going	PR	PR		TGF PFSCM

* Business days

Annexes

ANNEX 1: Equipment needs assessment tool

This Annex is to be completed by the final receiving recipient (entity that will be using the equipment). This Annex can be shared with PFSCM in order for PFSCM to do a needs analysis and identify the right equipment. This Annex can be emailed to SC (sourcingandcontractingunit@nl.pfscm.org) and PTT (producttechnicalunit@nl.pfscm.org).

Key consideration	Observation
1. What is the facility health service package?	
2. What is the facility service objective?	
3. What is the facility patient load (epidemiological profiles/ presenting cases)?	
4. What clinical interventions and procedures need new equipment in line with established guidelines?	
5. What human resources are available to operate and maintain the new equipment?	
6. What infrastructure provisions are in place to accommodate additional or new equipment?	

ANNEX 2: Equipment selection checklist (to be completed by the end user)

This Annex can be emailed to SC (sourcingandcontractingunit@nl.pfscm.org) and PTT (producttechnicalunit@nl.pfscm.org).

Key consideration	Factors to consider
Specification	• What are the specifications of the equipment? Provide precise specification, including: » A detailed description of the equipment, » the 'package of inputs' needed to keep the equipment going through its lifetime (including delivery, installation, initial training, consumables, and after sales support), » the quantities required.
Application	• Why and how will the equipment be used? The equipment should address findings from needs assessment. • Is the equipment sufficiently accurate and reproducible to suit the anticipated needs? • What are the infrastructure requirements, including the specifications for physical space? Can the laboratory provide all the necessary physical conditions, such as electricity, water, and space? • How easy will it be for the staff to operate the equipment? • Will instructions be available in a language that is understood by all staff? • Does the equipment have a warranty? If yes, how long is the warranty. • Are there any safety issues to consider? ***Note:*** *There must be adequate room to move the equipment into the laboratory; consider door openings and elevator access.*
Reagents and consumable (if applicable)	• What are the costs associated with reagents and consumables? • Will the vendor as part of the initial purchase provide start up reagents? If so, what are the quantities and for how long can they last? • Will reagents be readily available on the market (in the country of region)?
Equipment service/maintenance	• Is the equipment vendor available in the country/region to support after-sales maintenance? • Are equipment spare parts available in the country/region? » Do available biomedical engineers (at the facility or national level/EPHI) have the expertise to maintain/service the equipment? • Are the user and service manuals available in a language understood by all staff (English)?
Validation	• Has the equipment been validated for their intended use? ***Note:*** *Preferred equipment are those specified in the instructions for use of in vitro medical devices or those that have been published in established/authoritative textbooks, peer-reviewed texts or journals, or in international consensus standards or guidelines, or national or regional regulations.*
National regulations and guidance for import	• Is document available to meet country import requirements?
Certification	• Who are the regional or local certification bodies, and which certification should be verified by the end user (if applicable)?

ANNEX 3: Pre-installation considerations for equipment (Vendor and PR)

Key consideration	Factors to consider
Review technical needs	• Study the manufacturer's site preparation instructions. • Use experience and common sense.
Remove existing equipment	• Cut supply connections and remove the existing item. • Cannibalize the existing item for parts.
Construct or alter the building	• Build any special construction required, such as a transformer housing, room extension. • Make any special modifications necessary, such as enlarging the doorway, or building a workstation. • Remove any scrap or other items from the room.
Provide electrical requirements	Undertake the work required to provide (as necessary): • A new transformer. • A new or upgraded generator. • A single phase or three-phase supply at the site of installation. • A special circuit breaker. • A special socket outlet. • An electrical circuit with enough capacity.
Ensure the electricity installation is safe	Undertake: • An exercise to ensure that all relevant electrical installations are properly grounded and tested. • Any remedial works as required.
Provide water and drainage requirements	Undertake the work required to provide (as necessary): • Adequate water pressure. • Water treatment. • Increased pipeline diameter. • Proper drainage. • Appropriate connection points.
Provide steam supply requirements	Undertake the work required to provide (as necessary): • A steam supply at the proposed site. • Increased pipeline diameter. • A boiler that can accommodate the increased load. • Appropriate connection points.
Provide gas supply requirements	Undertake the work required to provide (as necessary): • Relevant gas supplies at the proposed site. • Appropriate connection points.
Provide extra specific requirements for installing the equipment	Depending on specific guidelines for certain types of equipment (as detailed by the equipment supplier), provide: • Bolts in the ceiling for attaching exhaust duct. • Trenches for wastewater for laboratory glassware washing machines, autoclave, etc.
Provide any additional equipment needs	Provide any associated items as necessary for the equipment or installation, such as: • An uninterruptible power supply (UPS). • A water pump.

ANNEX 4: Summary steps for unpacking and inspecting delivered equipment orders

Checks	Activity
For damage	• Systematically open one crate at a time. • Check the boxes/packages inside each crate for possible damage. • Systematically open one package at a time. • Keep all packaging, supports, labels and booklets/manuals, as you may have to re-pack the equipment to return it for repairs/replacements. • Unpack the equipment carefully. • Ensure that the equipment and its associated supplies are not or do not appear to be damaged. • If anything appears damaged, take a photograph if possible, and notify the supplier promptly.
Against documentation	• Check that the delivery matches the packing list(s). • Check that the contents comply with the specifications in the purchase order — in other words, check the type and model of all equipment and supplies. • Check that the quantities match the purchase order.
Technical requirements	• Ensure that the voltage shown on the packing list (or on the packing case) for electrical equipment is compatible with your power supply. • Check that the equipment data plate matches your order and the packing case/list and, for electrical equipment, that the voltage stated is correct. • For electrical equipment, ensure the mains lead and battery charger, where applicable, is included.
The 'package'	• Check that all the necessary consumables, accessories and spare parts have arrived as per the purchase contract. • Keep these equipment-related supplies together in a dry, cool and safe place until you can issue some and register the rest into the stores system. • Check that the operating manual, service manual (including a wiring/circuit diagram), and any assembly and installation instructions have arrived as per the purchase contract. • Keep the manuals together in a dry, cool, and safe place until you can make copies and issue/store them. • Notify the supplier if any documentation is missing or seems unacceptable (e.g. in another language than requested).
Administrative requirements	• Sign and date all relevant documents (such as the packing list and your order) to show that the contents of the delivery are correct. • Retain these documents for use in the rest of the Acceptance Process, and for later submission to the supplier/issuing store at the end of handover and submission to the finance officer for payment. • Record any discrepancies between the documents and the delivery contents on the documents themselves and on the Fault Report form. • Use the complaints procedures to investigate any discrepancies.

ANNEX 5: Laboratory equipment commissioning form

Only when this form has been satisfactorily completed should the Registration Box be filled in by the Head of Medical Equipment Maintenance

Section 1: REGISTRATION	
ALLOCATED INVENTORY NUMBER	
EQUIPMENT TYPE	
DESTINATION LOCATION	
ACCEPTANCE DATE	
WARRANTY EXPIRY DATE	
MAINTENANCE CONTRACT WITH	

Name of HEALTH FACILITY _____

Name of Equipment _____ Type/Model _____ Order Number _____

Serial Number _____ Cost _____ Date Received _____

Manufacturer _____ Address _____

Phone _____ Email _____

Supplier/Agent _____ Address _____

Phone _____ Email _____

Details of all accessories, consumables, spare parts and manuals received are listed on the following page of this form.

Section 2: ACCEPTANCE CHECKS

A. DELIVERY

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Actions	Yes/done	No/not done	Corrected if applicable
a) Representative of supplier present?			
b) Correct number of boxes received?			
c) After unloading, visible damage to the boxes?			
d) If damaged, has this been stated on the delivery note and senior management informed?			

Comments _____

_____

_____

ANNEX 5: Laboratory equipment commissioning form (continued)

B. UNPACKING (refer to invoices and shipping documents)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	Yes/done	No/not done	Corrected if applicable
a) Visible damage to the equipment?			
b) Equipment complete as ordered?			
c) User/operator manual as ordered?			
d) Service/technical manual as ordered?			
e) Accessories as ordered?			
f) Consumables as ordered?			
g) Spare parts as ordered?			

Comments _____

_____

C. ASSEMBLY (refer to manuals)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Actions	Yes/done	No/not done	Corrected if applicable
a) Are all parts available?			
b) Do they fit together?			
c) Mains lead with plug included?			
d) Do all the accessories fit?			
e) Are markings and labels OK?			
f) Any damage?			

Comments _____

_____

D. INSTALLATION (refer to manuals)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Actions	Yes/done	No/not done	Corrected if applicable
a) Was the work carried out satisfactorily?			
b) Were technical staff present as learners?			
c) Were electrical, mechanical, gas, radiation safety tests and performance checks carried out in accordance with the test sheets in section 9 of this form?			
d) Was the work carried out satisfactorily?			
e) Were technical staff present as learners?			
f) Were operators present as learners?			

Comments _____

_____

ANNEX 5: Laboratory equipment commissioning form (continued)

E. FINAL ACCEPTANCE (to be certified by the Head of Equipment Maintenance only)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	Yes/done	No/not done	Corrected if applicable
a) Is the equipment accepted?			
b) If rejected, have the shortcomings been summarized on this form?			
c) If so, has a report gone to senior management and formal complaints procedures started.			
d) Should payment be withheld pending corrections?			
e) Is payment approved?			

Comments _____

_____

F. USER TRAINING

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	Yes/done	No/not done	Corrected if applicable
a) Were the expected training courses given?			
b) Were the training courses satisfactory?			
c) Were suitable operators present?			
d) Were suitable technical staff present?			

Comments _____

_____

G. REGISTRATION (to be certified by the Head of Equipment Maintenance only)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	Yes/done	No/not done	Corrected if applicable
a) If accepted, has an inventory number been allocated?			
b) Has the Registration Box on this form been filled in?			
c) Has the Stores Controller been provided with the location for the equipment and all necessary data, so that the Stores Receiving Procedure can be followed and a Goods Received Note completed?			
d) Have the accessories, consumables, spare parts, and manuals all been issued to the correct holding authorities?			

NAME _____

SIGNATURE _____

DATE _____

ANNEX 5: Laboratory equipment commissioning form (continued)

I. COMMISSIONING/TESTING PROCEDURES (see manuals and relevant technical standards)

I.1 ELECTRICAL INTEGRITY TESTS

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Classification (where applicable)	**Fill as applicable**
a) Class I – II – III?	
b) Type B – BF – CF?	
c) Type AP – APG?	

Mains Connection	**Yes/done**	**No/not done**	**Corrected if applicable**
a) Are cables and plugs intact?			
b) Is cable color code correctly connected?			
c) Are connectors intact?			
d) Are the fuses correct?			
e) Is equipment protection correct?			
f) Is voltage setting correct?			
g) Is there an earth terminal?			

Electrical Measurements with Safety Tester	**Yes/done**	**No/not done**	**Corrected if applicable**
a) Is protective earth continuity correct?			
b) Is insulation resistance correct?			
c) Are the leakage currents correct?			
d) Is the voltage measurement correct?			

I.2 MECHANICAL INTEGRITY TESTS

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	**Yes/done**	**No/not done**	**Corrected if applicable**
a) Are knobs and switches intact?			
b) Do the wheels/castors move?			
c) Are the handles intact?			
d) Are the mechanical movements okay?			

Comments _____

_____

ANNEX 5: Laboratory equipment commissioning form (continued)

I.3 GAS INTEGRITY TESTS

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

Observation	Yes/done	No/not done	Corrected if applicable
a) Are the cylinders full?			
b) Are appropriate gauges available?			
c) Is there a cylinder key?			
d) Is the pressure reading correct?			
e) Is the cylinder color code correct?			
f) Are the hoses and fittings correct?			
g) Is the system leaking?			

Comments _____

_____

I.4 PERFORMANCE TESTS (see manuals for manufacturer's recommendations)

Undertaken by _____

Witnessed by: Name: _____ Position _____ Date _____

NOTE: *carry out all operational tests as specified by the manufacturer*

Observation	Yes/done	No/not done	Corrected if applicable
a) Are the function verification tests correct?			
b) Is the equipment calibration acceptable?			

Comments _____

_____

FAULT REPORT (describe any shortcomings with the equipment or services provided) _____

_____

_____

_____

NAME _____

SIGNATURE _____

DATE _____

ANNEX 5: Laboratory equipment commissioning form (continued)

NOW PLACE ANNEX 5 AS THE FIRST RECORD IN THE EQUIPMENT FILE/SERVICE HISTORY

Describe and quantify all items received, and complete a Register of New Stocks form:

ACCESSORIES RECEIVED

1. _____ 2. _____

3. _____ 4. _____

CONSUMABLES RECEIVED

1. _____ 2. _____

3. _____ 4. _____

SPARE PARTS RECEIVED

1. _____ 2. _____

3. _____ 4. _____

MANUALS RECEIVED

1. _____ 2. _____

3. _____ 4. _____