

Digital Health Procurement Guide



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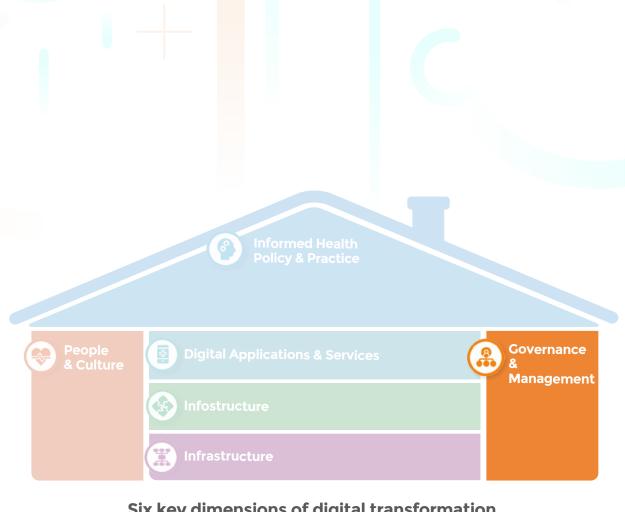
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Six key dimensions of digital transformation.

IDB Adaptation eHealth Architecture Model.

A well-defined approach to building the healthcare transformation pathway is critical not only to guide the journey itself, but also to inform the goals as it progresses. For this, the IDB uses the "digital house". This encompasses the actions, products and investments necessary for a solid construction of the Digital Transformation, with good foundations, and integrates the different aspects and perspectives of the approach.

The digital house is made up of the six key dimensions: governance and management, people and culture, informed health policy and practice, infrastructure, infostructure, and sector digital applications and services. This publication is related to the Governance and Management dimension. For more information, check our publication The golden opportunity of digital health for Latin America and the Caribbean.

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Foreword

As leaders within the Inter-American Development Bank's Social Protection and Health Division and Financial Management and Procurement Division, we are pleased to present this guide to digital health procurement. In an era marked by rapid technological advancements and the increasing digital transformation of healthcare systems, the procurement of digital health solutions has become a critical aspect of modernizing healthcare delivery and improving health outcomes.

At the IDB, we are committed to supporting our clients as they navigate the complexities of procuring digital health technologies. Our goal is to ensure that they have access to the necessary tools and resources to effectively implement innovative solutions that address the evolving healthcare needs of their populations.

This guide reflects our commitment to leveraging innovative procurement practices to achieve the best value for money and maximize the impact of investments in digital health. By providing practical insights, best practices and actionable tools, we aim to empower our clients to make informed decisions throughout the procurement process, from planning and tendering to contract management and performance monitoring.

We recognize that successful digital health procurement requires collaboration and partnership among governments, healthcare providers, technology vendors, and other stakeholders. Therefore, we encourage all stakeholders involved in digital health procurement initiatives to utilize this guide as a valuable resource and reference tool.

As we continue to navigate the challenges and opportunities presented by digital transformation of the health sector, the IDB remains steadfast in its commitment to supporting our clients in their efforts to build resilient and inclusive health systems that prioritize the well-being of all individuals.

We hope that this guide will serve as a valuable resource and contribute to the advancement of digital health procurement of our region.

Sincerely,

Pablo Ibarraran Social Protection and Health **Division Chief**

Javier Davila Perez Financial Management and Procurement **Division Chief**

1. Introduction

Digital health solutions, applications and services are the software applications that are developed, integrated, upgraded, maintained, and launched to improve health care. They are a significant investment for a Purchaser both financially but also how they will affect healthcare delivery (Bagolle et al, 2022). Acquisition of such tools can transform how healthcare is provided and administered, and even the types of services offered. As such, procuring digital health solutions and services like electronic health records (EHRs), health information exchanges, telehealth solutions, and many others is a complex process requiring a significant effort by the Purchaser making the procurement. It involves not only purchasing a tool or service, but also investing in the people who will implement it and sustain it after implementation. It involves investing in change management for the people who will use it to transform healthcare delivery. As such, it is important that the Purchaser invest the time and effort required to deliver a good procurement process - from planning to purchasing to negotiating the contract.

This procurement process is carried out within the framework of the procurement policies of the Inter-American Development Bank, its principles, especially value for money (VfM)², and with a fit-for-purpose approach³.

This document is a guide to support IDB's clients in procuring digital health tools.

This guide will:

- ✓ Help Purchasers understand the process for procuring digital health tools from defining its need to contract negotiation.
- ✓ Discuss the difference between defining what a Purchaser needs (i.e., its requirements) and how it asks (i.e., goes to market) for solutions to meet those needs.
- Provide an overview of a procurement process following a multi-stage bidding process.
- Provide tools and templates that can help a Purchaser execute a digital health procurement based on good practice.

This document uses the terms "digital health solutions", "digital health applications" and "digital health services" interchangeably throughout the text.

² The principle of VfM means the effective, efficient, and economic use of resources, which requires the evaluation of relevant costs and benefits, along with an assessment of risks and of non-price attributes, as appropriate. Price alone may not necessarily represent VfM given that non-price attributes such as quality, sustainability, innovation, and life-cycle costs could also be prioritized as part of the bid.

³ The Bank shall consider a fit-for-purpose approach both to the intended outcomes and the procurement arrangements in determining the most appropriate approach to meet the project sustainable development objectives and outcomes, considering the context and the risk to human health and the environment, value, nature, and complexity of the procurement.

This guide will not:

- Include an exhaustive discussion of IDB's procurement policies.
- Be the only way to procure digital health tools according to IDB's procurement policies. Other methodologies are available and can be discussed with the Bank's procurement experts.
- Replace ongoing conversation and check-ins with the IDB team assigned to your project.
- Define the clinical and administrative needs that the solution must meet for your Purchaser. Your Purchaser must define these.

This guide includes the following:

- 1) Introduction Brief description of the document and its objectives.
- 2) Overview A discussion of the purpose of procurement, key success factors, who needs to be involved, and the key documents that will be developed during the process.
- 3) Detailed Approach A more detailed discussion on the stages of a procurement process including the steps and potential timelines. It also provides some insights to consider when executing the process.
- 4) Appendices Tools and templates that IDB has developed to support Purchasers in procuring digital health tools:
 - Appendix A: Procurement Strategy: A template that helps to establish the strategy and planning of the procurement process and which should be completed prior to starting bid documentation.

- Appendix B: Purchaser's Requirements Document: Outline and examples for writing Part 7: Purchaser's Requirements and which should be started prior to any other sections of the bid document.
- Appendix C: Evaluation Plan: An example plan that the Procurement Team can use to map the evaluation steps and which should be completed prior to developing bid documentation.
- Appendix D: Evaluation Tools: Templates that can be used by the Evaluation Committee to help them document their review of the Bidders' proposals.
- Appendix E: High-Level Technical Responsiveness Form: The form that the Bidder completes during the Market Sounding Stage and needs to map against the Purchaser's Requirements Document (See Appendix B).
- Appendix F: Detailed Technical Responsiveness Form: The form that the Bidder completes during the Detailed Bid and Evaluation Stage; it is based on the High-Level Technical Responsiveness Form and needs to map against the Purchaser's Requirements Document (See Appendix B).
- Appendix G: Key Business Terms: Considerations of general commercial terms that the Purchaser should negotiate with the successful Bidder and which need to be defined prior to Detailed Bid and Evaluation Stage.
- Appendix H: Statement of Work: Considerations related to the "oneoff" services and deliverables that the Purchaser requires from the successful Bidder during the deployment and stabilization phases, and which need to be defined prior to Detailed Bid and Evaluation Stage.

Appendix I: Service Level Agreement: Considerations related to the ongoing services and deliverables that the Purchaser requires from the successful Bidder, and which need to be defined prior to Detailed Bid and Evaluation Stage.

How the IDB can help



IDB procurement and technical specialists and experts are available to accompany your Purchaser through this process. They can provide support, advice, and connection with other experts.

Examples of support they can provide:

- Review and provide advice on the procurement methodology to ensure alignment with Bank policy.
- Review and provide technical advice on key deliverables.
- Knowledge sharing and training relating to unique technical domains (e.g., interoperability experts, change management experts).
- Introductions to other jurisdictions who have procured similar technologies to understand their experiences.
- Funds to engage consultancies to facilitate and draft requirements or procurement documentation.

Speak with your IDB Health Specialist to explore options for support.

2. Overview



Objectives

The objectives of the procurement process for a new Digital Health solution are to:

- Define the goals that a Purchaser is trying to meet with the new system.
- Identify the clinical and administrative functions (aka business functions) that the solution needs to support and any detailed requirements that specific stakeholders (e.g., end-users, regulatory authorities) might have.
- Describe how the tool will fit within the broader digital health ecosystem in the country, how it will interoperate with other tools the country has, and what other "non-functional needs" the Purchaser has, such as support and maintenance.
- Identify tools and Suppliers that meet the Purchaser's needs.
- Successfully negotiate the contract.
- Understand the detailed roles and responsibilities of the Supplier and the detailed roles and responsibilities of the Purchaser for maintaining and supporting the solution.

>> Conditions for success

There are many, many stories of challenged procurements which result from the procurement simply not getting started on the right foot. Establishing a foundation means ensuring the conditions for success are in place prior to beginning the procurement and include:

Developing a Procurement Strategy (see Appendix A)

Procurements are projects. They involve significant effort, many activities, and many people. They require having a plan in place that describes who will do what, the type of procurement being undertaken, the number of stages that will be executed, and so forth. Failing to have a plan before the procurement begins can result in having to restart the procurement or failing to meet the need.

Understanding the current state

Digital health solutions are tools to achieve an opportunity or resolve a problem. Conducting a current state analysis enables the Purchaser to identify the challenges that the solution is intended to address and the opportunities it is intended to enable. It also helps to identify the existing solutions that the new solution will replace.

Having a shared vision and strategic goals

After understanding the current state, the Purchaser needs to establish and document the common vision and strategic goals that it hopes to achieve with the solution prior to initiating the procurement. This will guide the procurement process and the solution that is chosen. Identifying a common vision and strategic goals should include an explicit and documented list of the challenges the solution should address and the opportunities it should enable. If the problem is care siloes and the opportunity is to strengthen collaborative care across sectors, a tool enabling collaborative care planning and documentation of a core information set might be more relevant than a solution that enables health service management (e.g., supply and inventory management). In addition to acting as a guide while the initiative evolves and people change, it also serves as a foundation for developing performance indicators to determine the success of the initiative.

Solutions support a business model

A Purchaser needs to understand how it "does business". It needs to understand the care model and healthcare functions that the solution is intended to support. Understanding the care model or healthcare functions that the solution is intended to support is critical in selecting the appropriate system to meet those needs. The solution will support some healthcare functions but not others. For example, an electronic medical record for primary care is not well suited for supporting patient documentation in an operating theatre because they capture and make available patient information in different ways. Similarly, a solution may provide good support for the operating theatre but limited support for general medicine.

Committed human resources

Procuring a digital health solution requires a significant amount of effort and dedicated thought leadership. Key resources such as the project manager, business lead, business analyst, and procurement specialist need to have their time and dedication to this process protected to manage and support the procurement, including relieving them of other responsibilities to free their time. Other roles such as IT, clinicians, or other subject matter experts will also need to contribute their time at various points. This should be identified during planning so that their time is also protected.

Led by the users of the "business" unit

Identifying and articulating the clinical and administrative needs is critical to a procurement. A Purchaser should focus their bid documentation on what it needs to achieve with the system and the business functions it has to support. As such, the procurement process should be led by a "business owner", such as a clinician or someone extremely familiar with how the Purchaser provides and manages care. A common mistake is having a digital health procurement led solely by the IT or procurement personnel. Procurement will form part of the core team and IT will also provide input and support as a subject matter expert, but the team should be led by the business unit.

Realistic timelines

Procurement of core digital health systems should involve consultation with appropriate stakeholders to understand their needs and an in-depth evaluation of solutions that may meet

their needs. A procurement can take between 12 and 24 months to allow time to define the needs the solution will support, develop and publish the bid documentation, evaluate the Bidders, and negotiate the contract. The timeline for understanding the stakeholders' needs and evaluating systems needs to be realistic and consider the steps involved.

Broad stakeholder representation

Stakeholders, and particularly end-users, need to be consulted during the requirement gathering phase and participate in the evaluation phase. This will include clinicians, senior administrators, administrative clerks (e.g., receptionists), technologists, and so forth. As intended users of the solution, only they can articulate what they need and judge whether a solution meets those needs. Consider also the role that patients could play. They too may have particular needs that the solution could support.

Ensuring interoperability

The solution, as part of an ecosystem (national, regional, Organizational), needs to interface with other systems. Being aware and identifying those platforms is important to understand how the solution will interoperate with them. Understanding also the constraints of the solution and what it is unable to interoperate with will help the Purchaser make a more informed decision of whether the solution is the right fit. For example, an electronic health record is suitable for functions such as order entry and clinical documentation but is not a lab information system that enables specimen and test management. The Purchaser will need to understand whether and how the two systems will interoperate with one another.

Planning for a sustainable total cost of ownership

Digital health tools require ongoing resources for the life of the tool, which includes solution support and maintenance, solution hosting, ongoing training for new users, ongoing configuration to optimize the clinical and administrative processes, supplier management, and a variety of other activities required to operate a solution. The Purchaser needs to have a clear understanding of the total cost of ownership of the solution and a plan to have adequate financial and human resources in place. Find more information about calculating the total cost of ownership and a tool developed by IDB to calculate it at https://socialdigital.iadb.org/tco/.

>> Understanding your need

A common mistake in digital health procurement is focusing on the solution to be acquired rather than the need. Purchasers often describe in great detail what the solution must do or the functionality that it must have. However, they fail to adequately describe what they intend to do with the system, the problem they are trying to solve, or the opportunity they are trying to meet with a new solution. They describe the solution rather than the problem. This guide will emphasize the importance of a Purchaser understanding what it *needs* and expressing those needs, because without knowing the needs, the Purchaser may choose the wrong solution.



Needs are also known as "requirements" and are fundamental to a successful procurement. They are also foundational to the bid documentation that the Purchaser will issue (See Appendix B: Purchaser's Requirements

Document). Generally, requirements can be categorized in the following domains⁴:

	DEFINITION	EXAMPLES
BUSINESS	The key business objectives that the Purchaser is trying to achieve.	 Our organization needs to improve wait times for patients. Our country needs to improve access to care for people in rural and remote areas. Our organization needs comprehensive patient information to enable continuity of care.
STAKEHOLDER	The needs of the individual stakeholders need to have met from the system and usually expressed as a business process or task that they must complete.	 Community physicians need to be able to refer patients to hospital specialists. Patients need access to their own data. MOH administrators need information about hospital efficiency.
₹₩ FUNCTIONAL	Functionality that the solution should have (note that a common mistake is to focus requirements on functional requirements and not consider the other domains).	 The solution should maintain a directory of specialists to whom referrals can be made. The solution should suggest a specialist based on the contents of the referral. The solution should allow a patient to reschedule their appointment.
NON-FUNCTIONAL REQUIREMENTS	Characteristics that the solution must have or meet.	 The solution should be capable of exchanging messages via FHIR. The solution should be available 99.9% of the time. The solution should support role-based access to information.
SERVICES	Services required to successfully configure, deploy, maintain, and administer the solution. In most situations, the Purchaser and the Supplier will both have responsibilities for supporting the configuration, deployment, maintenance, and administration of the solution. Even if the requirements just describe the Supplier's responsibilities, the Purchaser needs to be clear about the services for which it will be responsible.	 End-users should be provided role-based training. On-site support should be available during go-live. Minor patches and major upgrades should be performed.
(i) (i) (information	Information that needs to be stored in the solution or how it is made available.	 The solution should support coding standards. The solution should support clinical vocabularies. The solution should support case costing reports. The solution should enable data extracts for analytical purposes.

 $^{^4}$ Adapted from the requirements classification schema found in *Business Analyst Body of Knowledge* from the International Institute of Business Analysis $^{\text{TM}}$.

One of the first steps in this guide is creating the Purchaser's Requirements Document (See Appendix B). The rest of this guide will draw on this foundational step, so it is critical that it not be skipped.

Procurement phases

Below is an overview of the typical procurement process following a multi-stage bidding process, which is the recommended process for digital health procurements using IDB procedures. If a single-stage bidding process is followed, the marketing sounding stage is skipped and the Purchaser moves directly from requirements definition to the Detailed Bid and Evaluation Stage. Importantly, regardless of whether a single or multi-stage process is followed, the Purchaser needs to develop a *Procurement* Strategy (see Appendix A) prior to beginning the procurement process.

The diagram below represents a multi-stage procurement with two stages named for this specific situation, the Market Sounding Stage as the first stage and the Detailed Bid and Evaluation Stage as the second stage. A procurement process could involve more than two stages. If necessary, the Marketing Sounding Stage may be repeated but it has to consider that it will punish the timeline of the procurement process. There is also opportunity to overlap some of the steps but the Purchaser will need to consult with the IDB team when developing the procurement strategy and planning (see Appendix A Procurement Strategy) to confirm whether this is possible.

The phases are discussed in more detail in Section 3 but the following is an overview:



PHASE	DESCRIPTION	DURATION ⁵
Procurement Strategy and Planning	 Initial stage of the procurement which results in the <i>Procurement Strategy</i> (see Appendix A) It includes identifying the team responsible for conducting the procurement with adequate stakeholder representation, choosing the procurement methodology according to the country and Bank's policies, identifying the high-level procurement activities and steps, identifying stakeholders who will be engaged during requirements gathering and to sit on the Evaluation Committee, and creating a realistic work plan (i.e., timelines). 	4 to 8 weeks

⁵ The stages often overlap so the overall time is reduced. For example, developing the other components of the bid documentation for the Marketing Sounding Stage can be done at the same time as creating the Purchaser's Requirements Document.

PHASE	DESCRIPTION	DURATION ⁵
Requirements definition	 Defining the needs that the Purchaser has and that the solution must meet, which will result in the Purchaser's Requirements Document (See Appendix B) This will include: Goals and objectives Clinical and administrative functions to be supported (e.g., registration, operating theatre) Functional requirements Non-functional requirements such as cybersecurity or interoperability Service requirements such as hosting, application maintenance, training or data migration Information requirements to meet the various clinical and administrative needs Documenting clinical and administrative functions can be done in a "business domains" diagram at a high level. It can also be supported by use cases at a more detailed level that demonstrate how the clinical or administrative processes are carried out. For example, the business domain diagram indicates that the solution needs to support the intake process. A more detailed use case describes the flow of the intake process (e.g., patient presents, is registered, is admitted, etc.). 	8 weeks to 24 weeks ⁶
Market Sounding Stage	 First stage of a multi-stage bid process which is intended to identify Bidders that provide solutions meeting the highest-level business needs, gather information about the market offerings, and refine the Purchaser's Requirements Document (See Appendix B). The outcome of a Market Sounding is that more information will be known about the offerings from Bidders, but also some Bidders may be eliminated if they do not meet the Purchaser's core business requirements (for example, a Bidder that is proposing a solution that is locally hosted but the Purchaser requires software-as-a-service). This stage can be repeated to refine requirements; Once the Purchaser has refined the requirements, they will enter the Detailed Bid and Evaluation which is where it solicits and evaluates detailed technical proposals and the financial proposal. 	12 to 16 weeks
Detailed Bid and Evaluation Phase	 The final stage of the bid process which includes detailed review of the Bidder and its offerings including paper-based review and other evaluation techniques such as system demonstrations. The purpose of this stage is to identify an offer based on system demonstrations and other evaluation techniques. 	12 to 20 weeks
Contract negotiation	 Negotiating a successful contract with the preferred Bidder and moving to the second Bidder should negotiations fail. 	4 to 12 weeks

⁶ The duration of developing requirements will vary significantly based on the scope of the tool. Using multi-stage procurement, requirements can be updated in the market sounding stage(s).

>> Roles and responsibilities

The following groups are typically involved in procuring a digital health tool. For a larger procurement a person may belong to more than

one group. For example, a senior leader who is accountable for decision-making may also participate in requirements gathering and evaluation sessions as a subject matter expert who needs to receive system supports.

GROUP / PERSON	DESCRIPTION	RESPONSIBILITIES
1. Procurement Team	Plans, facilitates and manages the procurement. For a larger procurement such as a hospital information system, the roles are likely to be performed by separate people. For a smaller procurement, one person may perform more than one role (e.g., a business analyst who also manages the process).	
Business Lead	A clinician such as a nurse or physician or a senior staff member with a strong understanding of the clinical and administrative functions and processes being supported.	 Works with the business analyst to plan, facilitate, and document vision, strategic goals and requirements. Works with the procurement specialist and business analyst in designing the bid and evaluation documentation and methodology. Co-leads - with the Procurement Specialist - the evaluation and contract negotiation process with the procurement specialist. Meets with IDB technical experts to review and obtain advice on the subject matter components of the requirements and bid documentation. Provides ongoing reports to senior Organizational and governmental representatives and stakeholders.
Project Manager	A project manager who is responsible for managing the procurement process and ensuring the appropriate resources are in place to conduct the procurement and evaluation.	 Works with the business lead, analyst, and procurement specialist in designing the workplan to guide the procurement. Ensures that necessary human and financial resources are in place to conduct the procurement. Provides ongoing management and coordination of the procurement from the requirements development stage to contract negotiation to transition to implementation.
Business Analyst	A dedicated analyst experienced in defining and documenting a Purchaser's needs and understanding how technology can meet those needs.	 Works with the business lead to plan, facilitate, and document requirements. Works with the procurement specialist and business lead in designing the bid and evaluation documentation and methodology. Documents the evaluation process and outcomes.
Procurement Specialist	A procurement specialist knowledgeable about procuring software and related services.	 Works with the business lead and business analyst in designing the bid and evaluation documentation and methodology. Co-leads - with the Business Lead - the evaluation and contract negotiation process with the procurement specialist. Meets with IDB procurement experts to confirm the appropriate procurement methodology. Prepares non-objection requests with support of the business lead.

GROUP / PERSON	DESCRIPTION	RESPONSIBILITIES
2. Evaluation Committee	A group of internal stakeholders from the impacted clinical, administrative, and IT areas who will evaluate the solution.	 Work with the procurement team members to develop the evaluation criteria. Review and score paper-based proposals. Participate in system demonstrations, Bidder meetings, and other evaluation activities. Recommend a preferred Bidder.
3. Subject Matter Experts	Internal and external stakeholders who will be impacted by the system or that have unique experiences that can help provide insight.	 Provide input on their needs from a solution by participating in requirements-gathering workshops and interviews. Support the evaluation process if requested by providing targeted review and feedback of modules or functionality specific to their role. Would include representatives from clinical, administrative, IT, and other groups who are impacted by the solution or external experts (e.g., a data standards expert) who have specialized knowledge that would contribute to the discussion.
4. Senior Organizational Leadership	Senior leaders at the Purchaser who have overall oversight and accountability for the procurement.	 Approve the scope of functionality to be supported by the solution. Provide input into vision and needs as required. Review and approve major project deliverables. Champion the project.
5. IDB staff	IDB staff with expertise in various areas.	 Supports the Purchaser with guidance and knowledge. Shares tools, resources, and lessons learned from other initiatives. Builds connections and introduces the Purchaser to people or Purchasers with similar experiences countries. Reviews requests for non-objection and provides non-objection at key points.

Note that this guide is related to the procurement process and describes the roles as such. Some of the above roles, such as project manager and business analyst, can however transition to the implementation process.

>> Key Procurement Documents

The procurement process will produce a variety of documents including the following key ones:

- 1) Procurement Strategy (see Appendix A) A document describing the procurement approach, rationale, team, steps and timeline.
- 2) Purchaser's Requirements Document (See Appendix B) Defines the vision, goals, and needs (e.g., supported business domains, functional, non-functional, service, and information requirements) that the Purchaser has and which the solution must meet. The Purchaser's Requirements Document (See Appendix B) is foundational to the process and is the basis for creating the bid documentation.
- Marketing Sounding Stage Bid Document
 Draws on the key business requirements
 (i.e., goals and objectives) and the high-level business functions that the Purchaser has documented in the Purchaser's Requirements Document (See Appendix B). The Bidder will be asked to describe how it meets the Purchaser's Requirements Document (See Appendix B) by completing the High-level Technical Responsiveness Form (See Appendix E). The bid document will also include standard criteria that the Bank has of Bidders (e.g., financial sustainability).

- This stage can be repeated and is particularly helpful to support the Purchaser refining scope and requirements where it may be unknown or unclear whether the market is able to meet those needs.
- 4) Detailed Bid and Evaluation Stage Bid
 Document? Reformulates the bid documentation developed during the market sounding stage with much more detail based on the refined Purchaser's Requirements Document (See Appendix B).

 The Bidder will be required to answer much more detailed questions in the Detailed Technical Responsiveness Form (see Appendix F) as their proposal. Elements of the detailed proposal that is, the Detailed Technical Responsiveness Form (see Appendix F) will form the foundation for negotiation and be included in the contract.
- 5) Evaluation Package The Evaluation Tools (see Appendix D) that the committee will follow and complete to evaluate the proposals.
- 6) Contract The contract that defines the general business terms (see Appendix G: Key Business Terms), defines the scope of the product and one-time services to be provided (see Appendix H: Statement of Work), and the scope of ongoing services and deliverables to be provided (see Appendix I: Service Level Agreement).

⁷ If a single-stage process is followed, the bid document would include the *Detailed Technical Responsiveness Form* (See <u>Appendix F</u>) rather than *High-level Technical Responsiveness Form* (See <u>Appendix E</u>).

3. Detailed Approach





This first phase is important because there are often unrealistic expectations about how quickly a procurement can be completed and the resources that need to be in place to conduct a procurement. This step helps ensure that there is shared understanding on the procurement approach and resources committed to delivering on it.

This phase focuses on identifying the procurement team that will be responsible for managing the procurement. The procurement team will then complete the *Procurement Strategy* (see Appendix A) that describes the procurement approach, strategy and workplan. They will also develop the high-level outline of the Evaluation Plan (see Appendix C). The procurement team will also identify the subject matter experts involved in requirements consultations and the Evaluation Team responsible for evaluating the solutions. It is a project management activity with a broad, rough definition of the evaluation methodology. It is not yet focused on defining the particular needs that a solution must meet or the detailed evaluation materials.

At the end of this step the Purchaser should have:

- Discussed procurement approaches with the Bank and confirmed which procurement approach it is following.
- Identified the high-level steps that it will follow to evaluate the offers and solutions (e.g., paper-based review, system demos, site visits, etc.).
- A realistic, documented strategy documented using the Procurement Strategy (see <u>Appendix A</u>) to guide the procurement process.
- A high-level Evaluation Plan
 (see Appendix C) to confirm the anticipated steps to evaluate the solutions.
- Identified Procurement Team members (i.e., business lead, business analyst, procurement specialist) and their time committed to the procurement.
- □ Identified subject matter experts who will be consulted during requirements gathering and evaluation, and the Evaluation Committee who will evaluate the Bidders and recommend the proposed solution.

How long will this step take?

4 to 8 weeks



Planning the procurement and developing the plan will only take a few weeks and can be completed quite quickly after the Procurement Team is in place. However, identifying and committing the Procurement Team can take longer if it requires creating Terms of Reference and hiring people. The Purchaser cannot proceed to the next stage without having the Procurement Team engaged because the Procurement Team are the group that are responsible for the next phase.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
1. Identify core team members	Identifying and committing time for the core procurement team members including Project Manager, Business Lead, Business Analyst, and Procurement Specialist. If internal resources are not available, this may involve contracting external resources.	Senior Organizational Leadership Identify and commit resources. Project Manager Identify required roles based on the procurement.
2. Develop Procurement Strategy and Evaluation Approach	Confirming the appropriate procurement approach (e.g., single-stage, multistage-stage) and documenting it in the <i>Procurement Strategy</i> (see Appendix A), and identifying the high-level evaluation steps and documenting them in the <i>Evaluation Plan</i> (see Appendix C).	Business Lead, Business Analyst, Procurement Specialist, Project Manager Complete the Procurement Strategy (see Appendix A). Develop the Evaluation Plan (see Appendix C).
3. Identify supporting resources	Identifying other staff within the Purchaser who will contribute to the requirements, participate on the Evaluation Committee, and serve as subject matter experts. Note that this group may evolve over time but it is critical to have them identified right at the beginning to secure commitment.	 Business Lead, Business Analyst, and Procurement Specialist, Project Manager Identify potential staff members to serve on the various groups. Senior Leadership Recommend and authorize staff members to serve as subject matter experts and on the Evaluation Committee.
4. Review the Procurement Approach and Evaluation Approach with IDB	A check-in with IDB experts and specialists to review the procurement strategy (see Appendix A Procurement Strategy) and Evaluation Plan (see Appendix C).	 Business Lead, Business Analyst, and Procurement Specialist, Project Manager Meeting with IDB procurement and technical experts and specialists to review and obtain feedback on the proposal plans.
5. Obtain approval from Senior Organizational Leadership	Reviewing the proposed plans including supporting resources with Senior Organizational Leadership for approval.	Business Lead, Business Analyst, and Procurement Specialist, Project Manager Reviewing proposed plans. Senior Leadership Approve the Procurement Strategy (see Appendix A) and Evaluation Plan (see Appendix C). Commit the necessary resources.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
6. Commit to the procurement	Formally communicating the procurement to the Purchaser and informing staff of their role.	 Business Lead, Business Analyst Draft the communications. Senior Leadership Communicate the procurement and commit resources to their roles.

>> Supporting tools

- Procurement Strategy (see <u>Appendix A</u>) will help you identify the key decisions needed before you start the process and map the process.
- ➡ Evaluation Plan (see Appendix C) provides sample steps for evaluating proposals. This plan will be drafted during the procurement planning at a high-level and updated during the Market Sounding Stage. It will be further refined during the Detailed Bid and Evaluation Stage.

>> This step often looks like this!



- Procurement begins without a plan.
- Timelines are developed based on a gut feeling or external pressures without adequate planning.
- The information technology or procurement teams are responsible for the procurement without involvement of the relevant business units.
- The procurement is siloed. Whoever is in charge procures the product without consultation or understanding of the broader ecosystem resulting in unmet needs and incompatible solutions.
- Senior Leadership does not formally endorse the procurement, commit the necessary resources, or communicate the importance of the procurement.
- Senior Leadership does not commit other staff members to participate in the Evaluation Committee or requirements gathering.
- → A solution is chosen based on Supplier lobbying rather than a rigorous evaluation process.

>> It should look more like this!



A group of health facilities is having significant challenges managing their patient information and collaborating on patient care. Patient charts are often lost or incomplete, and clinicians are often making treatment decisions without adequate information. The leadership from the health facilities meet to discuss the challenges and imagine a better vision for their care delivery and management. They decide that procuring an electronic medical record will help them address these issues. They understand it will require a significant amount of effort and decide to establish a core procurement team that would be responsible for seeing the procurement through. Using IDB funding and contributing some of their resources, they identify three people who will be responsible for the overall procurement (i.e., the Procurement Team). Sara, who is a physician with digital health interest and savvy, will serve as the Business Lead for the procurement. Ali is a Business Analyst, who knows how to create requirements documents and develop bids documents. Pedro is a Procurement Specialist with the Ministry. Ali and Pedro will divide the project coordination role at the beginning and will add a project manager later in the process if the effort is too high. Together, the three of them will form the first makings of the Procurement Team to which others such as the Project Manager will be added later.

After obtaining commitment from senior leadership that the three of them can work full time on the procurement and be relieved of their regular duties, they meet to begin planning the procurement. They are a bit unsure of the specific steps in a digital health procurement, so they consult the IDB's Digital Health Procurement Guide. They also ask their IDB

counterpart to schedule a meeting with the IDB's digital health and procurement teams to review the guide and answer questions they have.

With the advice received from the Bank, they discuss the procurement approach and feel that a multi-stage approach is likely best. After defining their requirements but before publishing the bid documentation, they can revisit this approach to make sure it is the most effective. They develop the procurement approach (see Appendix A Procurement Strategy) that includes information about how they will procure (e.g., consultancy or goods and services, negotiation or best and final offer), the procurement steps at a high-level, and who is involved. They consider at a high-level how they will evaluate the Bidders and develop their Evaluation Plan (see Appendix C). They also identify other staff members who could support the process by participating in requirements-gathering sessions, serving on the Evaluation Committee, or providing specific expertise such as information technology and legal. They are conscious of ensuring that they have a broad range of staff such as clinicians, receptionists, and managers represented from across the Purchasers to ensure that the solution reflects the needs of the Purchaser – not just their own needs. – not just their own needs.

Once they have documented the *Procurement Strategy* (see Appendix A) and the *Evaluation Plan* (see Appendix C), they review the plans with their IDB Health Specialist and IDB Procurement Specialist who can recommend changes based on experiences from other countries. They then present the plans to senior leadership who make some recommendations related to staff who can support the process. Ultimately Senior Leadership approves the plan and commits the required resources to the procurement.

Once the plan is fully approved, the Procurement Team plans a kickoff event where Senior Leadership speaks about the procurement and introduces the Procurement Team, the Evaluation Committee, and other staff who will participate in requirements gathering. The procurement is ready to go!

>> Step 2: Requirements definition



This phase is important because a Purchaser cannot procure a solution to meet its objectives unless it clearly understands and articulates the needs that it is trying to meet. Although a Purchaser's needs can and should be based on good practices and lessons that others have learned, they are ultimately unique to the Purchaser and it must not simply "copy and paste" requirements from another Purchaser, lists of functionalities that commercial products usually support, or external standards without considering whether they support the Purchaser.

This phase will end in formal documentation called *Purchaser's Requirements Document* (See Appendix B). It is a key section in the bid documentation (i.e., Part 2: Purchaser's Requirements) which describes what the Purchaser is procuring.

The phase begins by consulting with internal and external stakeholders to confirm the rationale for the new system and the challenges or opportunities it is intended to address (i.e., the goals or objectives). The vision was defined and strategic objectives were discussed by leadership in the previous phase which led to the procurement in the first place. This phase will extend those conversations to validate them.

It will then identify the clinical and administrative processes for which stakeholders must be able to use the new solution. This is commonly documented in a business domains diagram that identifies the core clinical or administrative functions that the solution must support (e.g., intake). It can also be supported by more detailed uses cases that describe the steps involved in those functions.

The Purchaser's Requirements Document (See Appendix B) will include functional and non-functional requirements (see Section 2: Understanding your need for definitions of these). However and very importantly, it also needs to include information about the contractual terms the Purchaser expects from the Bidder (see Appendix G: Key Business Terms), the deployment and stabilization services (see Appendix H: Statement of Work), and the ongoing services (see Appendix I: Service Level Agreement). These are often forgotten about until negotiation, which is a mistake. Deferring these to the negotiation phase will greatly undermine the Purchaser's negotiating power.

Importantly, when considering its requirements, the Purchaser needs to understand the solution's fit within the "bigger picture", and specifically, the strategic objectives and goals for the procurement, the care model or services that the solution is intended to support, how the solution must interoperate with other solutions in the digital health ecosystem, and how the solution will be sustained once it is procured.

At the end of this step:

- The Purchaser should have a shared understanding of:
 - The vision and the specific list of strategic objectives and goals for the solution (e.g., improve care collaboration between acute care and primary care, enhance reliable access to patient information at point of care);
 - The business functions and processes that the solution needs to support;
 - The functional and non-functional requirements including service and information requirements that the solution should meet; and
 - How the solution fits within the broader digital health landscape.

- Internal and external stakeholders will have contributed to the vision for the solution.
- The Purchaser will have a formal Purchaser's Requirements Document (See Appendix B) that outlines:



Alert! The Purchaser's
Requirements Document
is critical to a successful
procurement. It is a necessary
foundation for both evaluating
Bidders and negotiating the
contract.

- The goals and objectives of the initiative.
- The business functions that the solution needs to support (e.g., prescribing, data analytics).
- The stakeholder requirements (i.e., who needs to do what on the solution).
- Functional requirements such as the ability to merge duplicate records.
- Non-functional requirements such as the architectural requirements (e.g., cloud versus on prem), the privacy and security requirements, and so forth.
- Service requirements such as what change management or implementation and support services will be required from the Bidder.
- Information requirements such as coding or nomenclature standards that the solution must meet particularly to support interoperability and analytics.
- The Purchaser will cut and paste the Purchaser's Requirements Document (See Appendix B) into Part 2: Purchaser's Requirements of the bid documentation.

How long will this step take?

2 to 6 months



The time to develop the Purchaser's Requirements Document (See Appendix B) will vary depending on the scope of the solution being procured. However, a Market Sounding Stage bid document can be released after the context, business goals and supported business domains are defined. It doesn't have to be fully completed before moving to the next step.

This step involves significant stakeholder consultation so any delays caused in this phase are largely caused by stakeholders not being available for meetings and discussion. It can be accelerated if their time to contribute to the process is protected.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
1. Establish project check-ins	Establishing bi-weekly status and issues meeting with key project stakeholder representatives.	 Project Manager Plan and facilitate check-in meetings. Procurement Specialist, Business Lead, Business Analyst Participate in meetings. Sub-group of Stakeholder Representatives (e.g., representatives from senior leadership, impact business units, technical teams, etc.). Participate in meetings. IDB Representatives Participate in meetings.
2. Phase check-in	 Meeting with IDB representatives to: Review the procurement approach (see <u>Appendix A Procurement Strategy</u>) that was agreed upon. Plan the approach for the upcoming phase. Plan the document for the upcoming phase. 	 Project Manager, Business Analyst, Business Lead Presenting plan for phase to IDB representatives. IDB Representatives Provide support and advice as necessary.
3. Identify context and goals	Consultations with key internal and external stakeholders and other information gathering techniques to understand the healthcare context in which the solution will exist and the five or six things that the Purchaser intends to achieve with the solution. Complete the relevant section of the <i>Purchaser's Requirements Document</i> (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Conducting environmental scan and reviews of similar situations. Internal and External Stakeholders Share their vision for healthcare and how the solution supports the vision. IDB Representatives Support the team by reviewing the context and goals.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
4. Consult to confirm the business functions, processes, and stakeholders	Consultations with stakeholders to confirm the business domains (i.e., high-level scope of clinical and administrative functions) and use cases (e.g., patient registration) that the solution must support. Complete the relevant section of the <i>Purchaser's Requirements Document</i> (See Appendix B).	Business Lead, Business Analyst Plan and facilitate discussions. Conduct process mapping and create business domain diagrams and use cases. Draft initial sections of the Purchaser's Requirements Document (See Appendix B). Internal and External Stakeholders Share their vision for healthcare and how the solution supports the vision. Review the draft documentation. IDB Representatives Support the team by reviewing the proposed business functions, processes, and stakeholders.
5. Obtain approval	Review and approval of the goals and business functions to be supported by the solution. At this point, the Market Sounding Stage can begin and the high-level bid documentation released.	 Business Lead, Business Analyst, Project Manager Walk through the document with senior leadership. Senior Leadership Approve the in-scope business functions, processes, and stakeholders.
6. Establish functional requirements	Consultations with end-users to identify functional requirements of the system. Complete the relevant section of the Purchaser's Requirements Document (See Appendix B).	Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Internal Stakeholders (i.e., end-users) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Support the team with document review.
7. Establish non-functional requirements	Consultations with subject matter experts (e.g., IT, health informaticists) to identify non-functional requirements such as interoperability requirements, solution performance needs, cybersecurity requirements, and so forth. Complete the relevant section of the <i>Purchaser's Requirements Document</i> (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Subject Matter Experts (e.g., security representatives, IT, health informaticists) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Make available subject matter experts (e.g., interoperability) for feedback and advice. Support the team with document review.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
8. Confirm legal and policy framework	Consultations with national or regional stakeholders to understand policy and legals frameworks that the procurement must meet. Complete the relevant section of the <i>Purchaser's Requirements Document</i> (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Subject Matter Experts (e.g., security representatives, IT, health informaticists) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Make available subject matter experts for feedback and advice. Support the team with document review.
9. Establish contractual requirements	Consultations with subject matter experts (e.g., IT, hospital administrators, legal counsel) and others to identify key business terms that need to be considered in the relationship (see Appendix G: Key Business Terms). Complete the relevant section of the Purchaser's Requirements Document (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Internal Stakeholders (e.g., IT, change managers, senior leaders) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Make available subject matter experts for feedback and advice. Support the team with document review.
10. Establish service requirements	Consultations with subject matter experts (e.g., IT, change managers) and senior leadership to identify the services that the Purchaser will need from the Bidder such as hosting, change management training, application maintenance, and so forth (see Appendix H: Statement of Work, and Appendix I: Service Level Agreement). Complete the relevant section of the Purchaser's Requirements Document (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Internal Stakeholders (e.g., IT, change managers, senior leaders) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Make available subject matter experts (e.g., infrastructure experts) for feedback and advice. Support the team with document review.
11. Establish information requirements	Consultations with subject matter experts (e.g., clinicians, data analytics, researchers, etc.) to understand the information that the solution needs to capture and the information that needs to be made available. Complete the relevant section of the <i>Purchaser's Requirements Document</i> (See Appendix B).	 Business Lead, Business Analyst Plan and facilitate discussions. Document requirements. Subject Matter Experts (i.e., end-users) Participate in consultation sessions related to their domain. Review draft requirements. IDB Representatives Support the team with document review.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
12. Review document with stakeholders	Reviewing the final draft of the <i>Purchaser's Requirements Document</i> (See Appendix B) with key stakeholders to receive final feedback.	 Business Lead, Business Analyst Circulate the document for review. Walk through with stakeholder representatives to solicit feedback. Adjust as necessary. Subject Matter Experts (i.e., end-users) Participate in consultation sessions related to their domain. Review draft Purchaser's Requirements Document (See Appendix B). IDB Representatives Support the team with reviewing Purchaser's Requirements Document (See Appendix B) review.
13. Obtain approval	Review and approval of the completed Purchaser's Requirements Document (See Appendix B) with senior leadership of the Purchaser.	Business Lead, Business Analyst, Project Manager Walk through of Purchaser's Requirements Document (See Appendix B) with senior leadership. Senior Leadership Approve Purchaser's Requirements Document (See Appendix B).

>> Supporting tools

- Purchaser's Requirements Document (See Appendix B) will help get you on your way by providing a template for documenting requirements and outlining some key areas that should be considered.
- ⇒ Key Business Terms (see Appendix G) describes the key decisions that the Purchaser needs to make about the relationship it wants with the successful Bidder (i.e., the Purchaser's rights and the Bidder's obligations). These should be developed and included as requirements in the Purchaser's Requirements Document (See Appendix B) so that Bidders agree to them during the bidding process. Failing to include these in the bid documentation and waiting to address them with the preferred Bidder during the negotiation period undermines the Purchaser's negotiating position.
- ➡ Statement of Work (see Appendix H) discusses the key issues and questions that the Purchaser needs to consider when defining the "one off" services and deliverables that

- the Supplier will provide during the implementation phase. These services should be defined during the Detailed Bid and Evaluation. The Purchaser should either provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the basis for negotiation. Defining or requesting the details in the negotiation phase will greatly undermine the Purchaser's bargaining position.
- Service Level Agreement (See Appendix I) discusses the key issues and questions that the Purchaser needs to consider when defining the ongoing services and service terms (e.g., application support and maintenance) that the Supplier will provide after the implementation is completed. These services should be defined during the Detailed Bid and Evaluation. Similar to a statement of work, the Purchaser should either provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the basis for negotiation.

Defining or requesting the details in the negotiation phase will greatly undermine the Purchaser's bargaining position.

>> This step often looks like this!



- Requirements are created by a single person or small group without broader representation.
- Requirements are developed by the information technology or procurement teams.
- No Purchaser's Requirements Document (See Appendix B) is developed.
- Requirements are focused on functional or technical specifications but don't address the core objectives or reasons for procuring the solution nor the business processes that the end-users are expected to perform with the solution.
- Requirements do not include service or contractual requirements.

>> It should look more like this!



The procurement team establishes regular bi-weekly check-ins to ensure that all of the moving parts are coordinated and that everyone is aware of what needs to be done. In addition to the procurement team, they also invite the other staff and subject matters experts as required. They also invite the IDB digital health and procurement representatives to help provide guidance and advice.

They collaboratively develop their requirements-gathering plan including who needs to contribute, how the team will obtain their feedback, and the steps. The plan is like a stakeholder engagement plan but they have added other activities such as reviewing white papers to understand the typical scope of the solutions they are looking for and speaking with other jurisdictions in the region to understand their experiences. They begin a rigorous and systematic process for gathering requirements.

Their first step is to confirm what they are trying to achieve with the new solution and how it fits within the broader healthcare

environment. Sara (the physician who is the Business Lead) leads conversations Senior Leadership, other clinicians, administrative staff and other stakeholders such as Ministry representatives to understand what they feel the procurement should achieve. Ali supports these conversations by documenting them and beginning to develop the initial sections of the Purchaser's Requirements Document. The Ministry has recently released a renewed healthcare strategy to increase equitable access for patients in remote areas, increase patients' participation in their own health and wellness, and improve care collaboration. Among other things, this will involve strengthening patient flow across the Purchasers and providing patients access to their own information. Sara and Ali draft objectives for the new electronic medical record solution such as enabling care collaboration across facilities, improving patient access and so forth.

Sara and Ali also begin examining the staff and workflow processes that the solution will need to support. Does it just need to support care delivery? Does it also need to support analytics? Do physicians need to order medications on it or would they use another system to do that? Sara and Ali work with staff and other stakeholders to begin answering these questions and, together with the objectives, establish a vision and clear scope for the system. After the vision has been established, Sara and Ali review the vision with other staff and stakeholders to obtain their endorsement and finally ask for Senior Leadership's approval.

After receiving approval on the vision, Sara and Ali establish a plan for gathering more detailed functional and non-functional requirements from end-users. They review the plan in one of the bi-weekly meetings with the IDB digital health expert who recommends also adding a short survey to the requirements-gathering process to ensure more end-users feel like they have contributed to the process. Contributing to the process will encourage those stakeholders to support solution adoption and change management. Ali then books focus groups and interviews for Sara and him with various people from across the health facilities to identify and gather more detailed requirements. In their requirements-gathering plan, they identified

the people they wanted to engage and ensured senior leadership knew about and committed the people's time. They identified a few people from each facility to participate in groups and interviews in addition to sending the survey. They choose people from different departments, different staffing roles, and different backgrounds to ensure a diverse set of perspectives. They also specifically looked for new people to contribute to the requirementsgathering process so that new ideas were generated. This was also beneficial because the people they choose were not already stretched with other meetings and committees and were able to commit the necessary time.

They also meet with a number of other subject matter experts to inform their thinking. They meet with the information technology team to understand some of the technical requirements such as performance requirements. They meet with the health records department to understand more about the coding standards that the solution needs to support for good quality data and interoperability with other systems. They meet with telemedicine experts to help them understand how telemedicine changes healthcare delivery. Their IDB Health Specialist suggests meetings with IDB's interoperability experts to learn more about successful deployments in other countries to help inform their own thinking.

After Sara and Ali have gathered requirements and created a document, they review it with the end-users to make sure it reflects their needs and Senior Leadership for approval. They have been reviewing it with IDB all the way along so they have already considered IDB's advice to define the deployment and stabilization services and the ongoing services they require. They have also considered issues of the business relationship such as capping price increases at inflation.

When they present the document to IDB for non-objection, the process is smooth. They have worked hard but they are happy that it will avoid many issues down the road.

>> Step 3: Market Sounding Stage(s)



IDB has varying procurement methodologies that the Purchaser should discuss with the Bank's procurement specialist prior to making a decision on which procurement methodology to use. However, a multi-stage process can be beneficial because it can start the evaluation process earlier (i.e., after Step 4 of the requirements definition stage) as well as provide the Purchaser with an understanding of the scope of offerings and solutions available to inform decision making about more detailed requirements in the last stage of the bid process.

The Market Sounding Stage is intended to gather information about the market offerings and refine the Purchaser's requirements. The Market Sounding Stage is where the purchaser will develop and issue the high-level bid documentation. The template for the bid documentation will be provided by the IDB Procurement Specialist. In addition to various other content, the bid document will include the high-level business functions and processes from the Purchaser's Requirements Document (See Appendix B) as well as the High-level Technical Responsiveness Form (See Appendix E). Focusing the expression of need and the question for the Bidders at a higher level allows the Purchaser to further refine its more detailed requirements in parallel and prepare for restating the requirements in the next stage of the bid documentation.

At the end of this step:

- The Purchaser will have updated the Evaluation Plan (see Appendix C).
- The Purchaser will have vetted Bidders based on basic minimum criteria such as financial stability and have a list of Bidders qualified to enter the next stage.
- The Purchaser will understand to what extent the digital health solutions support the business functions and processes that the Purchaser anticipates performing on the solution.
- The Purchaser will have refined its. Purchaser's Requirements Document (See Appendix B) and included more detail in it. For example, if the Market Sounding Stage finds that most Bidders do not provide hosting services, it can remove this requirement from the document and identify an alternative hosting mechanism. Similarly, functional requirements can be edited. However, it is important that the Purchaser does not alter requirements where it impacts the core objectives and processes to be supported by the system.
- An Evaluation Committee will be in place.

How long will this step take?

12 to 16 weeks



The Marketing Sounding Stage is dependent on the context, goals, and supported business domains of the Purchaser's Requirements Document (See Appendix B) being completed. It also involves planning the evaluation process in addition to releasing and receiving high-level bidder proposals.

This step is typically delayed by not having drafted the key components of the Purchaser's Requirements Document (See Appendix B) developed and by not having planned the evaluation process, thus resulting in a draft bid document that does not match the intended process. This step will go more quickly if these are completed at the beginning of this step.

This step is also commonly delayed because the Evaluation Committee is not in place or does not have their time protected. Protecting their time to contribute to the process will make this step go more quickly.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
1. Phase check-in	 Meeting with IDB representatives to: Review the outcomes from the previous phase. Plan the approach for the upcoming phase. Plan the document for the upcoming phase. 	 Project Manager, Procurement Specialist, Business Analyst, Business Lead Presenting plan for phase to IDB representatives. IDB Representatives Provide support and advice as necessary.
2. Copy the Purchaser's Requirements Document into the bid document	Copying the Purchaser's Requirements Document (See Appendix B) into the Purchaser's Requirements section of the bid documentation. Beyond addressing any formatting issues, this step should require nothing more than copying the information from the Purchaser's Requirements Document into the bid documentation.	Business Analyst Output Output Description:

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
3. Draft High-level Vendor Responsiveness Form	Writing questions in the High-level Technical Responsiveness Form (See Appendix E) based on the Purchaser's Requirements Document (See Appendix B). The questions in the form should match the headings of the Purchaser's Requirements Document.	Business Analyst, Business Lead Traft the questions.
4. Refine negotiation strategy – Evaluation Plan	The Purchaser needs to refine the Evaluation Plan (see Appendix C) developed earlier to add the criteria that will be used to evaluate vendors in the Market Sounding Stage (i.e., the steps, whether it is pass/fail, etc.) before developing the bid documentation. In the Market Sounding Stage, the evaluation process is likely to be paper-based review with some clarification from the Bidder and the evaluation criteria is likely going to be pass/fail based on some minimum requirements. Those Bidders meeting the minimum requirements would pass to the Detailed Bid and Evaluation Stage (assuming only the multi-stage process is only two stages in this example) where evaluation is more rigorous, involves a broader set of evaluation techniques, and allows for ranking of Bidders.	Business Lead, Procurement Specialist, Business Analyst Traft Evaluation Plan (see Appendix C). Senior Leaders Review and approve Evaluation Plan (see Appendix C).
5. Draft Market Sounding Stage bid documentation	 Developing the Market Sounding Stage of the bid documentation which will focus on: Bid process (e.g., electronic versus paper submissions, whether a Bidder meeting will be held). Mandatory evaluation criteria including: IDB Mandatory Requirements (e.g., from an IDB member country). Purchaser's Mandatory Requirements of mandatory requirements (i.e., a limited number of mandatory requirements that the Bidder or solution must meet). Purchaser's Requirements Document (See Appendix B). High-Level Technical Responsiveness Form (Marketing Sounding). 	 Procurement Specialist, Business Analyst Draft and edit the bid documentation. Business Lead Provide comment on the bid documentation. Evaluation Committee (e.g., representatives from senior leadership, impact business units, technical teams, etc.) Provide comment on the bid documentation. IDB Representatives Provide support and advice as necessary.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
6. Request approval and non-objection	Review and approval of the Market Sounding Bid Documentation.	 Project Manager, Business Lead, Procurement Specialist, Business Analyst Review the bid documentation with senior leadership and IDB. Senior Leadership Review and provide approval. IDB Representatives Review and provide non-objection.
7. Release bid documentation	Publish Market Sounding Bid Documentation to allow Bidders to review and draft responses. Where and how long the document is published will depend on the nature of the procurement, but assume about 6 to 8 weeks for publishing and generally the bids should be published internationally to allow for a breadth of responses.	Procurement Specialist Publishing the document.
8. Respond to questions	Receiving and responding to questions from potential Bidders – noting that responses must be received formally (i.e., on paper and not phone calls), that they may require IDB review and non-objection., and must be provided to all Bidders	Business Lead, Procurement Specialist, Business Analyst Receive and draft response to Bidders. Evaluation Committee (e.g., representatives from senior leadership, impact business units, technical teams, etc.) Provide comment on the responses. Senior Leaders Review and approve responses. IDB Representatives Review and provide non-objection (if necessary) to responses.
9. Host Q&A session	Conducting an open session to which all Bidders are invited to ask questions about the Purchaser and its requirements. Although this step is optional, it can help to engage potential Bidders and publicize the document. It also provides a transparent forum for responding to questions.	Business Lead, Procurement Specialist, Business Analyst Host the session including documenting the Q&A and add it to the record or file of the procurement process.
10. Receive responses and document that responses have been received	Receiving the bids and documenting that they have been opened including in the Bid Opening Record.	Business Lead, Procurement Specialist Lead the bid opening meeting. Evaluation Committee Participate in the bid opening meeting. IDB Representatives Receive the Bid Opening Record.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
11. Review responses	Reviews responses to understand offerings and identify questions of clarification for the Bidders.	Business Lead, Procurement Specialist Lead the response review process. Review the responses and identify questions of clarification. Business Analyst Support the process. Collate and document questions of clarification raised by the Evaluation Committee. Review the responses and identify questions of clarification. Evaluation Committee Review the responses and identify questions of clarification. IDB Representatives Provide advice and support as requested.
12. Request clarifications from Bidders	Requesting clarification from the Bidders on unclear information.	Business Lead, Procurement Specialist Obtain clarification from the Bidders. Review the responses and identify questions of clarification. Business Analyst Support the process. Collate and document questions of clarification raised by the Evaluation Committee. Review the responses and identify questions of clarification. Evaluation Committee Review responses from the Bidders.
13. Evaluate responses and identify next stage Bidders	Meeting of the Evaluation Team to identify Bidders meeting the minimum requirements and who will pass to the next stage (see Appendix D: Evaluation Tools for tools allowing the evaluators to document their information and for the Procurement Team to compile the results). Note that eligibility will be based on the basic Bidder profile (i.e., financial sustainability) and some basic mandatory requirements (e.g., supports interoperability, is cloud based). Several Bidders are likely to move forward.	Business Lead, Procurement Specialist, Business Analyst Facilitate review meeting. Document results. Evaluation Committee Meet to confirm Bidders being invited to the second stage.
14. Submit Marketing Sounding Stage evaluation report	Submitting the results of the evaluation to IDB for non-objection.	Procurement Specialist, Business Analyst Prepare the non-objection report. IDB Representatives Provide non-objection.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
15. Notify successful and unsuccessful Bidders	Notify Bidders in writing who will proceed and not proceed to the next step. Note that this step assumes that there will be a period post notice in which the Bidder can object to having been excluded from the next stage. Receiving and entertaining the objection period can happen concurrently with the Detailed Bid and Evaluation Stage outlined below.	Procurement Specialist, Business Analyst Notify unsuccessful Bidders.

>> Supporting tools

- Evaluation Plan (see Appendix C) provides a sample plan for evaluating the Bidders. This plan will be drafted prior to developing the Market Sounding Bid Documentation to understand the evaluation process. It will be further refined prior to the Detailed Bid and Evaluation Stage based on the refined Technical Responsiveness Form included in Detailed Bid and Evaluation Stage Bid Documentation.
- Evaluation Tools (see Appendix D) provides some sample tools that can be used to document the evaluators' review and average the scores. These tools should be created in conjunction with developing the *Technical* Responsiveness Form in the bid documentation because they mirror the domains and sub-domains described in the form. It also helps to develop them concurrently to ensure that they are aligned and appropriately evaluating the requirements.
- Appendix E: High-level Technical Responsiveness Form provides an example of a structured format that can be used to receive the Bidders' proposals. This form would be completed and cut and paste into the bid template available from your IDB Health Specialist or Procurement Specialist.

>> This step often looks like this!



- Did documentation includes a "wish list" of functional requirements without being connected to the purpose, objectives or scope of business processes to be supported.
- Bid documentation doesn't include information about the services required.
- Limited contextual information to help Bidders understand the purpose, objectives, and scope of the procurement.
- A procurement team comprised of technology, procurement professionals, and legal representatives without end-user involvement.
- Bid documentation describing how the Bidder should meet the requirements instead of asking them how they can do it.
- ⇒ Bid documentation that does not include the Purchaser's Requirements Document (See Appendix B).

>> It should look more like this!



Before writing the bid documentation, the procurement team asks the IDB to prepare and deliver a quick presentation on the Market Sounding Stage to understand better the process and

bid documentation. The IDB digital health and procurement experts present an overview of the process and bid documentation at one of the bi-weekly meetings.

The procurement team understands that much of the effort involved in developing the Market Sounding Stage Bid Document is completing Part 2: Purchaser's Requirements and mapping out their evaluation process. They feel confident in moving forward. The procurement team confirms with Senior Leadership who will participate on the Evaluation Committee. The team is cognizant that they need a wide variety of end-users and stakeholders represented to ensure that the decision of which solution to procure is a collective decision rather than one made by only a few people. They identify clinical, administrative, and leadership representatives from several of the health facilities and propose the team to Senior Leadership. After Senior Leadership has endorsed the committee and communicated with the individuals involved, the procurement team hosts a kickoff meeting with the Evaluation Committee to communicate their role.

Sara (the physician who is the Business Lead, Ali (the Business Analyst), and Pedro (the Procurement Specialist) work together to write the bid document. They start by cutting and pasting the Purchaser's Requirements Document (See Appendix B) into the document and developing their questions for the High-level Technical Responsiveness Form (See Appendix E). They then work on other areas of the bid document. During this process, the Procurement Team also meets with the IDB Procurement Specialist and an expert from the IDB Digital Health Team to ensure that other components of their bid documentation are going well.

The questions that they include in the bid document are very high-level and are intended to understand the scope of solutions that Bidders can provide. They also include the normal questions recommended by the IDB such as financial stability and legal profile. Because this is only the Market Sounding Stage of the process, they decide to keep the evaluation very light. The evaluation will be passed or fail based on the financial stability, legal profile, the broad

scope of the solution that the Bidder is able to provide, and three core technical requirements (i.e., supports interoperability, is cloud based, works in offline mode). They know that a much more detailed and rigorous evaluation will occur during Detailed Bid and Evaluation Stage. After completing the document, they review it with the evaluation team to obtain any feedback and eventually submit it to Senior Leadership for approval and the IDB for non-objection.

After releasing the bid documentation, the procurement team hosts a question-and-answer session with Bidders prior to submitting their proposals. This helps the Bidders clarify any questions that they have about the document or the facilities' needs. The procurement team provides 8 weeks for response because they feel it will give the Bidders time to write stronger proposals. After the procurement team receives the proposals, they review them to ensure that they meet the minimum requirements, which the majority do. They also forward the proposals to the Evaluation Committee for their review and book a meeting to discuss the proposals (Evaluation Tools (see Appendix D). The Evaluation Committee has a few clarification guestions of some of the Bidders. The procurement team facilitates meetings with the Bidders to obtain the answers. The procurement team confirms which Bidders have met the minimum requirements and develops an evaluation report for approval by Senior Leadership and non-objection by IDB.

Based on the results of the Market Sounding Stage, the evaluation team suggests changes to the Purchaser's Requirements Document. They don't reduce the mandatory pass-fail requirements upon which they eliminated prospective Bidders. However, most of the Bidders were not able to provide sophisticated analytical capabilities so the evaluation team recommended removing these requirements and recommended instead issuing a separate bid document and allocating budget for that functionality. The team also added other functional requirements that were not in the document originally. Reading the initial stage proposals helped them better understand the functionality that they could expect in the clinical modules. They then reviewed the requirements to ensure that interoperability

was appropriately addressed so that the solution could interoperate with the reporting tool that they eventually procured. After editing the *Purchaser's Requirements Document*, the procurement team presents the refreshed requirements to Senior Leadership for approval.

When the stage has finished, the procurement team notifies Bidders who met the minimum requirements that they will be invited to the Detailed Bid and Evaluation Stage. The procurement team also notifies Bidders who did not meet the minimum requirements that they were unsuccessful and will not pass to the next stage.

>> Step 4: Detailed Bid and Evaluation Stage



The last evaluation stage of a multi-stage bid process includes refreshing the bid documentation, which provides the Purchaser with an opportunity to ask much more detailed questions about the requirements but also to reconsider which requirements continue to be important. The final stage will also involve significantly more detailed evaluation of the Bidders, moving from a paper-based evaluation of Bidders who have been invited to the last stage and shortlisting a few for demonstrations and more detailed evaluation. Note that IDB's procurement policies allows more than two stages. The previous stage could be repeated to refine the requirements, however this will affect the timeline

The Detailed Bid and Evaluation Stage will include bid documentation with much more detailed Purchaser's Requirements than the Marketing Sounding Stage. The evaluation criteria will also change from a pass-fail to ranking based on the Bidder's ability to meet the business, functional, and non-functional

requirements (see <u>Appendix C</u>: Evaluation Plan for an example of how ranking bidders can be done). Once proposals are received, the Evaluation Committee will review them to identify a short-list that will proceed to more detailed evaluation such as system demonstrations, Bidder interviews, sandboxing, or site visits.



Alert! The bid documentation is very complex. Do not develop a draft before speaking with your IDB Health Specialist or Procurement Specialist. They can provide advice at how to structure the document if you show them iterations along the way. It will make this critical step go much more smoothly.

In addition to describing the other types of requirements such as functional or nonfunctional requirements, the Detailed Bid and Evaluation Stage of bid documentation also needs to include the general business terms that the Purchaser anticipates imposing on the successful Bidder (see Appendix G: Key Business Terms). This includes terms such as capping price increases to the rate of inflation or less, acknowledgement from the Bidder that it has no right over the data, and so forth. Any important terms that the Purchaser wants to impose on the successful Bidder should be **explicitly** articulated in the bid documentation so that the Bidder acknowledges that the term or condition will form part of the contract. Failing to do so means that the term will need to be negotiated later with the successful Bidder, which will significantly undermine the Purchaser's negotiating position.

A critical component of the contract with the successful Bidder is clearly defining the services that it will provide and the terms of the service (e.g., the acceptance criteria, the performance criteria). For example, if the Bidder is expected to train, is it train-the-trainer or train everybody using the system? What does it mean to "go live"? Is it when the software is installed? When the first person uses it, when the entire health facility uses it? Similar to the business terms,

the services and terms need to be confirmed before going into negotiation (see Appendix H: Statement of Work and Appendix I: Service Level Agreement). The best-case scenario is that these are included as requirements and the Bidders acknowledge that they will provide the services under those terms. If this is not known, the bid documentation should require the Bidder to clearly propose the services and the terms of the service. This will be used as the starting point for negotiation (assuming that the Purchaser reserves the right to negotiate) and included in the contract with the preferred Bidder. Failing to do so risks a lack of clarity about the roles and responsibilities of the Purchaser and the Supplier (i.e., the Bidder to whom the contract is awarded) and disputes about whether the work has been appropriately delivered.

At the end of this step:

- The Purchaser will have a detailed Purchaser's Requirements Document (See Appendix B).
- The Purchaser will have created the Detailed Technical Responsiveness Form (see Appendix F).

- Bidders will have submitted more detailed proposals that are evaluated against predetermined criteria.
- The Evaluation Committee representing key stakeholders will conduct a rigorous and thorough evaluation of the Bidders and solutions through a series of evaluation steps intended to continuously refine and narrow the list (Evaluation Tools (see Appendix D).
- → A detailed record of the evaluation discussions and results will be retained
- The Evaluation Committee will rank the proposals based on the defined evaluation criteria and present the final scores to senior leadership. It will also recommend to senior leadership the Bidder most likely to meet the Purchaser's needs.
- The Purchaser will enter contract negotiation with the preferred Bidder identified above. It will also keep an alternate Bidder or two (i.e., the Bidders with the second and third-highest scores) in abeyance if negotiation with the preferred Bidder fails.

How long will this step take?

12 to 20 weeks



The Detailed Bid and Evaluation Stage is dependent on the Purchaser's Requirements Document (See Appendix B) being completed with a clear understanding of what is being requested, what services need to be provided, and how they will be evaluated.

This step is typically delayed by not having a completed *Purchaser's Requirements Document* (See Appendix B), by not having a clearly defined evaluation process, or the Evaluation Committee not having the time to read proposals and meet with Bidders. This step will go more quickly if the necessary documentation is in place and the Evaluation Committee has time protected for the evaluation.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
1. Phase check-in	 Meeting with IDB representatives to: Review the outcomes from the previous phase. Plan the approach for the upcoming phase. Plan the document for the upcoming phase. 	 Project Manager, Procurement Specialist, Business Analyst, Business Lead Presenting plan for phase to IDB representatives. IDB Representatives Provide support and advice as necessary.
2. Confirm the business terms and conditions	Confirming key contractual terms to be included in the next stage bid documentation and to which the Bidders will be expected to agree (see Appendix G: Key Business Terms). These are critical in that they form the foundation of the negotiation phase. Leaving them until the negotiation phase greatly undermines the Purchaser's negotiating position.	 Project Manager, Procurement Specialist, Business Analyst, Business Lead Draft the terms. Consult with subject matter experts. Subject Matter Experts Participate in information gathering meetings as necessary and provide advice. IDB Representatives Provide support and advice as necessary.
3. Confirm the list of services and terms	Confirming that the services which will be required from the successful Bidder and the terms related to the provision of those services such as acceptance criteria, performance criteria, and so forth are accurately described in the <i>Purchaser's Requirements Document</i> (See Appendix B).	Project Manager, Procurement Specialist, Business Analyst, Business Lead Draft the terms. Consult with subject matter experts. Subject Matter Experts Participate in information gathering meetings as necessary and provide advice. IDB Representatives Provide support and advice as necessary.
4. Refine the Purchaser's Requirements Document (See Appendix B)	Refining the Purchaser's requirements based on the findings from the market sounding stage and any other information gathering conducted.	 Business Lead, Business Analyst Plan and facilitate discussions. Re-draft the Purchaser's Requirements Document (See Appendix B). Internal and External Stakeholders Participate in discussions about modified requirements. Review the draft documentation. IDB Representatives Support the team by providing input and advice.
5. Refine the Evaluation Plan	Refining the Evaluation Plan that was developed in the previous stage to accommodate changes in what is being requested of the Bidders and to include the weightings of key areas. In addition to guiding the evaluation, this information will be required in the bid documentation and therefore needs to be done prior to developing the next stage of bid documentation. (See Appendix C: Evaluation Plan).	 Business Lead, Procurement Specialist, Business Analyst Refine the Evaluation Plan. Review the plan with the Evaluation Committee. Evaluation Committee Review and comment on the revised plan. IDB Representatives Provide support and advice as necessary.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
6. Create evaluation supports and materials	Creating supports for the Evaluation Committee to use when reviewing the Bidders and solutions.	Business Lead, Procurement Specialist, Business Analyst Traft the evaluation templates. Evaluation Committee Review and comment on the templates. IDB Representatives Provide support and advice as necessary.
7. Redraft bid documentation	Drafting the bid documentation for the Detailed Bid and Evaluation Stage including refining the Technical Responsiveness Form from the previous stage. (See Detailed Technical Responsiveness Form in Appendix F)	 Project Manager, Procurement Specialist, Business Analyst, Business Lead Compile the new bid documentation based on the restated requirements, revised evaluation methodology, and key general business terms.
8. Request approval and non-objection	Review and approval of the detailed bid documentation.	 Business Lead, Procurement Specialist, Business Analyst Review the bid documentation with senior leadership and IDB. Senior Leaders Review and provide approval. IDB Representatives Review and provide non-objection.
9. Release bid documentation	Publishing the bid document to allow Bidders to review and draft responses.	Procurement Specialist Publishing the document.
10. Respond to questions	Receiving and responding to questions from potential Bidders – noting that responses may require IDB review and non-objection.	Business Lead, Procurement Specialist, Business Analyst Receive and draft response to Bidders. Senior Leaders Review and approve responses. IDB Representatives Review and provide non-objection (if necessary) to responses.
11. Receive responses and document that responses have been received	Receiving the bids and documenting that they have been opened including in the Bid Opening Record.	Business Lead, Procurement Specialist Lead the bid opening meeting. Evaluation Committee Participate in the bid opening meeting. IDB Representatives Receive the Bid Opening Record.
Proposal Review and Shortlisting	Note that the evaluation steps and participants will vary. The Purchaser should consult with IDB procurement and technical specialists and experts to select a suitable strategy. The description below is based on a common evaluation process.	

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
12. Review responses	Reviews responses to understand offerings and identify questions for	Business Lead, Procurement Specialist, Business Analyst
	Bidders. SMEs review their sections as well. Evaluation Committee members and SMEs individually assign a	Reviewing the responses.Document questions for the Bidders.
	preliminary score to the Bidders.	Evaluation Committee
		 Reviewing the responses and documenting questions of clarification. Scoring responses.
		Subject Matter Experts (e.g., administrators, clinicians, IT)
		 Reviewing the responses and documenting questions of clarification. Scoring responses.
		IDB Representatives
		 Providing advice and guidance as necessary.
13. Meet with Bidders	Evaluation team meets with Bidders for the purpose of clarifying the responses. The results of these meetings must be documented because they are part of the procurement process.	Project Manager
(optional)		 Coordinating and scheduling meetings.
		Procurement Specialist
		 Facilitating the process for obtaining clarification.
		Business Lead, Business Analyst
		→ Participate in the process.
		Evaluation Committee
		→ Participate in the process.
		Subject Matter Experts (e.g., administrators, clinicians, IT)
		 Reviewing the responses and documenting questions of clarification.
		IDB Representatives
		 Providing advice and guidance as necessary.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
14. Score responses and shortlist	Confirming or changing scores based on findings of Bidder meetings, and meeting as a group to discuss and average scores. Where SMEs have reviewed a particular area (e.g., receptionists review the registration section), they will meet as a group to discuss and provide their averaged score to the Evaluation Committee. See Evaluation Tools (Appendix D), D.2 Evaluator's Tool for Scoring Written Proposals and D.3 Tool to Combine Evaluators' Proposal Scores for an example.	 Project Manager Coordinating and scheduling meetings. Procurement Specialist, Business Lead, Business Analyst Facilitating meetings with the Evaluation Committee and Subject Matter Experts. Documenting results of the meetings and scoring. Evaluation Committee Adjusting scores as necessary based on Bidder responses. Participate in the process. Subject Matter Experts (e.g., administrators, clinicians, IT) Reviewing the responses and documenting questions of clarification. Adjusting scores as necessary based on Bidder responses. IDB Representatives Providing advice and guidance as necessary.
15. Notify unsuccessful Bidders	Notifying Bidders who will not pass to the next stage of the evaluation (i.e., system demos).	 Procurement Specialist Drafting letter to notify unsuccessful Bidders. IDB Representatives Providing advice and guidance as necessary.
System Demonstrations and Interviews	System demonstrations are a critical part of any evaluation to confirm the Bidder's paper response and to understand how the Bidder meets the requirements. The Purchaser should choose a manageable number of Bidders (e.g., four) that will proceed to system demonstrations based on their paper-based scores.	

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
16. Conduct system demos and interviews	Meeting with bidders to view system demonstrations and conduct further clarifying interviews as necessary. System demos should be based on use cases (i.e., scenarios) that the Purchaser provides and represent a comprehensive set of business functions. See Evaluation Tools (Appendix D), D.4 Evaluator's Tool for Scoring System Demonstrations and D.6 Use Cases to Support System Demonstrations for examples.	 Project Manager Coordinating and scheduling meetings. Business Lead, Business Analyst, Procurement Specialist Compiling questions from the committee members. Developing the use cases. Facilitating demos and Bidder meetings. Facilitating system demos and meetings with the Bidders. Documenting results of the meetings and scoring. Evaluation Committee Participating in the system demos and interviews. Subject Matter Experts (e.g., administrators, clinicians, IT) Participating in targeted demos and interviews (i.e., relevant to their areas) as necessary. IDB Representatives Providing advice and guidance as necessary.
17. Refine scores individually	Individually adjusting scores assigned to the sections of the paper proposal based on the interviews and demonstrations. See Evaluation Tools (Appendix D), D.4 Evaluator's Tool for Scoring System Demonstrations for an example.	Business Lead, Business Analyst, Procurement Specialist Facilitate the process. Evaluation Committee Refining scores individually. Subject Matter Experts (e.g., administrators, clinicians, IT) Refining scores individually. IDB Representatives Providing advice and guidance as necessary.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
18. Shortlist Bidders	 → The Evaluation Committee meets as a group to discuss and average scores. Where sub-groups have reviewed a particular area (e.g., receptionists review the registration section), they too will meet as a group to discuss and provide an average score to the Evaluation Committee. → See Appendix D: Evaluation Tools, D.5 Tool to Combine Evaluators' Scores on System Demonstrations for an example. 	 Project Manager Coordinating and scheduling meetings. Business Lead, Business Analyst, Procurement Specialist Facilitate meetings of the Evaluation Committee and Subject Matter Experts. Evaluation Committee Meet as a group to discuss and average scores. Confirm Bidders being further shortlisted for sandboxing if any. Subject Matter Experts (e.g., administrators, clinicians, IT) Meet as individual groups to discuss and average scores. Make recommendation to Evaluation Committee of Bidders being further shortlisted for sandboxing. IDB Representatives Providing advice and guidance as necessary.
19. Notify unsuccessful Bidders	→ Notify Bidders who will not proceed to the next phase.	 Procurement Specialist Drafting letter to notify unsuccessful Bidders. IDB Representatives Providing advice and guidance as necessary.
Sandbox (optional)	A sandbox is an optional step intended to test a solution more extensively prior to entering into contract negotiation. It involves creating a demonstration system for the Purchaser to test out the solution prior to signing the contract. Setting up a sandbox can be a significant amount of effort and require training for end-users who will test it. Therefore, if a sandbox is set up, only the top one or two Bidders should be tested. The Bidder may also request a reasonable fee based on the effort involved.	

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
20. Conduct sandbox testing	 Setting up a sandbox environment and training testers on how to use the solution for the purpose of further testing. Sandbox testing can be informal but should be guided by common clinical and administrative scenarios. The administrative and clinical scenarios can leverage the use cases that were developed to support requirements development or system demonstrations, noting that the purpose of the sandbox is to confirm that the solution meets requirements rather than introduce additional ones. 	 Project Manager Coordinating sandbox set-up. Business Lead, Business Analyst Confirming clinical and administrative scenarios. Testing the solution. Compiling test results from Evaluation Committee and Subject Matter Experts. Evaluation Committee Testing the solution. Documenting test results. Subject Matter Experts (e.g., administrators, clinicians, IT) Testing the solution in targeted areas (i.e., relevant to their areas). Documenting test results. IDB Representatives Providing advice and guidance as necessary.
21. Refine scores individually	 Individually adjusting scores assigned to the sections of the paper proposal based on the interviews and demonstrations. See Evaluation Tools (Appendix D), D.4 Evaluator's Tool for Scoring System Demonstrations Proposals and D.5 Tool to Combine Evaluators' Scores on System Demonstrations for an example. 	Business Lead, Business Analyst, Procurement Specialist Refining scores individually. Evaluation Committee Refining scores individually. Subject Matter Experts (e.g., administrators, clinicians, IT) Refining scores individually. IDB Representatives Providing advice and guidance as necessary.
22. Shortlist Bidders	The Evaluation Committee meets as a group to discuss and average scores. Where sub-groups have reviewed a particular area (e.g., receptionists review the registration section), they too will meet as a group to discuss and provide an average score to the Evaluation Committee.	 Project Manager Coordinating and scheduling meetings. Business Lead, Business Analyst, Procurement Specialist Facilitate meetings of the Evaluation Committee and Subject Matter Experts. Evaluation Committee Meet as a group to discuss and average scores. Confirm the Bidder(s) who will pass to the reference checks. Subject Matter Experts (e.g., administrators, clinicians, IT) Meet as individual groups to discuss and average scores. Recommend the Bidder(s) to pass to the reference checks. IDB Representatives Providing advice and guidance as necessary.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
23. Notify unsuccessful Bidders	Notify Bidders who will not proceed to the next phase.	 Procurement Specialist Drafting and sending letter to notify unsuccessful Bidders. IDB Representatives Providing advice and guidance as necessary.
Reference Checks	Final step of reference checks on the top 1 o	or 2 Bidders to confirm previous evaluation. its and the same basic process applies.
24. Prepare for reference checks	 Reviewing list of previous clients provided by the Bidder and selecting some for reference checks. References should be selected by the Purchaser not by the Bidder. 	Business Lead, Business Analyst, Procurement Specialist Selection of references. Developing reference questions. IDB Representatives Providing advice and guidance as necessary.
25. Conduct checks	 Executing reference checks to confirm previous findings. Unless the reference checks identify concerns, the bids are not re-scored. 	Business Lead, Business Analyst, Procurement Specialist Conducting reference checks. Documenting results. IDB Representatives Providing advice and guidance as necessary.
Preferred Bidder		
26. Identify preferred Bidder and hire an independent probity authority acceptable to the IDB to accompany the contract negotiation	 Meeting with the Evaluation Committee to present results of the reference checks. Identifying the preferred Bidder to enter negotiation, keeping the others in abeyance should negotiations with the preferred Bidder fail. 	Business Lead, Business Analyst, Procurement Specialist Facilitate meeting of the Evaluation Committee. Evaluation Committee Recommend a preferred Bidder based on the results of the evaluation process.
27. Obtain approval	Review and approval of the evaluation report and recommendation to enter contract negotiation with the preferred Bidder.	Project Manager, Business Lead, Business Analyst Walk through the recommendation. Senior Leadership Approve the selection. IDB Representatives Review and provide non objection.

>> Supporting tools

- ➡ Evaluation Plan (see Appendix C) provides a sample plan for evaluating the Bidders. This plan was drafted prior to developing the Market Sounding Bid Documentation to described the overall evaluation process. It will be further refined during development of this stage to provide more detail including the weighting of the various requirements. The Evaluation Plan (see Appendix C) should mirror the questions in the refined Detailed Technical Responsiveness Form (see Appendix F).
- ➡ Evaluation Tools (see Appendix D) provides some sample tools that can be used to document the evaluators' review and average the scores. These tools should be created in conjunction with developing the Detailed Technical Responsiveness Forms (see Appendix F) in the bid documentation because they mirror the domains and sub-domains described in the form. It also helps to develop them concurrently to ensure that they are aligned and appropriately evaluating the requirements.
- Detailed Technical Responsiveness Form (see Appendix F) provides an example of a structured format that can be used to receive the Bidders' proposals. This form would be completed and then cut and paste into the section entitled Format of the Technical Bid in IDB's procurement template that is available from your IDB Health Specialist or Procurement Specialist. The difference between the Technical Responsiveness Form used in the Market Sounding Stage and the form used in the Detailed Bid and Evaluation Stage is level of detail. The Detailed Bid and Evaluation Stage will include more detailed questions based on the refined Purchaser's Requirements Document (See Appendix B) and based on areas in which the Purchaser would like to probe.

- Exercises Terms (see Appendix G) describes the key decisions that the Purchaser needs to make about the relationship it wants with the successful Bidder (i.e., the Purchaser's rights and the Bidder's obligations). These should be developed and included as requirements in the Purchaser's Requirements Document (See Appendix B) so that Bidders agree to them during the bidding process. Failing to include these in the bid documentation and waiting to address them with the preferred Bidder during the negotiation period undermines the Purchaser's negotiating position.
- Statement of Work (see Appendix H) discusses the key issues and questions that the Purchaser needs to consider when defining the "one off" services and deliverables that the Supplier will provide during the implementation phase. These services should be defined during the Detailed Bid and Evaluation. The Purchaser should either provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the basis for negotiation. Defining or requesting the details in the negotiation phase will greatly undermine the Purchaser's bargaining position.
- Service Level Agreement (See Appendix I) discusses the key issues and questions that the Purchaser needs to consider when defining the ongoing services and service terms (e.g., application support and maintenance) that the Supplier will provide after the implementation is completed. These services should be defined during the Detailed Bid and Evaluation. Similar to a statement of work, the Purchaser should either provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the basis for negotiation. Defining or requesting the details in the negotiation phase will greatly undermine the Purchaser's bargaining position.

>> This step often looks like this!



- Evaluation activities are unplanned and ad hoc.
- The evaluation focuses on the written response rather than considering other activities such as Bidder interviews and system demonstrations.
- ⇒ The Bidder is chosen based on lowest cost rather than value for money (i.e., the scope of services and ability of the solution to support the Purchaser's needs against the cost).
- A small evaluation team makes the recommendation without input from a broader group of end-users or from subject matter experts.

>> It should look more like this!



The procurement team comprising Sara (the physician who is the Business Lead), Ali (the Business Analyst), and Pedro (the Procurement Specialist) meets with the IDB during the bi-weekly meetings to discuss the planned approach for the Detailed Bid and Evaluation Stage. The IDB representatives make some suggestions to expedite the process and recommends developing the evaluation materials prior to releasing the bid documentation. They also recommend that the procurement team consider the services they need in greater detail and that they consider the business terms of the relationship. These need to be in the bid documentation so that the Bidders know what to expect.

Sara, Ali, and Pedro work with leadership to identify the services that they expect of the Bidders and the services that their Purchaser will provide. They then refine their initial stage bid documentation, refresh their Evaluation Plan (see Appendix C), and create the templates that the Evaluation Committee will use to evaluate the Bidders during the various steps. The bid documentation for this stage is much more detailed than the initial documentation and is adjusted to meet the revised requirements. It also includes information about how Bidders will be scored and points awarded. The Bidders will not

be evaluated solely based on their paper-based proposals but will be evaluated using a series of techniques such as system demonstrations. The bid documentation will need to describe these steps and how points will be awarded (i.e., the evaluation criteria). Once they have completed the bid documentation, they review it with the Evaluation Committee to adjust it as required, and finally present it to Senior Leadership for approval and to IDB for non-objection.

Sara, Ali, and Pedro follow the same basic process as in their first stage for releasing and receiving the proposals. They publish the bid documentation to the Bidders who moved to the Detailed Bid and Evaluation Stage, hold a Bidder question and answer session to address questions, and finally receive the proposals.

Once the proposals are opened, the procurement team forwards the proposals for review and rating by the Evaluation Committee. The Evaluation Committee also draws on the advice of other subject matter experts and end-users who review specific sections of the proposals relevant to their area of expertise. They individually score the proposals and meet as a group to discuss and assign a score to each Bidder. Ali also collates and documents their questions, issues, and comments on each of the Bidders. According to the evaluation process established previously, they choose the top four Bidders to proceed to system demonstrations and interviews.

The procurement team works with the Evaluation Committee and short-listed Bidders to set up a series of solution demonstrations to assess functionality as well as interviews to discuss areas such as implementation plans that cannot be demonstrated. Sara, Ali, and Pedro discuss with end-users and subject matter experts standardized use cases and workflows that the Bidders need to demonstrate. They pick five clinical scenarios that represent various end-to-end patient journeys as well as three administrative scenarios focused on solution management and services management. Due to the number of scenarios, the evaluation team attends all of the demos but the subject matter experts only attend the ones relevant to them.

The procurement team also schedules interviews with the Bidders to discuss questions and topics that are not part of the system demo. The health facilities are particularly concerned about change management and interoperability with other systems. In addition to their broader set of questions, the group spends additional time probing on change management and interoperability questions they have. They recognize that it's a big decision and want to ensure they are comfortable with the choices they are making by taking a little extra time.

After the demos and interviews, the Evaluation Committee again meets to discuss the scores that they individually assigned to the Bidders. Based on the discussions and including observations made by the subject matter experts, the Evaluation Committee further refines the Bidder scores and identifies a Bidder whose solution it would like to sandbox. The purpose of the sandbox is to allow the Evaluation Committee to further test the solution against the use cases they previously prepared to confirm their understanding of how it meets their requirements. The Bidder provides the Evaluation Committee with access to a sandbox environment, and shows the Evaluation Committee how to run through the use cases. Members of the Evaluation Committee each spend four hours over the next two weeks running through their use cases. At the end of the process, they again meet to refine their scores. The Evaluation Committee makes no changes to their scores because the solution performed as the expected.

The Evaluation Committee doesn't feel site visits are warranted and focused instead only on the reference checks. They feel the solution supports their requirements but also want to confirm that the Bidder is responsive, takes the time to understand its clients, and is able to create a positive relationship. After the procurement team contacts the references to get their perspectives, they meet again to confirm that this is indeed the preferred Bidder with whom they will begin negotiation.

After they have presented the preferred Bidder name to Senior Organizational Leadership and requested non-objection from the IDB, the procurement team moves into the contract negotiation phase with the preferred Bidder. The other Bidders are held in abeyance in case the negotiation with the preferred Bidder is not successful.

If negotiations are undertaken, they shall be held in the presence of a Probity Assurance Provider, agreed with the IDB.

>> Step 5: Negotiation



Negotiation is a critical step to document in as much detail as possible the decision-making mechanisms, the business functions the solution must support, the implementation and ongoing services and terms of service the Bidder will provide, and the acceptance criteria. This is in addition to any general terms and conditions such as liability, ownership of code, the service and licensing costs, capping cost increases for additional licenses, and so forth.

The negotiation team includes members of the procurement team and some representatives from the Evaluation Committee, with the presence of the independent probity assurance authority. Specifically, it needs to include representatives from end-users such as clinicians and administrators, technical specialists from IT, the procurement specialist, and legal counsel. It will also be supported by other subject matter experts as required such as change management experts to support developing the change

management terms or interoperability experts to support appropriate standards in that section of the agreement. Subject matter experts will be particularly important to support discussions where the Preferred Bidder seems weak, to ensure that the Bidder is developing an appropriate approach to the issue or to identify potential contingencies that the Purchaser may need to address.

Note that any key business and service terms and the contract template should have been included in the detailed bid documentation so that the Bidder is aware of key terms that the Purchaser expects. If the Purchaser waits until the negotiation phase to discuss the general business terms and to detail the anticipated

services and terms, it loses a significant amount of bargaining power.

Although the Purchaser only conducts contract negotiation with a single Bidder, the other top Bidders will be held in abeyance should contract negotiation fail. The contract negotiation period will end with contract signature.

At the end of this step:

- The Bidder will have been awarded a contract.
- Unsuccessful Bidders will be notified.
- The Purchaser should be prepared to move from negotiation to implementation.

How long will this step take?

4 to 12 weeks



Negotiation is an important part of the procurement process as well and needs to be considered.

This step will go much more easily and quickly if the Purchaser has provided the Bidders with their expected terms in the Detailed Bid and Evaluation Stage documentation and the Bidders have provided detailed descriptions of their services and terms in the proposal. Essentially those should be agreed upon even before beginning the negotiation.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
1. Phase check-in	 Meeting with IDB representatives to: Review the outcomes from the previous phase. Plan the approach for the upcoming phase. Plan the contract. 	Project Manager, Procurement Specialist, Business Analyst, Business Lead, Legal Counsel Presenting plan for phase to IDB representatives. IDB Representatives Provide support and advice as necessary.
2. Negotiate contract	Ongoing negotiation meetings to develop the contract including but not limited to: • Key Business Terms (see Appendix G). • Statement of Work (see Appendix H) deployment and stabilization related activities. • Service Level Agreement (See Appendix I) for ongoing support and services • Negotiation minutes. • Report of the independent probity assurance authority.	Procurement Specialist, Business Analyst, Business Lead, Legal Counsel • Facilitating meeting with IDB. Subject matter experts (e.g., IT) • Provide support as necessary. IDB Representatives • Provide support and advice as necessary. Independent probity assurance authority • Provide report of the negotiations.

ACTIVITY	DESCRIPTION	PARTICIPANTS AND RESPONSIBILITIES
3. Obtain contract approval	→ Reviewing with Senior Leadership according to normal approval processes to seek approval on the contract prior to signature.	 Procurement Specialist, Legal Counsel Presenting the contract for approval and signature. Preparing non-objection report. Senior Leadership Reviewing and approving the contract. Signing the contract. IDB Representatives Reviewing and providing non-objection to the contract.

>> Supporting tools

- Key Business Terms (see Appendix G) describes the key decisions that the Purchaser needs to make about the relationship it wants with the successful Bidder (i.e., the Purchaser's rights and the Bidder's obligations). These should be developed and included as requirements in the Purchaser's Requirements Document (See Appendix B) so that Bidders agree to them during the bidding process. Failing to include these in the bid documentation and waiting to address them with the preferred Bidder during the negotiation period undermines the Purchaser's negotiating position.
- Statement of Work (see Appendix H) discusses the key issues and questions that the Purchaser needs to consider when defining the "one off" services and deliverables that the Supplier will provide during the implementation phase. These services should be defined during the Detailed Bid and Evaluation stage and included in the Purchaser's Requirements Document (See Appendix B). The Purchaser should either

- provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the Basis for negotiation. Defining or requesting the details in the negotiation phase will greatly undermine the Purchaser's bargaining position.
- Service Level Agreement (See Appendix I) discusses the key issues and questions that the Purchaser needs to consider when defining the ongoing services and service terms (e.g., application support and maintenance) that the Supplier will provide after the implementation is completed. These services should be defined during the Detailed Bid and Evaluation stage and included in the *Purchaser's Requirements* Document (See Appendix B). Similar to a statement of work, the Purchaser should either provide detailed requirements to which the Bidder agrees or the Purchaser should ask Bidders to provide detailed information that will be used as the basis for negotiation. Defining or requesting the detail in the negotiation phase will greatly undermine the Purchaser's bargaining position.

>> This step often looks like this!



>> It should look more like this!



- Negotiation is conducted by a procurement specialist and legal counsel rather than including subject matter experts.
- The Purchaser considers the Bidder "chosen" prior to negotiation, causing the Purchaser to agree to unfavorable terms.
- The agreement focuses on general business terms without clearly articulating the product and services that the Bidder will provide or the terms of that service (e.g., uptime guarantee).
- The agreement focuses solely on the product and initial implementation without considering ongoing services or expansion.
- The agreement uses vague milestones such "adoption" without having criteria about what would constitute "adoption".
- "Go-live" is defined as the first day of turning on the solution rather than including a period of stabilization and optimization.

The procurement team expands to include legal counsel and meets with the IDB during the bi-weekly meetings to discuss the approach to contract negotiation and confirm a template for the service legal agreement. Once prepared, the procurement team notifies the preferred Bidder and initiates negotiation with them. The procurement team is largely responsible for the negotiation, but they are joined by subject matter experts at key points. Because the procurement team included key terms to which the Bidder has to agree in the bid documentation, the contract negotiation process is relatively straight-forward and they encounter no surprises. They negotiate around how some of the services will be delivered and adjust the approach to better suit their needs, but the negotiation is successful without having to move to the next highest scoring Bidder. Once the contract negotiation is complete and Senior Organizational Leadership have approved the agreement in principle, they request non-objection from IDB and have a formal signing ceremony with the preferred Bidder. The preferred Bidder is now the chosen and negotiation is conducted with integrity and in a fair manner without preferences or substantial modifications that can affect severely the nature, object and scope of the procurement process.

4. Are you ready?

PHASE	HAVE YOU?
1. Procurement planning	 Confirmed the procurement approach (e.g., single stage vs multi-stage, negotiation vs BAFO) with the IDB based on your needs and objectives? Identified the high-level steps, procurement steps and formalized a realistic project plan? Identified Procurement Team members (i.e., business lead, business analyst, procurement specialist) and have their time committed to the procurement? Identified subject matter experts to be consulted during requirements gathering and evaluation, and serve as the Evaluation Committee to evaluate the Bidders and recommend the proposed solution.
2. Requirements definition	 Engaged internal and external stakeholders (i.e., SMEs) to contribute to the vision for the solution? Developed a shared vision of your needs and requirements? Formalized that vision through a formal <i>Purchaser's Requirements Document</i> (See Appendix B)? Received approval from senior leaders on the document?
3. Market Sounding Stage	 Convened the Evaluation Committee to contribute to the bid documentation? Developed a high-level bid document based on your needs? Documented an evaluation process and matrix with pass / fail criteria? Met with potential Bidders to discuss your needs? Received proposals that provide information about the market offerings? Ensured the stage was transparent, fair and free of conflict of interest?
4. Detailed Bid and Evaluation Stage	 Restated your requirements based on the results of the proposals? Re-developed your bid documentation based on the restated requirements? Included other information such as draft contract, SLA, and SOW terms that will be included in the bid documentation? Met with Bidders to discuss your needs? Convened the Evaluation Committee to review the Bidders' offerings? Conducted a robust Bidder evaluation that begins on paper but includes system demonstrations, Bidder interviews, reference checks, and other techniques to confirm the Bidders' offerings? Ranked the offerings based on a pre-defined evaluation matrix and process? Selected a preferred Bidder with which to enter negotiations? Ensured the stage was transparent, fair and free of conflict of interest?
5. Negotiation	 Assigned a Probity Assurance Authority to ensure the process adheres to IDB's procurement policy? Negotiated terms of the contract that does not alter the scope, nature and/or object of the acquisition but that clarifies the general terms, SOW, and SLA? Received approval on a selected Bidder? Had a party to celebrate all of your hard work before beginning the implementation process?

5. More Information



TOOL / TEMPLATE	DESCRIPTION	LINK
The Golden Opportunity of Digital Health for Latin America and the Caribbean	A guide to support successful adoption of digital heath technologies in Latin America and the Caribbean.	https://publications.iadb.org/en/golden- opportunity-digital-health-latin- america-and-caribbean
Cybersecurity	National Institute of Science and Technology's cybersecurity standards.	https://www.nist.gov/cybersecurity
Electronic Health Record Systems: Definitions, Evidence, and Practical Recommendations for Latin America and the Caribbean	Considerations for procuring and implementing EHRs, including a discussion of core, common functionalities and evidence of benefits.	https://publications.iadb.org/en/electronic- health-record-systems-definitions- evidence-and-practical-recommendations- latin-america
HL7 FHIR	A messaging standard that enables communication and exchange of information among health information systems.	https://fhir.org/
ISO 18308:2011	A standard describing the usual modules and functionality of an electronic health record.	https://www.iso.org/standard/52823.html
Privacy	National Institute of Science and Technology's privacy framework.	https://www.nist.gov/privacy-framework
SNOMED CT	A clinical terminology standard that supports consistent and accurate entry of clinical information which is an important foundation for interoperability and decision support tools.	https://www.snomed.org/

Appendix A: Procurement Strategy

Download in Word/interactive format.

Introduction to this Tool

This template is a tool to help the Purchaser when planning and designing the procurement strategy. Planning the procurement is a critical step that should occur prior to the procurement starting. The Purchaser will need to make key decisions such as multi-stage versus single-stage procurement, whether the Purchaser will negotiate with the preferred Bidder or request a Best and Final Offer (BAFO), and many other decisions that will impact how the procurement progresses. Once these decisions are made, they can be very difficult to change and may require restarting the procurement. Planning the procurement in consultation with your IDB Procurement Specialist and IDB Health Specialist will help avoid these issues.

This template provides instructions and advice in shaded boxes such as this one and gives examples (the rest of the text in regular font). The examples provided will need to be changed and augmented by the Purchaser procuring the solution to match their situation.

The template is broken into the following sections:

- Procurement Overview A guick matrix summarizing key elements of the procurement.
- Sey Milestones A sample list of milestones through which a multi-stage procurement would pass. In this example, the milestones are for a procurement that includes two stages (i.e., a marketing sounding stage and the detailed bid and evaluation stage).
- ⇒ Roles and Responsibilities A sample demonstrating how the roles and responsibilities of the various people and groups should be documented.
- Issues, Risk, and Assumptions A section to identify some of the key risks, potential issues, or underlying assumptions associated with the procurement.

Note that the sections, format, and examples in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist and IDB Procurement Specialist.

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4. Issues, Risks, and Assumptions	60

>> 1. Procurement Overview

The procurement overview should outline the key decision points of the procurement.

	EXAMPLES OR OPTIONS	Instructions (delete this column when using the template)
Solution being procured:	Telemedicine solution with supporting services.	Identify the solution being procured.
Brief description of the scope:	The telemedicine software is expected to support teleconsultation and specifically to allow rural and remote providers to connect with specialists in the tertiary care hospitals. Initial rollout will be to five community facilities and one tertiary hospital. If successful, the solution is expected to be rolled out nationwide.	Describe briefly the anticipated scope of the solution or the implementation such as "solution is expected to"
Procurement type:	 Goods and Non-Consulting Services. Non-Consulting Services. 	There are several types of procurement. Pick the type of procurement that you are conducting. The type of procurement will impact the bid documentation and the contract. Digital health procurements are usually conducted as Goods and Services because there is usually software and supporting services involved. However, speak with the IDB Health Specialist or IDB Procurement Specialist to confirm the most appropriate type for you.
Prequalification?	→ Yes → No	Confirm whether Bidders will be pre-qualified. If you are following a multi-stage process as described in this guide, this step is not necessary.
Procurement approach	Single stageMulti-stage	Select the procurement approach that you will follow. This guide favors a multi-stage approach for digital health procurements particularly where the Purchaser's requirements are not well defined or where the solution is novel. However, there are other approaches to procurement that the IDB Procurement Specialist can discuss with you.
Selection Approach	→ Most advantageous offer according to Value for Money and Fit for Purpose.	The Bidder with the lowest cost will not always provide the most value nor the range of services expected. Therefore, this guide favors the value-for-money and fit-for-purpose approach which balances the cost of the solution and services with the benefit they provide to the Purchaser.

	EXAMPLES OR OPTIONS	Instructions (delete this column when using the template)
Market Approach	 Best and Final Offer Negotiation 	Select the market approach that you will follow. This guide favors negotiation because the Bidders' offerings will differ slightly and you will likely need negotiation discussions with the preferred Bidder to confirm the offering and that it is aligned with your needs. Note that negotiation requires an independent probity assurance authority to ensure that the negotiations don't fundamentally alter the scope being requested (i.e., that the procurement is unfair or not transparent).
Submission Type	→ Electronic→ Paper	Electronic submission (e.g., PDF via email) is generally preferred but if paper-based proposals are requested, ensure that there is one copy for each evaluator.

>> 2. Key Milestones

The following milestones chart is an example only and should be adapted to the needs of the Purchaser. It may include different evaluation steps and could include approvals or non-objection steps if helpful.

MILESTONE	DATE	COMMENTS
Step 1: Procurement planning		
Procurement team engaged		
Procurement Strategy (See Appendix A) approved		
Step 2: Requirements definition		
Engagement plan developed		
Requirements gathering begins		
Purchaser's Requirements Document (see Appendix B) Completed		
Step 3: Market Sounding Stage (this step can be	repeated in multi-stag	ge)
Evaluation Committee Identified		
Evaluation Plan Completed		
Market Sounding Bid Documentation developed		
Proposals received		
Evaluations completed		
Bidders moving to next stage confirmed		

MILESTONE	DATE	COMMENTS
Step 4: Detailed Bid and Evaluation Stage		
Evaluation Plan Refined		
Bid documentation developed		
Proposals received		
Proposals reviewed		
Bidders moving to system demos identified		
System demos completed		
Bidder interviews completed		
Bidders moving to sandbox identified		
Sandboxing completed		
Bidders moving to reference checks identified		
Reference checks completed		
Preferred Bidder selected		
Step 5: Negotiation		
Negotiation team confirmed Independent probity assurance authority hired		
Negotiation begins		
Contract award		

>> 3. Roles and Responsibilities

The following roles and responsibilities chart can be used to identify the members of the team and the roles and their responsibilities. It should be customized to the needs of the Purchaser.

GROUP / ROLE	NAME	RESPONSIBILITIES
1. Procurement Team		
Business Lead	< <name>></name>	 Works with the business analyst to plan, facilitate, and document vision, strategic goals and requirements. Works with the procurement specialist and business analyst in designing the bid and evaluation documentation and methodology. Co-leads with the procurement specialist the evaluation and contract negotiation process with the procurement specialist. Provides ongoing reports to senior Organizational and governmental representatives and stakeholders.

GROUP / ROLE	NAME	RESPONSIBILITIES
Project Manager	< <name>></name>	 Works with the business lead, analyst, and procurement specialist in designing the workplan to guide the procurement. Ensures that necessary human and financial resources are in place to conduct the procurement. Provides ongoing management and coordination of the procurement from the requirements development stage to contract negotiation to transition to implementation.
Business Analyst	< <name>></name>	 Works with the business lead to plan, facilitate, and document requirements. Works with the procurement specialist and business lead in designing the bid and evaluation documentation and methodology. Documents the evaluation process and outcomes.
Procurement Specialist	< <name>></name>	 Works with the business lead and business analyst in designing the bid and evaluation documentation and methodology. Co-leads with the business lead the evaluation and contract negotiation process with the procurement specialist. Prepares non-objection requests with support of the business lead for submission to IDB.
2. Evaluation Committee	< <name>></name>	 Work with the procurement team members to develop the evaluation criteria. Review and score paper-based proposals. Participate in system demonstrations, Bidder meetings, and other evaluation activities. Recommend a preferred Bidder.
3. Subject Matter Experts	< <name>></name>	 Provide input into their needs from a solution by participating in requirements-gathering workshops and interviews. Support the evaluation process if requested by providing targeted review and feedback of modules or functionality specific to their role.

>> 4. Issues, Risks, and Assumptions

Identify issues or risks that may hamper progress or need to be considered, and assumptions which need to be met for the procurement to be successful.

Success of this procurement will be influenced by:

<<Insert issues, risks, or assumptions here>>

Appendix B: Purchaser's Requirements Document



Introduction to this Tool

This Purchaser's Requirements Document (See Appendix B) template is a tool to help the "business owner" such as the Ministry of Health, a hospital, or a health facility to describe itself and what it needs the solution to support and it is a critical pre-requisite to developing bid documentation. It is cut and pasted into the bid document. During the Marketing Sound Stage, the requirements document is likely to be higher-level. During the Detailed Bid and Evaluation Stage, the requirements document will be refined and include a much greater level of detail.

This template provides instructions or advice in shaded boxes such as this one and gives examples (the rest of the text in regular font) of different types of requirements, how they are written, and the domains that they usually address. The examples provided are not exhaustive and need to be augmented by the Purchaser procuring the solution. That is, the Purchaser needs to undertake a rigorous requirements development process to identify its own needs for a health information system.

The template is divided into the following sections:

- □ Introduction A description of the Purchaser and the context within which it exists and the solution is being procured
- Business Requirements The key business objectives and goals for what the Purchaser is trying to achieve in the procurement (i.e., the "why").

- Stakeholder Requirements The business processes and end-users that need to be supported with the solution.
- Solution Requirements The functional requirements (i.e., what the system must do) and non-functional requirements (i.e., characteristics that the solution or supplier must have) to enable the Purchaser.
- Service Requirements The terms of service and services that the Purchaser needs. This could be common technology services such as support and maintenance, but it could also include other, related services like training or data analytics. See Appendix G: Key Business Terms, Appendix H: Statement of Work, and Appendix I: Service Level Agreement for more information on service requirements.
- Information Requirements The information that the solution needs to support and some key functionality related to managing the information.
- Appendices: Supporting workflows or diagrams to aid understanding of the requirements and the work that the solution needs to support.

Note that the sections, format, and examples in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist or IDB Procurement Specialist.

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>> 1. Introduction

>> 1.1. Document purpose and scope

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To orient the reader about the scope of requirements contained in the document.

Section contents

- Describes the purpose of the document (e.g., to define the requirements for a health information system).
- Describes the scope of the Purchaser's Requirements Document (See Appendix B).

Sample questions to answer in this section

- What is in scope for the requirements (e.g., a health information system for acute care, support for clinical functions)?
- What is not in scope (e.g., a health information system for primary care, administrative functions such as scheduling, reporting and analytics beyond data extraction)?

The Ministry of Health is interested in expanding access to digital health tools to smaller health facilities in the country to reduce inequities in care. These facilities...

This document describes the need for a new solution that addresses:

- 1) Patient management
- 2) Patient registration
- **3**) Etc.

This document does not include requirements for:

- Financial management
- Data analytics
- Acute care
- ⇒ Etc.

>> 1.2. Background and context

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To inform the reader of the drivers that lead to a system needing to be procured and understand the context within which the solution will be deployed.

Section contents

- Describes what is happening outside or inside the Purchaser that may be relevant (e.g., change in the healthcare system) or of which people need to be aware.
- Consider a PESTLE analysis⁸ for this section (see below for sample questions to answer). It does not need to be exhaustive but helps to understand the usual contents of the section.

Sample questions to answer in this section

- Policy What is happening at the healthcare system level that may be driving or will impact this initiative or solution (e.g., introduction of a new care model, shifting resources to primary care, etc.)?
- ⇒ Economic Are there changes in the economic environment that are driving this initiative or that inform how it will be delivered (e.g., funding made available through the loan, shift in resources to prevention, etc.)?
- Social What is happening within the social context of the Purchaser, healthcare system, or country that will impact this initiative or solution (e.g., limited digital health resource capacity, increased focus on enabling patients, shrinking healthcare force)?
- Technological Are there broader digital health or e-gov initiatives or trends which will impact the initiative or solution (e.g., shifting to a cloud model, national focus on interoperability standards, etc.).
- Legal Are there regulatory changes or considerations that will impact this initiative or the solution (e.g., new data privacy legislation)?
- Environmental What other factors in the health sector, digital health, or government environments may influence the solution or initiative?

PESTLE Analysis is a form of analysis that looks at the external factors influencing a situation or Purchaser (i.e., Policy, Economic, Social, Technological, Legal, Environmental). With respect to a procurement, PESTLE helps to understand the broader context in which the solution being procured will exist.

As part of Health Vision 2050, our country is undergoing a radical shift in how we provide health-care. A recent study demonstrated that we were only spending 5% of our healthcare resources on prevention but could achieve a 9% reduction in healthcare spending by if we were to divert additional resources to...

A single record for all

Fundamental to this shift is having a single patient record that follows the patient regardless of where...

Key legislative changes

Recognizing that fundamental shift that is occurring, we have also made related legislative and policy changes such as:

- Introduction of new digital health interoperability regulations that require solutions to...
- Passing information privacy laws that....

>> 2. About us

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

- This section helps the reader understand the Purchaser(s) that will be using the solution and what it does.
- This section does not yet discuss the business needs for the initiative or solution. That will be addressed in the subsequent sections.

Section contents

- The section will vary but generally describes the Purchaser and its model (e.g., a government-funded hospital, a consortium of healthcare Purchasers, etc.) the services it provides, other stakeholders who may be relevant, systems that are currently in place, staff at the Purchaser, patients at the Purchaser, and so forth.
- The formatting of this section will also vary, but is likely to have a mixture of narrative, tables, and bullet points.

Sample questions to answer in this section

- What type of Purchaser will be using the system?
- What services does the Purchaser provide?
- ⇒ How many staff are there? What do they do? Are they clinicians, administrators, researchers?
- How many patients does the Purchaser serve? How many patients encounters a year?
 What are their health needs?

HSP HealthCare is a community health services agency that provides 24/7 health care and support services across three lines of business to people of all ages and cultural backgrounds. HSP has been offering high-quality, multi-lingual complex care since 1940 to people in their homes, in the community and in long-term care facilities. HSP's mission is to help create more possibilities for independence with the goal of providing clients with spectacular service when, where and how they want it to support their independence. HSP enjoys a reputation for providing high-quality, client-centered care and is accredited with exemplary status by accrediting bodies.

HSP currently employees over 500 administrative staff and 2500 service delivery staff including physicians, nurses, occupational therapists, physiotherapists, personal support works, cleaners, social workers, dieticians, and speech-language pathologists.

HSP also offers community support programs to vulnerable and marginalized populations. These programs include: respite care, homemaking services, health education, community information and consultation, and extreme cleaning services.

>> 2.1. Services

HSP offers a range of specialized services available 24/7 that include medical, rehabilitation, personal and home support work. These services may be provided at home, in a long-term care facility, school or at a hospital.

SERVICE	DESCRIPTION
Personal and Home Support Work	 Personal care and activities of daily living such as grooming, dressing, bathing, etc. Meal planning and preparation. Light household duties. Support services for parents with newborns, multiple births and/or children with special needs. Escorting clients to appointments.
Medical	 Geriatric care. Care and support for those with mental illnesses. Palliative care. Post-operative care. Chronic disease management. Etc.
Rehabilitation Services	→ Etc.

>> 2.2. Service Delivery Partners

HSP has a variety of external delivery partners with which it coordinates care. HSP shares patients and information with these partners to enable better health care delivery to patients.

These care partners include:

- ⇒ Local hospitals If an HSP patient requires acute care services, they will be admitted to one of the local hospitals...
- Etc.

>> **2.3. Funding**

The majority of HSP's services are provided to clients free of charge through government-funded programs. Additional services may also be funded privately or through charitable Purchasers.

FUNDING SOURCE	DESCRIPTION	
Government	 Government funding to public with access to government-funded home and community services, and long-term care homes. 	
Private	 Private purchase of services across all lines of business. Private services may be purchased by independent clients or corporate entities. 	
Etc.	÷	

>> 2.4. Related systems

HSP has the following systems in place with which the solution will need to exchange information:

INFORMATION SYSTEM	DESCRIPTION
Master Patient Index	 Patient Manager is a master patient index in use across the country and used to link patients across repositories. It is the source of truth for patients. The solution will need to exchange basic patient identity with the index.
Laboratory Information System	 → LabTech is the current lab system in place that HSP uses to: ♦ Process specimens ♦ Manage results → The solution will need to exchange patient identity, orders, and results with the LabTech.
National EHR	→ Etc.
Etc.)

>> 2.5. By the numbers

METRIC	VALUE	
Record Volume		
Patient Records	308,926	
Active Patients	16,684	
Staff	2,238	
Admission/Discharges/Transfers (ADT)	3,091,487	
Client Notes	2,427,515	
Daily Activity		
Admitted Patients	507	
Discharged Patients	206	
Patient Visits	3,224	
Etc.		

>> 3. Business Requirements

Instructions to the reader (delete this box when developing your requirements):

Section purpose

An important section that articulates the key goals or objectives that the Purchaser hopes to achieve with the initiative or solution.

Section contents

This section should be short and is likely to be in bullet point format but should articulate the five or six goals that the Purchaser has for the initiative or solution.

Sample questions to answer in this section

- Why is the Purchaser undertaking the initiative or procuring the solution?
- What does the Purchaser hope to achieve?

HSP has a number of legacy solutions in place that manage various aspects of service management and delivery. The solutions vary from a patient registration system that manages patient identity in addition to scheduling to a clinical records system that allows staff to document encounters. The fragmented systems have led to a fragmented patient record that...

In addition, HSP has had challenges implementing quality standards across all lines of service delivery. Specifically, HSP has not been able to....

Based on the above challenges, the goals for the new solution are to:

- 1) Enable more efficient tracking and sharing of patient information across a patient's journey at HSP:
- 2) Support stronger collaboration among service delivery teams and provide patients with wrap-around services;
- 3) Support patient self-management through easier access to information and self-help tools;
- 4) Reduce load on HSP staff including both administrative and clinical staff as well as information technology support personnel; and
- 5) Have a stable, secure, and reliable technical environment so that information is "always available".

>> 4. Stakeholder Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See Appendix B)):

Stakeholder requirements are a critical component of requirements because they describe how the solution supports them to do their work. Most of the stakeholders will be end-users of the solution such as a registration clerk or a nurse. However, there may be other stakeholders who do not use the system but have needs that the solution must address (e.g., data analysts who require data cuts for analytical purposes but who will use another system to analyze the information).

The stakeholder requirements generally comprise two "perspectives". The first is what business process the Purchaser performs that the solution supports (e.g., provide primary care and document encounters). The second is what users need to be able to do on or get from the solution (e.g., a registration clerk needs to create and schedule patients). After writing them, they should be compared against one another to ensure that they are aligned (e.g., a user conducts research with the system, but the system is not intended to support a research function).

>> 4.1. High-level Business Processes

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To communicate the high-level business processes that the solution must support or enable.

Section contents

- This section should include the first two or three levels developed in process modelling. That is, it should include the highest-level business processes (commonly known as business functions or domains) that the solution will support (e.g., patient registration, care delivery) and break those domains into the next level of detail.
- How the section is broken down will vary according to the processes it supports and how the Purchaser understands itself. Regardless, the high-level processes identified in this section should act as an umbrella for the processes beneath it. If there are detailed processes that the solution must support and which do not fit into the broader, higher-level business processes, the highest-level processes need to be expanded or the detailed process should not be included in the procurement.
- When completing this section, remember that there will be new or additional business processes related to administering the solution (e.g., adding users, defining clinical templates, and so forth). Try to include these as well at a high level because one of the questions that you will ask the Bidder in the bid documentation is how their solution enables you to easily administer the solution on an ongoing basis.
- An effective way to document this section is with a diagram and supporting table as below.

Sample questions to answer in this section

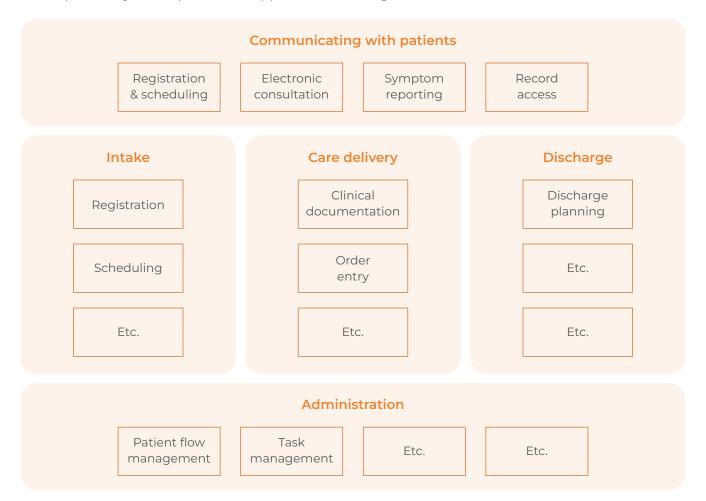
- What are the key processes of the Purchaser that will be affected by this solution?
- Can those high-level processes be broken into sub-processes?
- In addition to the clinical processes (e.g., documenting an encounter), are there administrative processes (e.g., registering a patient) that the solution needs to support?
- ⇒ What are the solution administration or management processes that will be involved (e.g., creating new templates, onboarding users)?
- Do the high-level processes include all of the detailed processes?

Marketing Sounding Stage versus Detailed Bid and Evaluation Stage

This section should be included in the Market Sounding Stage. It may be refined after reviewing the proposals received to include new business processes that the solution needs to support or to remove some. It will be refined prior to developing the Detailed Bid and Evaluation Stage documentation.

The solution is the core enterprise solution to support patient care. This includes managing the patient within the facility, managing the medical record, and so forth. It will not be used to support related functions such as data analytics, human resources, and billing.

More specifically, it is expected to support the following domains:



Description

DOMAIN	DESCRIPTION
1. Communicating with patients	
1.1 Registration and scheduling	 Create new patient and input basic demographics. Schedule and manage appointments (with a particular department). Complete pre-visit forms.
Etc.)
2. Intake	
2.1 Registration	→ Etc.
Etc.	•

>> 4.2. System Stakeholders

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To summarize the stakeholders and the functions that they perform or what they need from the solution.

Section contents

- This section should identify all of the stakeholders who will be impacted by the solution. The stakeholders are usually end-users but can also be "information customers" who will receive information from the system in the form of reports, data extracts or so forth.
- An effective way to develop this section is by considering the high-level processes from the previous section and thinking about the steps involved in them. This is process or workflow modelling. It will help you identify the stakeholders involved in or affected by the process, and how they are involved. They are often created as process diagrams, an example of which is found at the end of this document, and which can be included in the *Purchaser's Requirements Document* (See <u>Appendix B</u>) to provide further clarity and understanding.
- If there are stakeholders and more detailed functions or processes that do not fit in with the high-level business processes above, the high-level business processes need to be expanded, or the stakeholder and more detailed function or process need to be removed from scope. They need to align.
- This section is commonly documented in table format.

Sample questions to answer in this section

- Can the high-level business processes be broken into workflows?
- Who is involved in those workflows? What are they doing?
- Is there anyone who needs information from the system (e.g., a researcher) even though they don't use the system?
- Do all of the detailed workflows and stakeholders fit into one of the high-level business processes from above?

Marketing Sounding Stage versus Detailed Bid and Evaluation Stage

This section should be included in the Market Sounding Stage. It may be refined after reviewing the proposals received to include new stakeholders that the solution needs to support or to remove some. It will be refined prior to developing the Detailed Bid and Evaluation Stage documentation.

USER TYPE	ACTIVITIES / INFORMATION
Registration clerks	 Create and manage patients. Merge existing patient records. Schedule and manage appointments. Scan and attach supporting documentation into the medical record.
Operating room clerks	 All activities of a registration clerk plus. Scheduling operating room time.
Nurses	 Review and create schedules. Modify/update client appointments. Review service referral and client's documents. Conduct initial and ongoing assessments. Create service plan with client. Validate visits.
Patients	 Create, view, and manage appointments. View clinical documentation and care plan. Send and receive messages with clinicians.
Etc.	

>> 5. Solution Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Solution requirements describe "the how". How does the solution need to support the above business process and stakeholders.

This section has two key areas:

- Functional requirements, which are generally related to how the user interacts with the system and the functionality that the system would have; and
- Non-functional requirements, which are generally related to other, technical requirements that the system needs to meet but which are not functional in nature. These are domains such as performance, security, and so forth.

>> 5.1. Functional Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To describe the functionality and priority that the stakeholders feel the system should have.

Section contents

- The structure of this section will generally reflect the stakeholder requirements section. If a business process is represented above, it is likely to appear as a sub-heading below with more detailed requirements underneath it.
- ➡ Each sub-heading should where possible orient the reader about the business process or workflow that is happening and then list the requirements underneath it.

Sample questions to answer in this section

- How should the system support the end-users in doing their work?
- What would make their job easier?
- How important is the function?

Important! You will notice below that the requirements are broken into "core" and "desirable". Core requirements should be very high-level and reflect key aspects of the business process such as:

- Ability to order prescriptions.
- Ability to register new patients.
- Ability to customize clinical templates.

Desirable requirements are requirements related to how the solution supports the core business process requirements such as:

- Solution flags drug-drug interactions.
- Solution alerts when a potential duplicate registration is being created.
- Solution allows customized data labels.

Core requirements are those things that may very likely lead to rejecting the solution were the solution not capable of supporting it. Desirable requirements are desired by the Purchaser but not "must have". A common mistake is to include "desirable" requirements as core which will likely result in no solution meeting the minimum requirements. The Purchaser should be clear on what processes the solution needs to support, but flexible about how the solution supports those requirements.

>> 5.1.1. Communicating with Patients

Process overview

HSP requires the solution to facilitate patient engagement by enabling patients to view and request appointments, report symptoms, and view their record. The solution must also support electronic consultations between patients and care providers.

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Including the below business and stakeholder requirements (i.e., the description with the actor and activities table) is critical because these are ultimately what the solution will need to support. A common mistake is not including information such as this in a *Purchaser's Requirements Document* (see <u>Appendix B</u>).

5.1.1.1. Pre-appointment

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core Requirements			
1.	Must allow patients to view past and upcoming appointments	→ As stated	
2.	Must allow patients to request an appointment	→ As stated	
3.	Must provide patients with the ability to complete forms electronically	→ As stated	
4.	Etc.	→ Etc.	
Desiral	Desirable Requirements		
5.	Must include automated appointment reminders	→ For example, by SMS or email	
6.	Etc.	→ Etc.	

5.1.1.2. Electronic Consultation

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
7.	Must enable real-time communication between patients and practitioners	→ As stated	
8.	Must enable communication through a variety of communication channels	 For example, video and chat functionality 	
9.	Must enable communication amongst care providers	→ As stated	
10.	Must allow healthcare providers to access relevant patient data within the system during electronic consultations	→ As stated	
11.	Etc.	→ Etc.	
Desiral	Desirable Requirements		
12.	Must facilitate documentation of electronic consultations within the system	→ For example, recording consultation notes and follow-up actions	
13.	Etc.	→ Etc.	

5.1.1.3. Symptom Reporting

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
14.	Must provide customizable symptom questionnaires or templates to guide patients in reporting their symptoms	→ As stated	
15.	Must include multimodal reporting options	 For example, text-based input, dropdown menus, checkbox- es, and free-text fields 	
16.	Must include an alerting mechanism to notify healthcare providers of urgent symptoms reported by patients	→ As stated	
17.	Must offer patient education and feedback	→ As stated	
18.	Etc.	→ Etc.	
Desirable Requirements			
19.	Must integrate with wearable health monitoring devices to capture real-time, accurate data	→ As stated	
20.	Etc.	→ Etc.	

5.1.1.4. Record Access

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core Requirements		
21.	Must be able to view a patient record	→ As stated
22.	Must be able to limit a patient's view of the record	→ As stated
23.	Etc.	→ Etc.
Desirable Requirements		
24.	Must allow a patient to assign a proxy to view their record	→ As stated
25.	Etc.	→ Etc.

>> 5.1.2. Intake

5.1.2.1. Registration

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
26.	Must be able to create new patients	→ As stated	
27.	Must maintain basic demographic information about the patient	→ As stated	
28.	Etc.	→ Etc.	
29.	Must be able to search for an existing patient	→ As stated	
Desiral	Desirable Requirements		
30.	Must automatically flag potential duplicate patients when the record is created	 Checks based on last name and DOB. 	
31.	Must allow users to register a patient to a unit or department (e.g., patient in ER, patient in oncology)	→ As stated	
32.	Must require differing profile information based on a unit or department	→ For example, the profile for a patient in ER may require different information than a patient in oncology.	
33.	Must allow users to assign a client to one or more units or departments	→ As stated	
34.	Must allow users to sort patients by various variables	→ Examples are last name, DOB, department, etc.	
35.	Etc.	→ Etc.	

5.1.2.2. Scheduling

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core Requirements		
36.	Must be able to schedule a patient for an appointment	→ As stated
37.	Must allow users to view forms that have been completed electronically	→ As stated
38.	Must be able to view a patient's past and upcoming appointments	→ As stated
39.	Etc.	→ Etc.
Desira	ble Requirements	
40.	Must enable scheduling with a unit or person	The solution should allow a clerk to book the patient an appointment with a specific individual (e.g., a particular physician for follow-up) or with the first available clinician in a unit (e.g., a new patient being referred to oncology).
41.	Must visually display and prevent booking calendar restrictions	→ Some clinicians have "clinic days" where they only book appointments for certain reasons (e.g., an oncologist who only sees new patients on Mondays).
42.	Must allow booking hospital equipment	 For example, booking an appointment for dialysis.
43.	Etc.	→ Etc.

>> 5.1.3. Care Delivery

5.1.3.1. Clinical Documentation

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
44.	Must enable structured data entry	→ As stated	
45.	Must include customizable documentation templates that can be tailored to different departments and workflows	→ As stated	
46.	Must support free-text entry for capturing detailed clinical notes	→ As stated	
47.	Etc.	→ Etc.	
Desiral	Desirable Requirements		
48.	Must integrate voice recognition and dictation capabilities	→ As stated	
49.	Must facilitate collaborative documentation between multidisciplinary teams	→ As stated	
50.	Etc.	→ Etc.	

5.1.3.2. Order Entry

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
51.	Must allow healthcare providers to order diagnostic tests, procedures, medications, treatments, and ancillary services	→ As stated	
52.	Must enable categorization and prioritization of orders based on urgency, clinical relevance, and workflows	→ As stated	
53.	Must allow real-time order status tracking	→ As stated	
54.	Etc.	→ Etc.	
Desiral	Desirable Requirements		
55.	Must enable customizable order templates	 Order templates can be customized for different workflows and departments. 	
56	Etc.	→ Etc.	

>> 5.1.4. Discharge

5.1.4.1. Discharge Planning

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core F	Core Requirements		
57 .	Must allow healthcare providers to develop a comprehensive discharge summary	→ As stated	
58.	Must enable interdisciplinary care coordination	Must allow all members of the care team to com- municate and collaborate during the discharge planning process.	
59.	Must offer patient education materials and resources	 Including instructions for caregivers. 	
60.	Must support healthcare providers in conducting medication reconciliation processes at the time of discharge	→ As stated	
61.	Must facilitate care transitions between healthcare settings	→ For example, by ensuring timely communication between providers and the transfer of medical records.	
62.	Etc.	→ Etc.	
Desirable Requirements			
63.	Must support referral management to community resources and support services	→ As stated	
64.	Etc.	→ Etc.	

>> 5.1.5. Administration

Process overview

HSP requires the solution to support various administrative processes such as resource allocation, queue management, and supporting healthcare providers manage and track tasks.

5.1.5.1. Patient Flow Management

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
65.	Must facilitate room and resource allocation	 Ability to assign examination rooms and equipment. 	
66.	Must support patient triage and prioritization protocols	 Ensure patients are directed to the appropriate area, provider, and care setting. 	
67.	Must support queue management	 For example, provide expected wait times or queue status. 	
68.	Must integrate with appointment scheduling and registration functionality to streamline patient check-in	→ As stated	
69.	Etc.	→ Etc.	
Desirable Requirements			
70.	Must conduct capacity planning and forecasting to anticipate patient volumes and resource needs	→ As stated	
71.	Etc.	→ Etc.	

5.1.5.2. Task Management

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
72.	Must allow healthcare providers to view a task list	→ As stated	
73.	Must support task tracking and monitoring	→ As stated	
74.	Must support task reminders and notifications	→ As stated	
75.	Etc.	→ Etc.	
Desiral	Desirable Requirements		
76.	Must support task delegation	Allow healthcare providers to assign tasks to themselves or other members of the care team.	
77.	Must generate tasks based on clinical notes and common patient demographics and diagnoses	 Generate tasks to be validated by providers based on clinical notes and information recorded in the system. 	
78.	Etc.	→ Etc.	

>> 5.2. Non-Functional Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To describe the non-functional requirements that the system should have.

Section contents

- The structure of this section can vary depending on what you feel logical groups of non-functional requirements are. However, consider a structure such as:
 - Architecture High-level technical architecture requirements such as cloud hosting, stored in the country, and so forth.
 - Performance Response time, scalability, reliability, and so forth.
 - Interoperability Information exchange with other systems.
 - User Interface Ease of use, access from multiple types of devices, and so forth; this can also be addressed as user interface requirements in the functional section.
 - Contractual requirements.
 - Privacy Role-based access to match user access against purpose, logging and auditing for privacy purposes (e.g., who looked at what).
 - Security Confidentiality, integrity, and availability of the data as well as other security concepts.
- The non-functional requirements are generally captured through interviews with the IT team, legal, risk management, and other teams within the Purchaser. They are generally not captured during interviews or meetings with end-users to define the processes or functional requirements.

Sample questions to answer in this section

- Are there particular needs that the system must meet or characteristics that the system must have, but which are not functional? Do the sub-sections described above (e.g., performance, interoperability, etc.) capture the needs or characteristics or have some been missed?
- How important is the requirement?

Important!

For the functional requirements in the above section, there were likely to be few core requirements and they related to whether the solution supports the key business processes. There are likely to be more non-functional requirements which are core. These would be requirements such as interoperability, performance (e.g., response time of the solution, ability to support the anticipated load (e.g., 1000 simultaneous users), and so forth.

>> 5.2.1. Architecture

HSP has a limited technology infrastructure footprint and as such is looking for a hosted solution in a data center that the successful Bidder will manage in country. Nonetheless, the solution will need to work in offline mode to accommodate frequent Internet outages.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
79.	Should be cloud-based	 Assuming software as a service. 	
80.	Should be hosted in country	→ As stated	
81.	Should work in offline mode	→ As stated	
82.	Etc.	→ As stated	
Desiral	ole Requirements		
83.	Should operate in a Microsoft environment	→ As stated	
84.	Should be based on an open-source platform	→ As stated	
85.	Etc.	→ Etc.	

>> 5.2.2. Performance

HSP operates 24/7 and has over 3,000 users who are distributed across the country. As a mission critical system, the solution needs to have high availability to ensure we are able to provide the highest level of care.

5.2.2.1. Availability and Responsiveness

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	Core Requirements	
86.	Should be able to support the existing user and patient load as well as scale as load increases	→ As stated
87.	 Should be available: 99.9% of the time calculated over a one-month period. No more than 1 unplanned outage per month. No more than 3 high-severity issues reported in one month. No more than 2 hours between service restoration and return to normal clinical functioning. 	→ As stated
88.	Should respond: Within 3 seconds 95% of the time. Within 2 seconds 90% of the time.	→ As stated
89.	Must be available from locations across the country	→ As stated
90.	Must support multiple users viewing and editing the same patient record simultaneously	→ As stated
91.	Must update data in real-time so data is synchronous across the solution	→ As stated
92.	Etc.	→ Etc.
Desira	ble Requirements	
93.	Must be accessible through a variety of devices	 Accessible through a variety of devices (i.e., mobile device).
94.	Etc.)

5.2.2.2. Disaster Recovery

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
95.	Must be resilient in the face of errors, failures, etc.	→ As stated	
96.	Must include disaster recovery for failures at the application, database, server, and storage levels	→ As stated	
97.	Must have zero data loss in the event of system failure	→ As stated	
98.	Must be able to return to productive use within X hours of failure	→ As stated	
99.	Etc.	÷	
Desirable Requirements			
100.	Etc.)	

>> 5.2.3. Interoperability

HSP has a number of related systems with which the solution must exchange information. Interoperability with these systems is required.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	Core Requirements	
101.	Must use non-proprietary semantic standards to support interoperability	→ Examples include SNOMED CT, LOINC or ACT.
102.	Must use non-proprietary messaging or syntactic standards to support interoperability	→ Examples include HL7.
103.	Must be able to interoperate with the existing laboratory information system flow including supporting: Sending orders. Receiving results. Order and results tracking. Etc.	 HL7 V2.X messages. At least ORM, OML for orders. At least OUL, ORU for results.
104.	Must be able to interoperate with the existing pharmacy system including supporting: Medication ordering. Dispensing updates. Exchanging medication lists. Etc.	 HL7 V2.X. At least ORM, OMP, RDE for orders. At least RDS for dispensing.
105.	Must have the capacity to integrate with future solutions that have not yet been identified, as image	→ As stated
Desiral	Desirable Requirements	
106.	Common nomenclature and coding standards for labs	→ LOINC
107.	Common nomenclature and coding standards for pharmacies	→ As stated
108.	Uses the SNOMED standard	→ As stated
109.	Mapping between catalogues	→

>> 5.2.4. User Interface

Overview

The user interface should be flexible so that HSP and individual users can customize data entry screens, dashboards, and other screens without need for programming. For example, the oncology team may need to have differing filters or information presented about patients than the ER team. A physician may choose to have different information readily visible about a patient than another physician.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	equirements	
110.	Must be able to display multiple modules simultaneously	→ Staff often have to switch back and forth among information types and tasks (e.g., track the status of referrals, register new clients, etc.). System must be able to support their multitasking.
111.	Must have customizable dashboards displaying key patient information	 Customizable dashboards for the unit and individual users.
112.	Must maintain consistency in design elements, layout, and terminology throughout the interface	→ As stated
113.	Must have intuitive navigation to help users move through the system seamlessly	→ As stated
114.	Must ensure that the system works well on different devices and screen sizes	→ As stated
115.	Etc.	→ Etc.
Desira	ole Requirements	
116.	Uses a visually appealing design	→ As stated
117.	Allows users to customize certain aspects of the user interface	 Options for adjusting font size, colors, or layout.
118.	Supports access via mobile devices	→ As stated
119.	Etc.	÷

>> 5.2.5. General Project Requirements

Note that the below highlights include general requirements that HSP expects. However, these are in addition to any protections afforded HSP in the agreement attached to this bid documentation and to which the Bidder is expected to agree.

5.2.5.1. Licensing and payment

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
120.	Increases in the cost of services should be capped at 2% per annum	→ This is for services only. HSP anticipates that licensing costs will be offered volume discounts.	
121.	Payment for deliverables and services should correspond to when they are provided	HSP would not accept significant pre-payment of deliverables and will expect final payment of deliverables and services to be withheld until successful delivery.	
122.	Licenses should be transferable to new users or facilities	→ If a user leaves the organization or a health facility is closed, HSP expects the license to be returned to the pool for reallocation at no additional charge.	
123.	Licenses should include patches and minor and major upgrades	→ As stated	
124.	Patches and upgrades should support the same or better functionality	→ As stated	
125.	Ongoing support and maintenance fees should begin after operational acceptance is achieved	Operational acceptance will be granted on a facility-by- facility basis, and be granted after the longer of the facility operating for three months or free of severity 2 or higher errors for a period of 168 hours.	
126.	Etc.	→ Etc.	
Desirable Requirements			
127.	N/A	→ N/A	

5.2.5.2. Termination

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	Core Requirements		
128.	The Supplier should provide 18 months of notice where it chooses to terminate support for the solution	→ This will allow HSP time to source a new solution.	
129.	The Supplier should provide support in migrating data to the new solution	 Regardless if termination is initiated by HSP or Supplier. 	
130.	A limited number of licenses should be granted in perpetuity to allow HSP access to archive and access the data	→ As stated	
131.	Etc.	→	
Desirable Requirements			
132.	Etc.	→ N/A	

5.2.5.3. Privacy

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	equirements	
133.	The Supplier should acknowledge that it has no right over the patient data	This includes no right to use patient data in identifiable, de-identified, aggregate, or other form except for the purpose of providing services to HSP under the contract.
134.	 The Supplier should agree to: Not withholding the data under any circumstances from HSP even in the case of non-payment. Not using data for any other purpose than providing HSP with services. Referring all data-related requests to HSP. Conducting regular auditing of its own staff. Notifying HSP within 24 hours of a suspected security breach. 	→ As stated
135.	The Supplier should agree to training its own staff on privacy and imposing relevant privacy obligations on them and contractors who work on their behalf.	→ As stated
136.	Etc.	→ Etc.
Desira	Desirable Requirements	
137.	Etc.	→ Etc.

5.2.5.4. Security

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	equirements		
138.	The Supplier should have an industry-standard security program in place	→ Examples include NIST or ISO27001/2/.	
139.	The Supplier should include stringent access controls on its own staff	 Identity verification, authentication, and authorization. Principle of least access is respected (i.e., no more access than necessary). Segregation of duties. 	
140.	The Supplier should have security monitoring in place	Example includes intrusion detection.	
141.	The Supplier should conduct regular security testing on their solution	 For example, conducting penetration tests annually. 	
142.	The Supplier should have their security program audited from time to time	For example, annual audit by a third party.	
Desiral	Desirable Requirements		
143.	Etc.	→ Etc.	

>> 5.2.6. Privacy (Solution)

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	equirements	
144.	Should allow a patient to withdraw consent	Impact would be to prevent the information being made available to end-users.
145.	Should log all user access	→ As stated
146.	Etc.	→ Etc.
Desira	Desirable Requirements	
147.	Should allow a user to override the consent withdrawal if necessary	End-user would be allowed to override the block if necessary (e.g., life and limb).
148.	Etc.	→ N/A

>> 5.2.7. Security (Solution)

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	equirements		
149.	Should require end-users to uniquely identify themselves	→ Require login	
150.	Should support role-based access	→ As stated	
151.	Etc.	→ Etc.	
Desira	Desirable Requirements		
152.	Should support relationship-based access	→ Example includes an end- user having to assert that they are providing care to the patient or have another administrative reason for entering the chart.	
153.	Should support automatic timeout	 Time-out should be configurable. 	
154.	Etc.	→ N/A	

>> 6. Service Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To describe the services that will be required during implementation, go-live, and ongoing support.

Section contents

- This section can also be incorporated into the non-functional requirements section if it makes more sense, but many find it helpful to include it in its own section as we have done here.
- The structure of this section can vary depending on what you feel logical groups of services are. Examples might be:
 - Implementation-related Services
 - ▶ Installation and Configuration Services.
 - ▶ Implementation and Post-Deployment Services.
 - Development Services.
 - Ongoing Services
 - Support and maintenance.
 - Monitoring.
 - Backup and disaster recovery.
 - User training.
 - Cybersecurity.
- Most if not all of these services will be required. The Purchaser needs to determine however whether it anticipates the Bidder will provide the service or whether the Purchaser itself will deliver the service.
- The Purchaser should rely on subject matter experts to define the services. This would include IT for requirements related to support and so forth, change managers for services related to change management, and so forth.

Sample questions to answer in this section

- What do you need to do to prepare for the implementation?
- How will the system impact your Purchaser?
- What support do you need from the Supplier? What will you do yourselves?
- What are the ongoing services that are needed? Who will manage the solution (e.g., add new users, configure new templates, etc.).

>> 6.1. General requirements

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	equirements		
155.	 Should have a project plan in place that includes: Project Scope. Project Constraints. Project Management Techniques. 	→ As stated	
156.	Should have bi-weekly project management meetings	 Project management meet- ings would be accompanied by detailed status reports. 	
157.	Should have executive-level monthly reporting	→ Executive level reports suitable for the Minister of Health.	
158.	Etc.	→	
Desira	Desirable Requirements		
159.	Etc.	→ Etc.	

>> 6.2. Installation and Configuration

No.	REQUIREMENT	DESCRIPTION/EXAMPLE			
Core R	Core Requirements				
160.	 Should install and configure the solution in the data center including: Configuring operating systems. Installing the software including any supporting software required to operate it. Plan, facilitate, and document solution design and configuration sessions. Configuring the solution such as loading users, creating sites, developing templates, and so forth. Testing the installation. 	→ As stated			
161.	 Should install and configure the solution in the local health facilities including: Configuring end-point operating systems. Installing the software including any supporting software required to operate it. Planning, facilitating, and document solution design and configuration sessions. Configuring the solution such as loading users, developing templates, and so forth. Testing the installation. 	→ This activity must be completed at each health facility and include representatives from each clinical unit.			
162.	 Should migrate legacy data including: Mapping existing data sets. Identifying transformation requirements. Conducting test loads. Conducting final load after signoff. 	 Includes patient data such as demographics and clinical information. 			
163.	 Should configure the required integrations including: Confirming the interface strategy. Conducting data mapping. Coding the integrations. Testing the integrations. 	→ As stated			
164.	Etc.	→ Etc.			
Desira	able Requirements				
165.	Should be a "big bang" cutover in health facilities	→ As stated			
166.	Should be a staggered implementation across clinics	→ Although implementation at facilities can overlap, they should generally be staggered so no more than two facilities are in a stabilization period at any given point.			

>> 6.3. Implementation and Post-Deployment

No.	REQUIREMENT	DESCRIPTION/EXAMPLE			
Core R	Core Requirements				
167.	 Should provide solution training including: Training plan, materials, and delivery for solution administrators. Training plan, materials, and delivery for help desk. Training plan, materials, and delivery for end-users. 	Training should be role based (e.g., nurses receive different training and materials than registration clerks).			
168.	 Should provide change management services including: Developing the change management strategy and approach. Developing change management materials and supports. Conducting activations. 	 Change management must be completed at each health facility and include represen- tatives from each clinical unit. 			
169.	 Should provide go-live support: 2 support resources in each clinical and administrative unit during clinic hours for 14 days after go-live. 10 onsite resources 24/7 for the longer of a period of 96 hours since a severity 2 or higher bug has been reported or 14 days have passed since go-live. Telephone support available 24/7 during the stabilization period. 	 Go-live support and operational acceptance is on a facility-by-facility basis (i.e., the support resources defined in the requirement will be available for each facility until that facility receives operational acceptance). Stabilization period will end and operational acceptance for the implementation be provided until the longer of 3 months have passed since go-live or a severity 2 or higher issue has not been reported for 168 hours. 			
170.		→ Etc.			
Desira	sirable Requirements				
171.	Should support HSP in developing the Operational Acceptance Tests	→ As stated			
172.	Bidder should have previous change management experience either within or outside healthcare sector	Recognizing that vendors often partner with external change management firms, the change-management experience can be derived from other sectors.			

>> 6.4. Development

HSP anticipates that the solution will be a commercial off the shelf product. However, assuming that some modifications or low-code customizations may be required, the following are HSP's requirements.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE	
Core R	equirements		
173.	 Should follow an industry-standard development methodology that includes: Planning, facilitating, and documenting requirements sessions with end-user representatives. Using a variety of means to solicit end-user feedback (e.g., mockups, protypes). Developing and testing the code. Providing results of the test reports. 	→ As stated	
174.	Etc.	→ Etc.	
Desira	sirable Requirements		
175.	Should support HSP in developing the acceptance testing plan and scripts	→ As stated	
176.	Etc.	→ Etc.	

>> 6.5. Ongoing Support and Hosting

No.	REQUIREMENT	DESCRIPTION/EXAMPLE		
Core R	Core Requirements			
177.	Should provide hosting including disaster recovery and failover	 Needs to meet the performance requirements defined in this requirements document. 		
178.	 Should provide preventative and corrective maintenance including: Applying patches and bug fixes as required to fix issues reported. Deploying patches and upgrades to the application and any third-party software required to operate the solution. Solution upgrades including developing and installing patches and minor upgrades on a quarterly basis and major upgrades annually. Cybersecurity maintenance including installing server and solution patches and updates on a critical priority basis. 	→ As stated		
179.	 Should provide solution and performance monitoring including: Maintaining solution monitoring tools. Continuous solution monitoring for performance and uptime issues. Monthly assessments for performance and optimization to enhance responsiveness. 	→ As stated		
180.	 Should provide backup and recovery services including: Regular system backups to prevent data loss. Maintain the failover system. Maintain and test annually a disaster recovery plan. 	→ As stated		
181.	 Should provide cyber security monitoring and maintenance including: Monthly vulnerability scans. Annual penetration testing. Deploying patches and updates to address security vulnerabilities. 	→ As stated		
182.	 Should provide updates to documentation and training materials: Release notes for new patches and upgrades. Ongoing maintenance of system configuration documentation. Annual updates to Solution training materials to reflect changes in the previous year. Quarterly updates for training materials and scripts for solution administrators and helpdesk personnel. 	→ As stated		
183.	Etc.	→ Etc.		

No.	REQUIREME	NT			DESCRIPTION/EXAMPLE
Desiral	Desirable Requirements				
184.	Severity levels should be defined as:			→ As stated	
	Severity	Criteria	Criteria		
	1 - Critical	Clinical unitUnable to pCybersecuri		on	
	2 - High	→ Clinical unit	ive unit unable to significantly imp difficulties provid	paired	
	 3 - Medium Multiple users prevented from conducting normal functions Clinical users impacted but a workaround is possible Patient experience significantly degraded 				
	 4 - Low Minor bugs impacting a few users but generally able to function normally Patient experience mildly degraded 				
	5 – Very lov	y → Questions → Feature requ	uests		
185.	Service hours a	and response times s	should be:		→ As stated
	Severity	Service Hours	Investigation initiated	Target resolution (80% of the time)	
	1 - Critical	→ 24/7	15 minutes	1 hour	
	2 - High	→ 24/7	2 hours	4 hours	
	3 - Medium	→ 24/7	8 hours	24 hours	
	4 - Low	7am to 7pm, local timeBusiness days	24 hours	72 hours	
	5 - Very low	7am to 7pm, local timeBusiness days	As possible	Next patch or as negotiated	
186.	Etc.				→ Etc.

>> 7. Information Requirements

Instructions to the reader (delete this box when developing your *Purchaser's Requirements Document* (See <u>Appendix B</u>)):

Section purpose

To describe the information that the system needs to support and reporting features.

Section contents

- The key purpose of this section is to describe the information-related needs of the system and should include:
 - Conceptual data diagram Diagram of the information contained in the solution.
 - Description of data entities Table of the conceptual "fields" that the solution needs to contain.
 - Data architecture management functionality Functionality related to managing the data architecture or managing the data itself (e.g., adding fields, relabeling fields).
 - Data analytics functionality Functionality related to supporting data analytics (e.g., reports available, data tools such as dashboards, reporting functionality).
 - Data standards such as formatting (e.g., structured, discrete), coding (e.g., ICD10) and nomenclature (e.g., SNOMED).
- Data management and data analytics functionality can be addressed instead in the solution requirements section if it seems like a more logical flow. Interoperability is generally addressed in the non-functional requirements section but could instead be included here if it seems like a more logical flow.

Sample questions to answer in this section

- What are the "entities" about which the solution needs to hold information (e.g., patients, providers, departments, units, health facilities, etc.)?
- What information needs to be captured about each of these?
- Does the information need to be structured? Does it need to be coded or have a standard nomenclature?
- Who are the information customers? What do they need from the solution? How will they receive it? A report, dashboard, data extract, other?

>> 7.1. Conceptual Data Model

>> 7.1.1. Patient Profile

Patient profile is basic information about the patient and his or her needs.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	dequirements	
187.	Medical record number	→ As stated
188.	Client Name	 First Name Middle Name Last Name Salutation Preferred Name/Alias
189.	Birth date	→ Day, month, year
190.	Birth location	CountryProvince / StateCity, Town, or Municipality
191.	Gender	MaleFemaleOther
192.	Address	 Country Province / State City, Town, or Municipality Street

>> **7.2.** Reports

HSP produces a number of reports to inform planning and resource allocation, as well as for quality improvement purposes. Given the scope of data recorded within the solution, the following reports should be available for extraction.

Core Requirements

No.	REQUIREMENT	DESCRIPTION/EXAMPLE		
Core R	Core Requirements			
193.	Admitted patients	 Number of patients admitted by ward. 		
194.	Case costing	 Cost of services provided during a course of care including a list of services and the cost. 		
195.	Patient Demographics	 Summary of patient demographics, including age, gender, contact information etc. 		
196.	Audit Trail	Tracks and logs changes made to patient records to ensure compliance with privacy regulations.		
Desira	ole Requirements			
197.	Customizable Reports	 Customized reports based on specific criteria or requirements to meet unique Organizational needs. 		
198.	Population Health Reports	Analyzes health trends and outcomes across a popula- tion, aiding in public health initiatives and preventative care strategies.		
199.	Readmission Reports	Identifies patients at risk of readmission, enabling healthcare providers to implement interventions to reduce readmission rates.		
200.	Encounter Summary Reports	→ Summarizes details of a specific encounter, including the reason for the visit, vital signs, diagnoses, treatments, and medications.		

>> 7.3. Data Analytics

HSP uses data for planning and quality improvement purposes. HSP also needs to link data from the solution with other datasets for analysis purposes. This includes costing data from our financial systems as well as other data sets from a variety of systems.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE		
Core R	Core Requirements			
201.	Create and save report templates	→ As stated		
202.	Share report templates with other users	 Reports must respect access rights matrix. 		
203.	Extract data in a standardized, machine-readable format	→ Excel, CSV.		
204.	Built-in analysis tools	Tools to provide basic statistical analysis such as averages, cell counts, and so forth rather than row by row queries.		

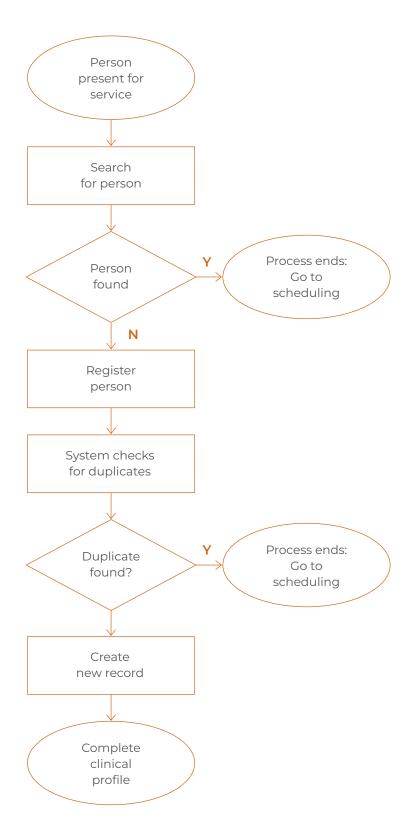
>> 7.4. Data Standards

HSP is interested in conducting analytics as discussed above as well as ensuring interoperability across national platforms. As such, the use of data standards is essential. The following standards should be available.

No.	REQUIREMENT	DESCRIPTION/EXAMPLE
Core R	equirements equirements	
205.	SNOMED	→ Diagnosis
206.	LOINC	→ Laboratory related
207.	ICD-10/ICD-11	 Classification of diseases and diagnoses.

>> 8. Addendum: Workflows

>> 8.1. Registration



Appendix C: Evaluation Plan



Introduction to this Tool

This tool is a sample evaluation plan that should be developed at a high-level prior to the Market Sounding Stage and refined by adding more detail prior to the subsequent stages. The detailed evaluation plan will include weighting the sections and questions in the Bidder's proposal and therefore will closely mirror Detailed Technical Responsiveness Form (see Appendix F). The evaluation steps and contents of the plan will be customized according to the needs of the Purchaser. The benefit of creating an evaluation plan at the beginning of the procurement and refining it as the procurement progresses is that it supports planning what will be evaluated in each step and how the step will be evaluated.

This template provides instructions or advice in shaded boxes such as this one and gives examples (the rest of the text in regular font). The examples provided will need to be changed and augmented by the Purchaser procuring the solution to match their situation.

The template is broken into the following sections:

- Evaluation Steps Similar to a mini-project plan that outlines the steps, the intended outcome, and the person or team r esponsible for the step.
- Evaluation Committee A list of people who will participate in the Evaluation Committee and what they will be evaluating specifically. Note that an evaluation committee member might not evaluate all components of the solution or Bidder if they don't have the subject matter expertise. For example, a clinician may not evaluate the registration functionality or an IT representative may not evaluate the clinical functions of the solution.
- Evaluation Criteria How the proposal will be scored.

Note that the sections, format, and examples in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist or IDB Procurement Specialist. The Purchaser should consult with IDB Health Specialist and IDB Procurement Specialist when planning the procurement and evaluation approach.

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>> 1. Evaluation Steps

Our team will follow the following steps to evaluate the solution:

STEP	DESCRIPTION	EVALUATION OUTCOME	RESPONSIBILITY		
Market Sound	Market Sounding				
Review of mandatory requirements	Reviewing the proposals to identify those meeting mandatory requirements	 Pass / Fail. All Bidders passing will move to Detailed Bid and Evaluation Stage. 	Evaluation Committee		
Proposal review	Reviewing remaining proposals to understand market offerings and refine detailed requirements	→ N/A	Evaluation Committee		
Detailed Bid I	Evaluation				
Proposal review	Reviewing the proposals and ranking Bidders based on the strength of the proposal	 Bidders assigned a score. 4 highest-ranked Bidders above 40% will move to next step. 	Evaluation Committee Subject Matter Experts (where relevant)		
System demonstra- tions	Scripted system demonstrations with up to four Bidders resulting in re-evaluation of the shortlisted Bidders' scores	 Bidders' scores adjusted based on evidence in system demonstration. 2 highest ranked Bidders above 40% will move to the next step. 	Evaluation Committee Subject Matter Experts (where relevant)		
Bidder meetings	Meetings with up to two Bidders to evaluate technical capabilities and service offerings	 Bidders' scores adjusted based on evidence from meetings. Both Bidders will proceed to the next step assuming they continue to score above 40%. 	Evaluation Committee Subject Matter Experts (where relevant)		
Sandbox	Review of test software for evaluation	 Bidders' scores adjusted based on evidence from meetings. Both Bidders will proceed to the next step assuming they continue to score above 40%. 	Evaluation Committee Subject Matter Experts (where relevant)		
Reference checks	Conducting three reference checks with current or former Bidder customers to confirm quality of the service offering which may result in adjusting the score	 Bidders' scores potentially adjusted based on reference checks. Both Bidders will proceed to the next step assuming they continue to score above 40%. 	Evaluation Committee		
Opening of financial proposal	Financial proposal is reviewed. The proposal costs will be adjusted to reflect a total cost of operations which will then be used as the basis for assigning a score to the financial proposal	 Total cost of ownership calculated. Lowest cost Bidder is awarded 100% of potential financial score with the higher cost Bidder awarded 100% percentage over the lower bid. 	Evaluation Committee		
Preferred Bidder selected	Preferred Bidder is selected based on technical and financial scores	Technical score = 80%.Financial score = 20%.			

>> 1.1. Evaluation Committee

The Evaluation Committee is comprised of the following people. They may be supported by other subject matter experts as required. Evaluation committee members may not be required to review each domain if they do not have expertise in the area:

EVALUATION COMMITTEE MEMBER	DOMAINS TO BE REVIEWED	DOMAINS THE EVALUATOR WILL NOT REVIEW
Name of Person 1	Clinical Domains Service Domains	Administrative functionality Non-functional domains
Name of Person 2	Non-functional domains Service domains	Solution functionality
Etc.		

>> 2. Evaluation Criteria

>> 2.1. Mandatory Requirements in Market Sounding Stage

IDB procurement policy includes some mandatory requirements, such as being from an IDB member country, that Bidders must meet in addition to any key technical requirements identified by the Purchaser. The Purchaser needs to consider the key mandatory requirements for passing to the next stage. These criteria must be included in the Market Sounding Stage.

The following are the mandatory requirements that will be evaluated during the Market Sounding Stage and which are required to pass to the Detailed Bid and Evaluation Stage:

DOMAIN	REQUIREMENT
Eligibility	From an IDB member country <add relevant="" requirements="">></add>
Contract Non-Performance	3) No incidents of contract non-performance since <<date>></date>4) <<add relevant="" requirements="">></add>
Financial	5) Sufficient operating funds6) <<add relevant="" requirements="">></add>
Experience	 7) At least 3 similar sized contracts within the previous 3 years 8) Experience in-low to-middle-income countries 9) <<add relevant="" requirements="">></add>
Etc.	10) Works in offline mode11) Standards-based interoperability12) <<add relevant="" requirements="">></add>

>> 2.2. Detailed Bid and Evaluation Stage Ranking

The following is an example only. The domains need to match the categories of the Technical Responsiveness Form. It is likely to be in draft form at the beginning of the procurement. It will be refined after reviewing the proposals received in the Market Sounding Stage and prior to development of the bid documentation for the Detailed Bid and Evaluation Stage.

>> 2.2.1. Weighting

As noted above, the Bidders will be ranked through a series of evaluation steps. Weighting for the domains, sub-domains, and individual questions will be as follows

DOMAIN	SUBDOMAIN	WEIGHTING
1. Bidder profile		N/A – Not scored
2. Solution profile		N/A – Not scored
3. Mandatory Requirements		Pass - Fail
4. Functional capabilities	Total	400 points out of 1000
4.1. Communicating with Patients		
	4.1.1 Pre-appointment	10 points
	4.1.2 Electronic consultation	20 points
	4.1.3 Symptom reporting	5 points
	4.1.4 Record access	5 points
	4.1.5 Etc.	10 points
4.2. Intake		
	4.2.1 Registration	20 points
	4.2.2 Scheduling	20 points
	4.2.3 Etc.	10 points
4.3 Care Delivery		
	4.3.1 Clinical Documentation	20 points
	4.3.2 Order Entry	30 points
	4.3.3 Etc.	10 points
4.4 Discharge		
	4.4.1 Discharge planning	20 points
	4.4.2 Etc.	10 points
4.5 Administration		
	4.5.1 Patient Flow Management	30 points
	4.5.2 Task Management	5 points
	4.5.2 Etc.	10 points
4.6 "Others"		
	4.6.1 Etc.	X points

DOMAIN	SUBDOMAIN	WEIGHTING
5. Non-functional capabilities		300 points out of 1000
5.1 Architecture	N/A	50 points
5.2 Performance and availability		
	5.1.1 Availability and responsiveness	30 points
	5.1.2 Disaster Recovery	20 points
	5.1.3 Etc.	5 points
5.3 Interoperability	N/A	40 points
5.3 User Interface	N/A	20 points
5.4 Contractual requirements		
	5.4.1 Licensing and Payment	10 points
	5.4.2 Termination	20 points
	5.4.3 Privacy	10 points
	Etc.	
< <others>></others>		X points of 300 points
6. Service Offerings		340 points out of 1000
6.1 General Requirements		40 points
6.2 Installation and Configuration		100 points
6.3 Implementation and Post-Deployment		100 points
6.4 Ongoing Services		100 points of
< <others>></others>		
7. Information capabilities		100 points out of 1000
7.1 Conceptual Data Model		
	7.1.1 Patient Profile	10 points
	7.1.2 Patient Demographics	5 points
7.2 Reports	N/A	30 points
7.3 Data analytics	N/A	30 points
< <others>></others>		

>> 2.2.2. Assigning Points

The example below is a multi-step approach to evaluating the Bidders and awarding points. This should be confirmed at the beginning of the procurement. Importantly, a summary of this will need to be included in the bid documentation to inform the Bidders how they will be evaluated. It also needs to be communicated to the Evaluation Committee so that they are aware of what to look for when reviewing a solution.

>> 2.2.3. Proposal review

Each domain in the Detailed Technical Responsiveness Form (e.g., Functional Capabilities) comprises a series of sub-domains (e.g., Registration) which includes a series of questions.

Evaluators will be asked to review the answers to questions and consider the requirements. Each evaluator will assign a score based on:

- 0 Does not meet the core requirements or cannot be determined based on the response.
- 1 Meets the core requirements but is deficient.
- 2 Meets the core requirements.
- \bigcirc 3 Exceeds the core requirements (e.g., capturing the desirable requirements).
- ⇒ 4 Significantly exceeds the core requirements (e.g., offers a novel solution or far exceeds expectations).

The evaluators' scores for each question will then be averaged and divided by 4 to convert the score to a percentage. The percentage score will then be multiplied by the weight for that question to arrive at the score for each question. The score of the questions will be summed to arrive at a total score for the Bidder.

Each individual evaluator will score the Bidders individually and be offered a chance to re-score the Bidders after debriefing with the Evaluation Committee. The evaluators' scores will be averaged to arrive at a total score for the Bidder after the evaluators have had an opportunity to debrief and adjust their individual scores if they see fit.

Note that some evaluators may not be asked to review or score all domains or sub-domains because they do not have subject matter expertise in that area. In those instances, only the scores of the remaining evaluators will be considered.

Example

The Communicating with Patients Domain includes the Pre-Appointment sub-domain. Based on the responses to the questions, one evaluator assigns a score of 1 (meets core requirements but is deficient). Another evaluator assigns a score of 3 (exceeds the core requirements). Averaging the evaluators' scores would result in a score of 2 for the sub-domain. Expressed as a percentage this would be 50% (i.e., a score of 2 divided by a maximum of 4).

If the sub-domain were worth 10 points, the Bidder would receive 5 points on their response because they have a percentage score of 50% on their response (i.e., a 50% score multiplied by a weight of 10 points).

This same basic process would be used to calculate the Bidder's scores for each domain or sub-domain which would be then summed to arrive at a final score for the Bidder. Only the top four Bidders receiving more than 40% of the potential points would be considered to move to the next evaluation step.

System demonstrations and Bidder meetings

The system demonstrations and the Bidder meetings allow the top 4 Bidders receiving a score of 40% or more during the proposal review step to demonstrate how their software meets the requirements or discuss their offering for domains that cannot be demonstrated (e.g., support services).

After participating in the demonstrations and the Bidder meetings, the evaluators will debrief to discuss their perspectives. Each evaluator will then be asked to rescore each domain or sub-domain for each Bidder. The evaluators will used the same criteria as above:

- 0 if the Bidder was unable to demonstrate ability to meet the core requirements;
- ⇒ 1 if the Bidder demonstrated an ability to meet the core requirements but shows deficiencies;
- 2 if the Bidder demonstrated an ability to meet the core requirements;
- ⇒ 3 if the Bidder demonstrated an ability to exceed the core (e.g., including the desirable requirements); or
- 4 if the Bidder demonstrated an innovative approach that far exceeded expectations.

The overall Bidder scores will be calculated in a manner similar to the paper-based proposal review. Each individual evaluator will assign a score of 0 to 4 in each of the demonstrated domains or sub-domains. The average of the evaluators' scores will then be divided by four to arrive at a percentage and multiplied by the weight of the domain or sub-domain to arrive at a score. The score on the domains and sub-domains will then be summed to arrive at a score for the Bidder.

Each individual evaluator will score the Bidders individually and be offered a chance to re-score the Bidders after debriefing with the Evaluation Committee. The evaluators' scores will be averaged to arrive at a total score for the Bidder after the evaluators have had an opportunity to debrief and adjust their individual scores if they see fit.

Note that some evaluators may not be asked to review or score all domains or sub-domains because they do not have subject matter expertise in that area. In those instances, only the scores of the remaining evaluators will be considered. If the use cases guiding the demonstrations or the questions guiding the meetings do not address a particular domain or sub-domain, the score from the paper proposal will be carried forward.

Example

The Communicating with Patients Domain comprises 5 sub-domains. The Bidder is asked to show the Pre-Appointment sub-domain but not the Electronic Documentation sub-domain. The Evaluators will re-assign as score to the Pre-Appointment sub-domain based on what they see in the demo. Because the Bidder is not asked to demonstrate the Electronic Documentation sub-domain, their score from the paper-based review will be carried forward.

Sandbox and reference checks

The top two Bidders with a minimum score of 40% from the previous step will proceed to this step. The sandbox and reference checks are intended to validate the Bidder scores after the system demonstrations.

After the sandbox and reference checks, the evaluators will be asked to confirm the scores assigned to the Bidders in each domain or sub-domain. Evaluators will be asked to adjust the score up or down or maintain the existing score based on the results of the reference checks and sandbox. The scores will then be averaged across evaluators as per the previous steps.

Review of financial proposal

The financial proposals will be opened after the above steps are completed. The financial proposal will be used to calculate the total cost of ownership which will be used as the basis for the financial evaluation.

The Bidder with the lowest total cost of ownership will be awarded 100% of the financial points. The Bidder with the higher total cost of ownership will have their points reduced by the same percentage by which they are over the total cost of the lower Bidder.

Example

In this evaluation, the financial proposal is worth 20 points. If the total cost of ownership of the lowest Bidder is \$100 and the total cost of ownership of the highest Bidder is \$110, the higher Bidder is 10% more expensive than the lower Bidder. The lower Bidder will receive 20 points. The higher Bidder will receive 18 points (i.e., 20 points minus 10%).

>> 2.3. Selection of a Preferred Bidder

The preferred Bidder will be based on the higher score of the two remaining Bidders. The score will be weighted by:

- 80% Bidder's score on its ability to meet the requirements.
- 20% Bidder's score on the total cost of ownership.

The second Bidder will be held in abeyance in case negotiations with the preferred Bidder are unsuccessful.

Appendix D: Sample Evaluation Templates



Introduction to these tools

These include a series of tools to support the evaluation process. Assuming the Purchaser is following a multi-stage procurement, these tools will be refined as the Purchaser passes through the various stages. However, it is very beneficial to at least draft the tools prior to beginning the procurement even if they get refined as the procurement progresses. They will help significantly in planning the procurement and providing clarity about how the Bidders will be evaluated.

This template provides instructions or advice in shaded boxes such as this one and gives examples (the rest of the text in regular font). The examples provided will need to be changed and augmented by the Purchaser procuring the solution to match their situation.

The tools are:

Scoring High-Level Mandatory Requirements – A matrix that the Procurement Team could use to record which Bidders met the mandatory requirements.

- Evaluator's Tool for Scoring Written Proposals – A tool to support the evaluators documenting their review of the proposals. The Market Sounding Stage normally includes pass / fail criteria. The Detailed Bid and Evaluation Stage would include scoring and ranking the Bidders, which this tool would support well.
- Tool to Combine Evaluators' Proposal Scores

 A tool to support the Procurement Team
 to aggregate the scores of the evaluators
 and to assign an overall score to the Bidder.
- ➡ Evaluator's Tool for Scoring System Demonstrations and Bidder Interviews A tool to support the evaluators documenting their rankings based on the systems demonstrations and Bidder interviews. The Market Sounding Stage normally includes pass / fail criteria.
- Use Cases to Support System Demonstrations – A sample of how a use case could be written and provided to Bidders to guide their system demonstrations.

Note that the sections, format, and examples in the tools are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist or IDB Procurement Specialist.

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>> 1. Evaluating High-level Mandatory Requirements

The following tool could be used to review and confirm that Bidders meet the mandatory requirements to pass from the Market Sounding Stage(s) to the Detailed Bid and Evaluation Stage. This tool would be developed based on the mandatory requirements for the Market Sounding Stages. IDB policy has some requirements that must be met (e.g., the Bidder being from an IDB member country). In addition, the Purchaser likely has some mandatory business requirements, such as supporting interoperability, that must be met for a Bidder to be considered. These should be considered and included in the template below and the bid documentation.

DOMAIN OR SUB-DOMAIN	REQUIREMENT	BIDDER					
FROM TECHNICAL RESPONSIVENESS FORM		1	2	ETC.			
Basic Eligibility	1) From an IDB member country	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	2) < <add relevant="" requirements="">></add>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
Contract Non-Performance	3) No incidents of contract non-performance since < <date>></date>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	4) < <add relevant="" requirements="">></add>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
Financial	5) Sufficient operating funds	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	6) < <add relevant="" requirements="">></add>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
Experience	7) At least 3 similar-sized contracts within the previous 3 years	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	8) Experience in low-to- middle-income countries	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	9) < <add relevant="" requirements="">></add>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
Solution Capabilities	10) Works in offline mode	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	11) Standards-based interoperability	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	12) < <add relevant="" requirements="">></add>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>	< <pass fail="">> <comments as<br="">necessary>></comments></pass>			
	Proceed to next stage?	< <yes no="">></yes>	< <yes no="">></yes>	< <yes no="">></yes>			

>> 2. Evaluator's Tool for Scoring Written Proposals

The following tool could be completed by evaluators to document their review of the Bidders. This tool would list all of the questions identified in the Detailed Technical Responsiveness Form (see <u>Appendix F</u>) from the Detailed Bid and Evaluation Stage. It would enable the evaluator to comment on and assign a score to the Bidders' responses to the questions in the Technical Responsiveness Form. The scoring methodology can be adapted as necessary but an option appears below.

Some of the questions and responses may simply be for information rather than scoring (e.g., the location of the Bidder's head office). In this case, the questions would have an "N/A" in the score column to indicate that the evaluator need not assign a score.

Note that the examples included in the tool are from the example questions in Detailed Technical Responsiveness Form (see <u>Appendix F</u>). The examples would be replaced with the Purchaser's actual questions.

Name: << Evaluator name>>

Bidder: <<Bidder name>>

Instructions: Review the Bidder's responses to each of the questions. For each question assign a score to the Bidder's response based on the follow–ng:

- 0 Does not meet the core requirements or cannot be determined based on the response.
- ⇒ 1 Meets the core requirement but is deficient.
- 2 Meets the core requirements.
- \bigcirc 3 Exceeds the core requirements (e.g., capturing the desirable requirements).
- ⇒ 4 Significantly exceeds the core requirements (e.g., offers a novel solution or far exceeds expectations).

Identify any questions you may have about the Bidder's offering that requires clarification through the system demos or through meetings with the Bidder. Also record any comments that will help clarify why you assigned the score that you did.

Note that in the next table, there are individual row for each question in the *Detailed Technical Responsiveness Form* (see Appendix F). This assumes that the evaluators are scoring each question rather than a section. The level of detail below needs to match the Purchaser's scoring methodology.

DOMAIN	QUESTION	EVALUATOR'S SCORE (0 TO 4)	EVALUATOR'S QUESTIONS
1. Bidder profile			
	1. Describe	N/A – not scored	
	2. Describe		
2. Solution profile			
3. Mandatory Requirements			
4. Functional capabilities			
4.1. Communicating with Patients			
4.1.1 Pre-appointment	9. Describe how your solution supports patients managing their own appointments including completing pre-appointment forms and documentation.		
	10. Describe how your solution supports a patient completing electronic forms prior to presenting at the clinic.		
4.1.2 Electronic consultation	11. Describe how your solution supports virtual consultations and remote monitoring.		
	12. Describe the communication channels that your system supports (i.e., messaging, video calling).		
4.1.3 Symptom reporting	< <insert from="" questions="" the<br="">Technical Responsiveness Form (See Appendix F)>></insert>		
4.1.4 Record access			
4.2. Intake			
4.2.1 Registration			
4.2.2 Scheduling			
4.3 Care Delivery			
4.3.1 Clinical Documentation			
4.3.2 Order Entry			
T.S.Z STOCK EITH Y			
4.4 Discharge			
4.4.1 Discharge planning			
Discharge planning			

DOMAIN	QUESTION	EVALUATOR'S SCORE (0 TO 4)	EVALUATOR'S QUESTIONS
4.5 Administration			
4.5.1 Patient Flow Management			
5. Non-functional capabilities			
5.1 Architecture			
5.2 Performance and availability	< <insert from="" questions="" the<br="">Technical Responsiveness Form (See Appendix F)>></insert>		
5.2.1 Availability and responsiveness			
5.2.2 Disaster Recovery			
5.2.3 Etc.			
5.3 Interoperability			
5.4 User Interface			
5.5 Contractual requirements			
5.5.1 Licensing and Payment			
5.5.2 Termination			
5.5.3 Privacy			
Etc.			
< <others>></others>			
6. Service Offerings			
6.1. General Requirements			
6.2 Installation and Configuration			
6.3 Implementation and Post-Deployment			
6.4 Ongoing Services			
< <others>></others>			
7. Information capabilities			
7.1 Conceptual Data Model			
7.1.1 Patient Profile			
7.1.2 Patient Demographics			
7.2 Reports			
7.3 Data analytics			
< <others>></others>			

General questions or comments: << Evaluator to identify any questions for the Bidder or comments related to the perceived advantages or disadvantages of the solution.>>

>> 3. Tool to Combine Evaluators' Proposal Scores

The following tool would be developed and completed by the Procurement Team to average the scores of the evaluators, assign points to each question based on its weight, and calculate the overall Bidder score.

Bidder name: <<Insert Bidder name>>

DOMAIN OR SUB-DOMAIN	PROPOSAL QUESTION	EVALUATORS' SCORES		AVERAGE SCORE	%	WEIGHT OF THE QUESTION	SCORE ON THE QUESTION (AVERAGE/4 X WEIGHT)	
		EVALU- ATOR 1	EVALUA- TOR 2	ETC.				
1. Bidder profile		N/A	N/A	N/A				
2. Solution profile		N/A	N/A	N/A				
3. Services profile								
3.1 Approach	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.2 Config- uration and implementa- tion	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.3 Change management	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.4 < <others>></others>	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
4. Functional capabilities								
4.1.1 Registration							50 points	7 points (14%)
	55. How does your software enable us to efficiently register patients?							
	56. How does your soft- ware handle duplicate patients?	3	1	Etc.	2/4.	50%	10	5
	57. Etc.	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				Etc.

DOMAIN OR SUB-DOMAIN	PROPOSAL QUESTION	EVALUATORS' SCORES			AVERAGE SCORE	%	WEIGHT OF THE QUESTION	SCORE ON THE QUESTION (AVERAGE/4 X WEIGHT)
		EVALU- ATOR 1	EVALUA- TOR 2	ETC.				
4.1.2 Scheduling								
	58. How does your software enable us to schedule and manage appointments?							
	59. Etc.							
4.1.3 < <others>></others>	< the questions here>>							
5. Non- functional capabilities								
5.1 Perfor- mance and availability	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
5.2 Interoperability	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
< <others>></others>	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
6. Information-related capabilities								
6.1 Scope of information	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
6.2 Data analytics capabilities	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
< <others>></others>	< the questions here>>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
TOTAL							1000 points	7 points

>> 4. Evaluator's Tool for Scoring System Demonstrations and Bidder Interviews

The following tool could be completed by evaluators to document their review of the Bidders during the system demonstrations and Bidder interviews. This tool mirrors the sub-domains that the Purchaser identified in the *Detailed Technical Responsiveness Form* for the Detailed Bid and Evaluation Stage. While participating in the demo or Bidder interviews the evaluator assigns a score to the relevant sub-domain. For example, if the demo is intended to show the intake, assessment, and referral process, the demo will address a number of the sub-domains such as registration, scheduling, and referral. These will all be assessed individually.

Note that the example sub-domains included in the example mirror the sub-domains in *Appendix F: Detailed Technical Responsiveness Form* (see <u>Appendix F</u>) of this guide. The examples should be replaced with the actual sub-domains that the Purchaser includes in its Detailed Technical Responsiveness Form (see <u>Appendix F</u>).

Name: << Evaluator name>>

Bidder: <<Bidder name>>

Instructions: The Bidder will be asked to demonstrate their solution following a series of uses cases. The use cases are intended to demonstrate the solution's capabilities to support the sub-domains. For each sub-domain assign a score to the Bidder's response based on the following:

- O The Bidder was unable to demonstrate the core requirements.
- ⇒ 1 The Bidder demonstrated the core requirements but it was deficient.
- 2 The Bidder demonstrated an ability to meets the core requirements.
- ⇒ 3 The Bidder demonstrated an ability to exceed the core requirements (e.g., capturing the desirable requirements).
- → 4 The Bidder demonstrated an ability to significantly exceed the core requirements (e.g., offers a novel solution or far exceeds expectations).

Some of the sub-domains cannot be demonstrated and will instead involve a meeting with the Bidders. The same scoring methodology should be used for those subdomains.

Identify any questions you may have about the Bidder's offering that requires clarification. Also record any comments that will help clarify why you assigned the score that you did.

DOMAIN OR SUB-DOMAIN FROM TECHNICAL RESPONSIVENESS FORM	EVALUATOR'S SCORE (0 TO 4)	COMMENTS OR QUESTIONS
1 Bidder profile		
	N/A < <often an="" and="" as="" intended="" introduction="" is="" not="" scored="" the<br="" to="">Bidder so it can be rolled up (i.e., not list each question one by one). If scored, follow the usual methodology>></often>	< <evaluator any<br="" identity="" to="">relevant questions or comments here>></evaluator>
	N/A	
2. Solution profile		
	N/A < <often (i.e.,="" an="" and="" as="" be="" bidder="" by="" can="" each="" follow="" if="" intended="" introduction="" is="" it="" list="" methodology="" not="" one="" one).="" question="" rolled="" scored="" scored,="" so="" the="" to="" up="" usual="">></often>	< <questions comments="" or="">></questions>
3. Services profile		
3.1 Configuration and implementation	< <evaluator 0="" 4="" a="" assigns="" based="" of="" on="" score="" the<br="" to="" whether="">Bidder is able to adequately address the questions and provides clear evidence that it is able to meet the requirement>></evaluator>	< <questions comments="" or="">></questions>
3.2 Ongoing Support and Maintenance	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
3.3 Change management	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
3.3 Change management	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
3.4 Etc.	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
4. Functional capabilities		
4.1.1 Registration	< <evaluator 0="" 4="" a="" assigns="" based="" of="" on="" score="" the<br="" to="" whether="">Bidder is able to adequately demonstrate the solution's capabilities.>></evaluator>	< <questions comments="" or="">></questions>
4.1.2 Scheduling		
4.1.3 << Others>>	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
5. Non-functional capabilities		
5.1 Performance and availability	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
5.2 Interoperability	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
< <others>></others>	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>

DOMAIN OR SUB-DOMAIN FROM TECHNICAL RESPONSIVENESS FORM	EVALUATOR'S SCORE (0 TO 4)	COMMENTS OR QUESTIONS
6. Information- related capabilities		
6.1 Scope of information	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
6.2 Data analytics capabilities	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>
< <others>></others>	< <assign 0="" 4="" a="" of="" score="" to="">></assign>	< <questions comments="" or="">></questions>

General questions or comments: << Evaluator to identify any questions for the Bidder or comments related to the perceived advantages or disadvantages of the solution.>>

>> 5. Tool to Combine Evaluators' Scores on System Demonstrations and Bidder Interviews

The following tool would be developed and completed by the Procurement Team to average the scores of the evaluators, assign points to each question based on its weight, and calculate the overall Bidder score.

The domains and sub-domains below are examples that match the example from Appendix F: Detailed Technical Responsiveness Form in this guide. The domains and sub-domains in the Purchaser's document should match the Purchaser's own Detailed Technical Responsiveness Form.

Bidder name: <<Insert Bidder name>>

DOMAIN OR SUB-DOMAIN	EVALUATORS' SCORES			AVERAGE SCORE	%	WEIGHT OF THE SUB-DOMAIN	SCORE ON THE SUB-DOMAIN (AVERAGE/4 X WEIGHT)
	EVALU- ATOR 1	EVALUA- TOR 2	ETC.				
1. Bidder profile	N/A	N/A	N/A				
2. Solution profile	N/A	N/A	N/A				
3. Services profile							
3.1 Approach	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.2 Configuration and implementation	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.3 Change management	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
3.4 << Others >>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
4. Functional capabilities							
4.1.1 Registration	1.	3	Etc.	2	50 %	50 points	25 points
4.1.2 Scheduling							
4.1.3 << Others>>							
5. Non-functional capabilities							
5.1 Performance and availability	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
5.2 Interoperability	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
< <others>></others>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				

DOMAIN OR SUB-DOMAIN	EVALUATORS' SCORES		AVERAGE SCORE	%	WEIGHT OF THE SUB-DOMAIN	SCORE ON THE SUB-DOMAIN (AVERAGE/4 X WEIGHT)	
	EVALU- ATOR 1	EVALUA- TOR 2	ETC.				
6. Information-related capabilities							
6.1 Scope of information	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
6.2 Data analytics capabilities	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
< <others>></others>	<< 0 to 4>>	<< 0 to 4>>	<< 0 to 4>>				
TOTAL						1000 points	7 points

>> 6. Use Cases to Support System Demonstrations

System demonstrations should follow a structured process to ensure that the Bidder is demonstrating the functionality that the Purchaser is interested in viewing. The Procurement Team should create several use cases following a logical flow of the business processors that the Purchaser follows. The use cases should be developed in consultation with the clinicians and administrators and demonstrate both clinical and administrative functionality.

The following tool is an example use case that could be provided to Bidders, who would be required to follow it to complete their system demonstrations. It would also be provided to evaluators to help them know what to expect. Importantly, the use case also highlights which sub-domains from the *Technical Responsiveness Form* will be demonstrated during the use case. This will help the evaluators know which sub-domains they are expected to score.

Instructions to Bidders:

Four Bidders have been asked to demonstrate their solutions. Each of the four Bidders have received the same series of use cases that they are expected to follow when demonstrating the solution. Each of the use cases includes a series of steps that generally map against key sub-domains in the Technical Responsiveness Form from the bid documentation (e.g., registration, order entry, etc.). The Bidder should consider the requirements described in the bid documentation and the functionality that we are interested in viewing and demonstrate the capabilities of their solutions. After participating in the system demonstrations, the evaluators will assign a score to each of the sub-domains demonstrated in the use cases based on whether they feel:

- O The Bidder was unable to demonstrate the core requirements.
- ⇒ 1 The Bidder demonstrated the core requirements but it was deficient.
- 2 The Bidder demonstrated an ability to meets the core requirements.
- ⇒ 3 The Bidder demonstrated an ability to exceed the core requirements (e.g., capturing the desirable requirements).
- → 4 The Bidder demonstrated an ability to significantly exceed the core requirements (e.g., offers a novel solution or far exceeds expectations).

The scores will be averaged, converted into a percentage (e.g., 1 of 4 equals 25%), and multiplied by the weight of the sub-domain (e.g., 50 points for registration) to arrive at a score for that sub-domain (e.g., 16.5 points). Note that a sub-domain may be demonstrated across multiple use cases. The evaluator will be asked to assign an overall score to that sub-domain based on their impression of the solution's ability to meet the requirements.

Use case #1: Initial intake and assessment

Description: Linda Tavares is a 52-year-old woman and is a new patient at the health facility. She is generally healthy but has a family history of heart disease. The initial intake and assessment process should begin at registration, include an assessment and screening based on her age, sex, family history, and other relevant factors, involve creating orders for lab work and diagnostic imaging, and result in a referral to a cardiologist.

At a minimum the following should be demonstrated:

STEP	KEY FUNCTIONALITY OR SUB-PROCESSES TO BE DEMONSTRATED
1. Patient calls for an appointment	 Search for existing patient. Creation of a patient chart. Calendaring including multiple physicians. Etc.
2. Patient receives reminder	 Automatic reminders including information relevant to the appointment (e.g., bring your current meds). Recall list of next day appointments. Appointment rebooking. Etc.
3. Patient presents for the appointment	 Completion of patient registration. Flagging potential duplicates. Patient status (e.g., patient arrived, patient waiting). Ability to self-complete family and social history. Etc.
4. Nurse completes an intake interview and assessment	 Confirmation of family history, social history, and other relevant clinical information. Recording vitals, symptoms, and concerns. Structured data entry. Etc.
5. Physician completes examination and plan	 Confirmation of clinical information. Completion of the initial examination. Screening based on key risk factors. Etc.
6. Physician orders labs	 Creating the order. Templated lab orders based on physician preferences and patient demographics. Flagging inappropriate lab orders (e.g., attempt to order a PSA test for Linda). Etc.
7. Physician orders imaging	 Creating the order. Templated orders based on physician preferences. Etc.
8. Physician makes a referral	 Generating the referral. Referral to an internal and external provider. Etc.
9. Patient books a follow-up appointment	 Appointment created. Appointment blocks based on follow-up type. Etc.

Sub-domains demonstrated in this use case:

SUB-DOMAIN	WEIGHT
Registration	50 points
Scheduling	40 points
Clinical documentation	50 points
Screening	30 points
Order entry	15 points

Use case #X: <<insert name>>

Description: << Insert description>>

At a minimum the following should be demonstrated:

STEP	KEY FUNCTIONALITY TO BE DEMONSTRATED
1. < <insert step="">></insert>	< <insert be="" demonstrated="" functionality="" key="" to="">></insert>

Sub-domains demonstrated in this use case:

SUB-DOMAIN	WEIGHT
< <insert subdomain="">></insert>	< <insert criteria="" evaluation="" in="" map="" need="" the="" to="" weighting="" which="" will="">></insert>

Appendix E: High-Level Technical Responsiveness Form



Introduction to this Tool

This tool is a sample *High-Level Technical Responsiveness Form*. It is suitable for the initial stage.

If Bidders provide free-form proposals without guidance as to the structure or questions that the Purchaser wants answered, they will provide proposals following their own outlines and it can be very difficult to compare proposals. Instead, the Purchaser should require a structured proposal from the Bidders. The High-level Technical Responsiveness Form would include a list of questions that the Bidders are required to answer. This forms the core information of the Bidder's proposal, limits the amount of deviation in Bidders responses, and makes the work of the Evaluation Committee members much easier. Using a structured format is not required by IDB but is strongly recommended.

The High-Level Technical Responsiveness Form is based very closely on *Appendix B: Purchaser's Requirements Document*. The *Purchaser's Requirements Document* (See <u>Appendix B</u>) has a series of headings (i.e., domains) such as business requirements, functional requirements, and so forth which express the needs of the Purchaser. It will also have sub-headings (i.e., sub-domains) in each of those categories such as registration or interoperability.

The High-Level Technical Responsiveness Form will mirror those same headings and subheadings but instead of stating the needs, it will turn those needs into questions that the Bidder must answer. For example, if one of the sub-headings in the Purchaser's Requirements is "Registration" because the solution needs to support the registration process, the High-level Technical Responsiveness Form would have a corresponding sub-heading called registration and questions such as "how will your solution support registration?" or "how does your solution manage duplicate patients?".

In the Market Sounding Stage, the High-level Technical Responsiveness Form is likely to have broad questions because the focus is on learning what the market offers to help refine the Purchaser's requirements. In the Detailed Bid and Evaluation Stage, the form will need to be more detailed (See Appendix F: Detailed Technical Responsiveness Form for an example).

Note that the sections, format, and examples in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist or IDB Procurement Specialist.

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In addition to completing the required forms outlined in Section X.X on page X, the Bidder is required to complete the following Technical Responsiveness Form stating how it meets << Purchaser name>> needs.

The Bidder is required to complete the following form with comprehensive and complete responses. Unless otherwise requested below, the Purchaser will not review or consider supporting materials that do not appear in the table below. Similarly, referencing elsewhere in the response (e.g., "See Page XX of Section 2") or an attachment will be considered non-compliant, and the Purchaser in its sole discretion may disqualify the Bidder.

>> 1. Bidder Overview

Section contents

- This section can vary but should include general questions about the Bidder.
- Some of this information may overlap with other forms in the bid documentation in which case it does not need to be repeated below.
- During the Market Sounding Stage, this section will be high-level and is intended just to understand the Bidder. During the Detailed Bid and Evaluation Stage, the questions are likely to be more detailed.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See <u>Appendix B</u>):

N/A - It is not derived from the *Purchaser's Requirements Document* (See Appendix B) because they are intended simply to learn more about the Bidder.

As noted above, the sections below are merely examples. The Purchaser will need to customize them and add to them according to their needs.

>> 1.1 Company Profile(s)

The following must be completed for each company if the Bidder is a joint venture.

1. Provide an overview of your company. In your response, describe your industry focus, how large it is, where you have operations, whether you have an office in country, and other items that may help us understand your company better.

<< Insert response here>>

>> 1.2 Client Base

Complete the following for each Bidder.

2. Describe your typical client base (e.g., care setting, organization size, client type, etc.).

<< Insert response here>>

>> 2. Solution Profile

Section contents

- This section can vary but should include information about the solution itself.
- Some of this information may overlap with other forms in the bid documentation in which case it does not need to be repeated below.
- During the Market Sounding Stage, this section will be high-level and is intended just to understand the Bidder. During the Detailed Bid and Evaluation Stage, the questions are likely to be more detailed.

Changes from the High-Level to Detailed Technical Responsiveness Form

- Potentially requesting information about the project team.
- Much of the other content will be the same as the *High-Level Technical Responsiveness Form*.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See <u>Appendix B</u>).

- Section 4.2 in the *Purchaser's Requirements Document* (See Appendix B). However, for the Marketing Sounding Stage, the *Purchaser's Requirements Document* (See Appendix B) might be very high level. The requirements are likely to evolve after receiving the proposals in the Marketing Sounding Stage.
 - 3. Identify the modules and the business functionality that they support.

MODULE	BRIEF DESCRIPTION OF PURPOSE
< <add as="" required="" rows="">></add>	

4. Describe the types of devices including client hardware or peripherals (document scanners, bar codescanners, label printers, etc.).

<< Insert response here>>

>> 3. Mandatory Requirements

Section contents

This section should ask the Bidder to describe how their solution supports any mandatory requirements that the Purchaser has identified. Mandatory requirements are those requirements that will disqualify the bidder if they cannot meet them. They are pass or fail. One fail will result in the Bidder's disqualification. Therefore, there should be very few mandatory requirements (e.g., 4 or 5). These are likely to relate to non-functional requirements such as ability to interoperate, cloud-based architecture, and so forth.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

N/A – These will be derived from various areas of the *Purchaser's Requirements Document* (See <u>Appendix B</u>).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read.

- 5. Describe how your solution supports interoperability with other information systems.
 - <<Bidder to insert response here>>
- **6.** Describe how your solution will continue to function and sync if the facility loses connectivity.
 - <<Bidder to insert response here>>

>> 4. Functional Capabilities

Section contents

- This section should ask the Bidder to describe how their solution supports the business functions and processes that the Purchaser needs the solution to support.
- During the Market Sounding Stage, the questions are likely to be high-level. When the Purchaser enters the Detailed Bid and Evaluation Stage, many of the questions will be repeated but there is also an opportunity to ask for more detail.
- The purpose of this section is to get a good overview of the solution. During the Market Sounding Stage, it is unlikely to be ranked.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

- Section 5 of the Purchaser's Requirements Document (See Appendix B).
 - ▶ If you compare the example headings and questions below, you will notice how they match the headings in Section 5 of the *Purchaser's Requirements Document* (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read.

>> 4.1 Communicating with Patients

>> 4.1.1 Pre-appointment

Refer to Section 5.1.1.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

7. Describe how your solution supports patients managing their own appointments including completing pre-appointment forms and documentation.

<< Insert response here>>

>> 4.1.2 Electronic Consultation

Refer to Section 5.1.1.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

8. Describe how your solution supports virtual consultations and remote monitoring.

<<Insert response here>>

>> 4.1.3 Symptom Reporting

Refer to Section 5.1.1.3 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

9. Describe how your solution allows a patient to report symptoms.

<<Insert response here>>

>> 4.1.4 Record Access

Refer to Section 5.1.1.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

10. Describe how your solution allows a patient to access their own information.

<<Insert response here>>

>> 4.2 Intake

>> 4.2.1 Registration

Refer to Section 5.1.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

11. Describe how your solution supports HSP registering patients. In your response, describe how the solution supports managing patient records such as merging records and so forth.

<< Insert response here>>

>> 4.2.2 Scheduling

Refer to Section 5.1.2.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

12. Describe how your solution meets HSP's scheduling requirements.

<< Insert response here>>

>> 4.3 Care Delivery

>> 4.3.1 Clinical Documentation

Refer to Section 5.1.3.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

13. Describe how your solution supports clinical documentation. In your response, discuss how it supports multiple settings (e.g., in-patient, outpatient).

<< Insert response here>>

>> 4.3.2 Order Entry

Refer to Section 5.1.3.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

14. Describe how your solution meets HSP's order entry requirements.

<< Insert response here>>

>> 4.4 Discharge

>> 4.4.1 Discharge Planning

Refer to Section 5.1.4.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

15. Describe how your solution supports discharge planning.

<< Insert response here>>

>> 4.5 Administration

>> 4.5.1 Patient Flow Management

Refer to Section 5.1.5.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

16. Describe how you solution supports managing patient flow in inpatient and outpatient settings.

<<Insert response here>>

>> 4.5.2 Task Management

Refer to Section 5.1.5.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

17. Describe how your solution enables staff to assign and manage tasks and workflow.

<<Insert response here>>

>> 5. Non-functional Capabilities

Section contents

- This section should ask the Bidder to describe how their solution supports the non-functional requirements that the Purchaser needs the solution to support.
- ⇒ As with other sections in the High-level Technical Responsiveness Form, the non-functional requirements are likely to be quite high-level with an opportunity to ask more detailed questions in later phases.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

- Section 5.2 of the Purchaser's Requirements Document (See Appendix B).
 - ▶ If you compare the example headings and questions below, you will notice how they match the headings in Section 5.2 of the *Purchaser's Requirements Document* (see <u>Appendix B</u>).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read.

>> 5.1 Architecture

Refer to Section 5.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

18. Describe the recommended system and network architecture of the proposed solution.

<< Insert response here>> Appending a conceptual or logical data diagram is acceptable.>>

>> 5.2 Performance

>> 5.2.1 Availability and Responsiveness

Refer to Section 5.2.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

19. Describe how the architecture supports HSP's availability and performance requirements. In your response, also discuss use of redundant components, mirroring, clustering, fail-over, load balancing, and so forth. Identify any components that are a single point of failure.

<< Insert response here>>

>> 5.2.2 Disaster Recovery

Refer to Section 5.2.2.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

20. Describe generally how your solution is architected to meet HSP's disaster recovery requirements.

```
<< Insert response here>>
```

21. Describe your disaster procedures.

```
<< Insert response here>>
```

>> 5.3 Interoperability

Refer to Section 5.2.3 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

22. Describe generally how your solution supports HSP's interoperability requirements.

```
<< Insert response here>>
```

23. Describe your approach to configuring / developing and testing integrations.

```
<<Insert response here>>
```

24. List the semantic, messaging, coding, and other standards that your solution supports for interoperability. In your response, map the standard against the relevant domain (e.g., labs would include LOINC, etc.).

```
<< Insert response here>>
```

>> 5.4 User Interface

Refer to Section 5.2.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

25. Describe the features available to support an end-user customizing the interface to their needs.

```
<< Insert response here>>
```

>> 5.5 Privacy (Solution)

Refer to Section 5.2.6 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

26. Describe how your solution supports ensuring the privacy of our patients.

<< Insert response here>>

>> 5.6 Security (Solution)

Refer to Section 5.2.7 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

27. Describe how your solution is architecture to protect the security of our patient information.

<< Insert response here>>

28. Describe the security program you have in place. List any standards that your program meets.

<< Insert response here>>

>> 6. Service Offerings

Section contents

- This section should ask the Bidder to describe which services they provide and how they provide them.
- This is an important section to help the Purchaser understand what the Bidder would provide but also what the Purchaser would need to do.
- ⇒ For the Market Sounding Stage, it can be high-level but for the Detailed Bid and Evaluation Stage it should be more detailed, including identifying in more detail what the Purchaser will be responsible for during the initiative.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

Section 5 and 6 of the *Purchaser's Requirements Document* (See <u>Appendix B</u>).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read.

>> 6.1 General Requirements

Refer to Section 6.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 29. Describe the high-level project approach (e.g., phasing, big bang versus staged rollout, etc.) that you would take for this initiative.
 - << Insert response here>> The Bidder may append a high-level charter, work plan, Gantt chart, or other supporting documentation.>>

>> 6.2 Installation and Configuration

Refer to Section 6.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- **30.** Describe your approach installation and configuration approach. In your response distinguish between installation and configuration in the data center (i.e., the global instance) and installation and configuration in a health facility.
 - <<Insert response here>> The Bidder may append a work plan, Gantt chart, or other supporting documentation.>>

Data Migration

31. Describe your approach to data migration. In your response discuss how you will source and target data sets, perform the migration, and test the migration.

<<Insert response here>>

Testing

32. Describe your testing strategy. In your response, describe the entire testing process (e.g., smoke testing the installation, end-to-end testing, performance testing, security testing).

<< Insert response here>>

>> 6.3 Implementation and Post-Deployment

Refer to Section 6.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

Implementation

- 33. Describe at a high-level your implementation and post-deployment approach.
 - <<Insert response here>> The Bidder may append a work plan, Gantt chart, or other supporting documentation.>>

- **34.** Describe your training approach. In your response, describe how you plan and deliver training as well as the training materials that are provided.
 - <<Insert response here>>
- **35.** Describe your experience integrating change management in technological and non-technological projects. The work could have been provided by your staff or in collaboration with others. In your response, summarize the scope, general approach and key products delivered in the more relevant projects.
 - <<Insert response here>>
- **36.** Provide the bios and brief resumes of the change management personnel that will be assigned to this project.
 - <<Insert response here>>
- 37. Describe your solution configuration approach. In your response, describe how you confirm requirements at each health facility, configure the solution, and document the configuration.
 - <<Insert response here>>
- **38.** Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities during the implementation process.

Activity	Supplier's Responsibilities	Purchaser's Responsibilities
e.g., Training	 E.g., Developing training materials 	→ E.g., Reviewing and approving training materials

Go-live and post-deployment

- **39.** Describe the onsite support that you will provide during go-live and the period immediately thereafter. In your response, identify the number of resources that will be onsite for go-live in each facility, the duration, the hours, and so forth.
 - << Insert response here>>
- **40.** Describe the onsite support that you will provide during the stabilization period. In your response, identify the number of resources that will be onsite for go-live in each facility, the duration, the hours, and so forth.
 - <<Insert response here>>

>> 6.4 Ongoing Services

Refer to Section 6.5 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

41. Describe the preventative and corrective maintenance activities that you will provide after operational acceptance. In your response, identify any standards that you meet.

<<Insert response here>>

>> 7. Information Capabilities

Section contents

This section should ask the Bidder to describe how their solution supports the information requirements such as information captured, reporting and analytics capabilities, and so forth.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

- The questions about how the solution supports the information requirements below should draw on the business processes and system stakeholders' needs outlined in Section 7 of the *Purchaser's Requirements Document* (See Appendix B).
- If you compare the example headings and questions below, you will notice how they match the high-level headings in Section 7 of the *Purchaser's Requirements Document* (see <u>Appendix B</u>).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise.

>> 7.1 Reports

Refers to Section 7.2 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

42. Describe the reporting functionality that your solution provides. In your response describe the types of reporting tools available (e.g., dashboards, extract tools) and how users are able to manage them (e.g., creating own dashboards, etc.).

<< Insert response here>>

>> 7.2 Data Standards

Refers to Section 7.4 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

43. List the data standards that the solution uses and in which modules they are used.

<<Insert response here>>

>> 8. Licensing Model

Section contents

- This section should ask the Bidder about the licensing model for their product.
- This will be much more detailed in the Detailed Technical Responsiveness Form, where it will also include costing information to better understand the cost of the solution as well as scaling.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B).

⇒ N/A.

The Bidder should provide clear and detailed responses to the questions below. The following information is to support calculating the total cost of ownership, which is the basis for the financial evaluation.

>> 8.1.1 Licensing

44. Describe the licensing model for your solution. In your response identify the types of licenses (e.g., per user seats, per site, etc.) and a brief description of the rights conferred through the license (e.g., transferable, includes major upgrades, etc.).

<< Insert response here>>

Appendix F: Detailed Technical Responsiveness Form



Introduction to this Tool

This tool is a sample Detailed Technical Responsiveness Form. It is more detailed than *High-level Technical Responsiveness Form* (See Appendix E) and is suitable for the Detailed Bid and Evaluation Stage.

If Bidders provide free-form proposals without quidance as to the structure or questions that the Purchaser wants answered, they will provide proposals following their own outlines and it is very difficult to compare proposals. Instead, the Purchaser should use a structured proposal form that the Bidders must complete. The Detailed Technical Responsiveness Form would include a list of questions that the Bidders are required to answer. This forms the core information of the Bidder's proposal, limits the amount of deviation in Bidders responses, and makes the work of the Evaluation Committee members much easier. Using a structure format is not required by IDB but is strongly recommended.

During the Market Sounding Stage, the form was quite high-level. The Purchaser can start with that form but will likely need to make it more detailed and adjust to address any new or modified requirements in *Purchaser's Requirements Document* (See Appendix B). More specifically, the differences between the document during the Market Sounding Stage and the Detailed Bid and Evaluation Stage include the following:

1) After the Market Sounding Stage, the Purchaser has an opportunity to refine the

Purchaser's Requirements Document (see Appendix B) based on what it learned from the proposals. The Technical Responsiveness Form will be changed from high-level to more detailed and edited to reflect any changes in the requirements. For example, if the Purchaser finds that the solutions have unexpected features based on the proposals, those features may be added as requirements and the Detailed Technical Responsiveness Form would need to have questions added to ask about those features as well.

- Questions in the Market Sounding Stage are high-level such as "how does your solution support orders?" In the Detailed Bid and Evaluation Stage, the Purchaser may want to probe in more detail on those areas and include more detailed questions such as "how does your solution support managing the order workflow (e.g., order made, order received, order filled)?" and "how does your solution check the appropriateness of an order based on the diagnosis?"
- 3) The Detailed Technical Responsiveness Form copies the core and desirable requirements from the *Purchaser's Requirements Document* (See Appendix B) to provide the Bidders with more guidance about what they should address in their proposals.

Note that the sections, format, and examples in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the IDB Health Specialist or IDB Procurement Specialist.

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In addition to completing the required forms outlined in Section IV: Bidding Forms, the Bidder is required to complete the following Technical Responsiveness Form, stating how it meets << Purchaser name >> needs.

The Bidder is required to complete the following form with comprehensive and complete responses. Unless otherwise requested below, the Purchaser will not review or consider supporting materials that do not appear in the table below. Similarly, referencing elsewhere in the response (e.g., "See Page XX of Section 2") or an attachment will be considered non-compliant, and the Purchaser in its sole discretion may disqualify the Bidder.

>> 1. Bidder Overview

Section contents

- This section can vary but should include general questions about the Bidder and their team.
- Some of this information may overlap with other forms in the bid documentation, in which case it does not need to be repeated below.
- This section is generally not scored because it is for informational purposes, to understand more about the Bidder. If there are particular requirements that need to be met with respect to the Bidder's profile (e.g., a certain size of workforce), these could be included instead in 5 Non-Functional Capabilities or scores could be added to this section.

Changes from the High-Level to the Detailed Technical Responsiveness Form

- Potentially requesting information about the project team.
- Much of the other content will be the same as the *High-Level Technical Responsiveness Form*.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See <u>Appendix B</u>):

N/A - It is not derived from the *Purchaser's Requirements Document* (see Appendix B) because they are intended simply to learn more about the Bidder.

As noted above, the sections below are merely examples. The Purchaser will need to customize them and add to them according to their needs.

>> 1.1 Company Profile(s)

The following must be completed for each company if the Bidder is a joint venture.

1. When did your company initiate operations in the health information technology field? <<Insert response here>> 2. What is your company's industry focus? << Insert response here>> 3. How many fulltime staff does your company employ? << Insert response here>> 4. How many full-time staff did your company employ last year at this time? << Insert response here>> 5. How many full-time staff are currently dedicated to supporting the product? << Insert response here>> 6. How many full-time staff are currently dedicated to enhancing the product? << Insert response here>> 7. What percentage of these staff have been employed for more than 12 months? << Insert response here>> 8. Do you have an office in <<country of operation>>? If so, how many staff are located in <country of operation>> and generally what are their roles? << Insert response here>> 9. List the other countries in which you have offices serving the healthcare sector. << Insert response here>>

10. Provide resumes of key staff members that will be assigned to this initiative.

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<< Insert response here>>

>> 1.2 Client Base

Complete the following for each Bidder.

- 11. How many users use this product worldwide?
 - <<Insert response here>>
- 12. How many clients have deployed this product?
 - <<Insert response here>>
- 13. Describe your typical client (e.g., hospital vs primary care, beds, private vs. public, multi-site vs. single site, etc.), inpatient/outpatient/primary care, etc.
 - <<Insert response here>>
- 14. Do you have any clients in the Caribbean Region? If so, where?
 - <<Insert response here>>

>> 2. Solution Profile

Section contents

- This section can vary but should include general questions about the solution the Bidder provides.
- This section is generally not scored because it is for informational purposes to understand the technical architecture. If there are particular requirements that need to be met, these could be included instead in 5 Non-Functional Capabilities or scores could be added to this section.

Changes from the High-Level to Detailed Technical Responsiveness Form

- Potentially requesting information about the project team.
- Much of the other content will be the same as the *High-Level Technical Responsiveness Form*.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

Section 4.2 in the *Purchaser's Requirements Document* (see <u>Appendix B</u>).

>> 2.1 Required Modules

15. Identify the modules of your product that are required to meet the full scope of requirements defined in this bid documentation.

MODULE	VERSION	YEAR FIRST SOLD	BRIEF DESCRIPTION OF PURPOSE	VENDOR (I.E., WHICH OF THE BIDDERS PROVIDES THIS SOFTWARE)
< <add as="" required="" rows="">></add>				

>> 2.2 Required Third-Party Software

16. Identify any third-party software required to meet the full scope of requirements described in this bid documentation.

MODULE	VERSION	YEAR FIRST SOLD	BRIEF DESCRIPTION OF PURPOSE	VENDOR
< <add as="" required="" rows="">></add>				

>> 2.3 Optional Modules

17. List any modules that are not required to meet the full scope of this software (i.e., are optional) but may enhance functionality or system use.

MODULE	VERSION	YEAR FIRST SOLD	BRIEF DESCRIPTION OF PURPOSE	VENDOR
< <add as="" required="" rows="">></add>				

>> 2.4 Devices

18. Describe the basic technical specifications of devices including client hardware or peripherals (document scanners, bar code scanners, label printers, etc.).

DEVICE	PURPOSE (IF NOT OBVIOUS)	SPECIFICATIONS
(e.g., end-user devices)		
(e.g., Laptop)	(e.g., Data entry at point of service)	
(e.g., tablet)	(e.g., Data entry at point of service)	
(e.g., medical devices)		
(e.g., ECG)	(e.g., as stated)	
(e.g., peripherals)		
(e.g., label printer)	(e.g., print barcodes for vials)	

>> 2.5 Sourcing

QUESTION	RESPONSE
1) Which of the above third-party software are you able to supply? Are we required to purchase it from you?	
2) Which of the above hardware are you able to supply? Are we required to purchase it from you?	
3)	

>> 3. Mandatory Requirements

Section contents

This section should ask the Bidder to describe how their solution supports any mandatory requirements that the Purchaser has identified. Mandatory requirements are those requirements that will disqualify the bidder if they cannot meet them. They are pass or fail. One fail will result in the Bidder's disqualification. Therefore, there should be very few mandatory requirements (e.g., 4 or 5). These will likely relate to non-functional requirements such ability to interoperate, cloud-based architecture, and so forth.

Changes from the High-Level to Detailed Technical Responsiveness Form

These are likely to repeat the questions in the High-Level Technical Responsiveness Form because the Purchaser cannot disqualify Bidders after the Marketing Sounding Stage based on mandatory requirements that the Purchaser later eases.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

N/A – These will be derived from various areas of the *Purchaser's Requirements Document* (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read, and will result in zero being assigned.

- 19. Describe how your solution supports interoperability with other information systems.
 - <<Bidder to insert response here>>
- **20.** Describe how your solution will continue to function and sync if the facility loses connectivity.
 - <<Bidder to insert response here>>

>> 4. Functional Capabilities

Section contents

This section should ask the Bidder to describe how their solution supports the business functions and processes that the Purchaser needs the solution to support.

Changes from the High-Level to Detailed Technical Responsiveness Form

- Many of the questions will be the same as the High-Level Technical Responsiveness Form. Even though they are the same, they need to be repeated in the Detailed Technical Responsiveness Form because it will form the basis of negotiation and be appended to the contract.
- In addition to the repeated questions from the high-level form, the more detailed form will have additional and more detailed questions to dig deeper into the Bidders' capabilities.
- Similarly, the previous stage was an opportunity do market sounding. That may drive out changes in the requirements which would need to be reflected here.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

- \bigcirc Section 5 of the Purchaser's Requirements Document (see Appendix B).
 - ▶ If you compare the example headings and questions below, you will notice how they match the headings in Section 5 of the *Purchaser's Requirements Document* (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read, and will result in zero being assigned.

>> 4.1 Communicating with Patients

>> 4.1.1 Pre-appointment

Refer to Section 5.1.1.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 21. Describe how your solution supports patients managing their own appointments, including completing pre-appointment forms and documentation.
 - << Insert response here.>>
- 22. Describe how your solution supports a patient completing electronic forms prior to presenting at the clinic.
 - << Insert response here.>>

>> 4.1.2 Electronic Consultation

Refer to Section 5.1.1.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

23. Describe how your solution supports virtual consultations and remote monitoring.

```
<< Insert response here.>>
```

24. Describe the communication channels that your system supports (i.e., messaging, video calling).

```
<< Insert response here.>>
```

>> 4.1.3 Symptom Reporting

Refer to Section 5.1.1.3 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

25. Describe how your solution allows a patient to report symptoms.

```
<< Insert response here.>>
```

26. Describe how your solution provides patients with education and feedback based on the symptoms they report.

```
<< Insert response here.>>
```

>> 4.1.4 Record Access

Refer to Section 5.1.1.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

27. Describe how your solution allows a patient to access their own information.

```
<< Insert response here.>>
```

28. List the fields that are viewable in a patient's limited view of the record.

```
<< Insert response here.>>
```

>> 4.2 Intake

>> 4.2.1 Registration

Refer to Section 5.1.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

29. Describe how your solution supports HSP registering patients. In your response, describe how the solution supports managing patient records such as merging records and so forth.

```
<< Insert response here.>>
```

30. List the fields that are recorded for a patient's demographic information.

```
<< Insert response here.>>
```

>> 4.2.2 Scheduling

Refer to Section 5.1.2.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

31. Describe how your solution meets HSP's scheduling requirements.

```
<< Insert response here.>>
```

32. Describe how your solution allows users to view electronic forms that patients have completed.

```
<< Insert response here.>>
```

>> 4.3 Care Delivery

>> 4.3.1 Clinical Documentation

Refer to Section 5.1.3.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

33. Describe how your solution supports clinical documentation. In your response, discuss how it supports multiple settings (e.g., in-patient, outpatient).

```
<< Insert response here.>>
```

34. Describe how your solution enables users to customize documentation templates.

```
<< Insert response here.>>
```

>> 4.3.2 Order Entry

Refer to Section 5.1.3.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

35. Describe how your solution meets HSP's order entry requirements.

```
<< Insert response here.>>
```

36. Describe how your solution enables order status tracking.

```
<< Insert response here.>>
```

>> 4.4 Discharge

>> 4.4.1 Discharge Planning

Refer to Section 5.1.4.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

37. Describe how your solution supports discharge planning.

```
<< Insert response here.>>
```

38. Describe how your solution enables interdisciplinary care coordination.

```
<< Insert response here.>>
```

>> 4.5 Administration

>> 4.5.1 Patient Flow Management

Refer to Section 5.1.5.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

39. Describe how you solution supports managing patient flow in inpatient and outpatient settings.

```
<< Insert response here.>>
```

40. Describe how your solution supports queue management.

```
<< Insert response here.>>
```

>> 4.5.2 Task Management

Refer to Section 5.1.5.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 41. Describe how your solution enables staff to assign and manage tasks and workflow.
 - << Insert response here.>>
- **42.** Describe how your solution enables task reminders and notifications for healthcare providers.
 - << Insert response here.>>

>> 5. Non-functional Capabilities

Section contents

This section should ask the Bidder to describe how their solution supports the non-functional requirements that the Purchaser needs the solution to support.

Changes from the High-Level to Detailed Technical Responsiveness Form

- The Detailed Technical Responsiveness Form is likely to have much more detailed or focused questions than the high-level one. It should probe on key areas that the Purchaser is interested in. For example, in the Market Sounding Stage the interoperability question may have been quite high-level. In the Detailed Bid and Evaluation Stage, the question is likely to require more detail about the standards used, how interoperability with other systems is achieved, whether interoperability is achieved through low code or requires significant development work and so forth.
- Similarly, the previous stage was an opportunity do market sounding. That may drive out changes in the non-functional requirements which would need to be reflected here.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

- Section 5.2 of the Purchaser's Requirements Document (see Appendix B).
 - ▶ If you compare the example headings and questions below, you will notice how they match the high-level headings in Section 5.2 of the *Purchaser's Requirements Document* (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read, and will result in zero being assigned.

>> 5.1 Architecture

Refer to Section 5.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- **43.** Describe the recommended system and network architecture of the proposed solution. If your solution is SaaS, describe the existing system and network architecture. In your response, distinguish as necessary between the development, testing, staging, training, and production environments and address the following:
 - Database and application platforms, and operating systems.
 - Overall system architecture, including database, application, interface and presentation system components.
 - Design considerations for high transaction volumes and performance.
 - << Insert response here. Appending a conceptual or logical data diagram is acceptable.>>
- **44.** Describe how your solution integrates with the various modules / components (e.g., single database, HL7 interfaces, integration layer, etc.)
 - << Insert response here.>>
- **45.** Describe the storage architecture.
 - << Insert response here.>>
- **46.** Describe the recommended server and storage hardware for your proposed solution, keeping in mind the load requirements described in Section 5.2.2.1 of the Purchaser's Requirements (i.e., users, client records, etc.). In your response, distinguish between the production, testing, training, and disaster recovery environments.
- f your solution is SAAS, describe instead your solution architecture below

Include any server hardware that must be added incrementally at each phase to accommodate additional software modules or users (if relevant).

SERVER (OR PURPOSE)	SPECIFICATIONS
Production environment	
(e.g., Web Server)	
(e.g., Load balancing)	

47	Describe ho	λν/ \/OLIr	svstam	ic	architected	to.	work in	offline	mode
47.		JVV VOUI	SVSLEIII	15	architected	L()	VVOIR	OHILLE	HIOUE.

<< Insert response here.>>

>> 5.2 Performance

>> 5.2.1 Availability and Responsiveness

Refer to Section 5.2.2.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

48. Describe how the architecture supports HSP's availability and performance requirements. In your response, also discuss use of redundant components, mirroring, clustering, fail-over, load balancing, and so forth, identify any components that are a single point of failure.

```
<< Insert response here.>>
```

49. Discuss your solution's ability to meet HSP's availability requirements. In your response, list any assumptions (e.g., minimum hardware specifications) that HSP must meet.

```
<< Insert response here.>>
```

50. Discuss your solution's ability to meet HSP's performance requirements. In your response, list any assumptions (e.g., minimum hardware specifications) that HSP must meet.

```
<< Insert response here.>>
```

>> 5.2.2 Disaster Recover

Refer to Section 5.2.2.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

51. Describe generally how your solution is architected to meet HSP's disaster recovery requirements.

```
<< Insert response here.>>
```

52. How does your solution prevent data loss in the event of system failure?

```
<< Insert response here.>>
```

53. Describe your disaster recovery targets.

```
<< Insert response here.>>
```

54. Describe your disaster procedures.

```
<< Insert response here.>>
```

>> 5.3 Interoperability

Refer to Section 5.2.3 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 55. Describe generally how your solution supports HSP's interoperability requirements.
 - << Insert response here.>>
- **56.** Describe your approach to configuring / developing and testing integrations.
 - << Insert response here.>>
- **57.** List the semantic, messaging, coding, and other standards that your solution supports for interoperability. In your response, map the standard against the relevant domain (e.g., labs would include LOINC, etc.).
 - << Insert response here.>>

>> 5.4 User Interface

Refer to Section 5.2.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 58. Describe how your solution meets HSP's user interface requirements.
 - << Insert response here.>>
- **59.** Describe the features available to support an end-user customizing the interface to their needs.
 - << Insert response here.>>

>> 5.5 General Project Requirements

>> 5.5.1 Licensing and Payment

Refer to Section 5.2.5.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- **60.** Review the general licensing and payment requirements and confirm your willingness to accept them or identify alternative terms that are similar or better.
 - << Insert response here.>>

>> 5.5.2 Termination

Refer to Section 5.2.5.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

61. Review the termination requirements and confirm your willingness to accept them or identify alternative terms that are similar or better.

<< Insert response here.>>

>> 5.5.3 Privacy (Contractual)

Refer to Section 5.2.5.3 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

62. Review the general privacy requirements and confirm your willingness to accept them or identify alternative terms that are similar or better.

<< Insert response here.>>

>> 5.5.4 Security (Contractual)

Refer to Section 5.2.5.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

63. Review the general security requirements and confirm your willingness to accept them or identify alternative terms that are similar or better.

<< Insert response here.>>

>> 5.6 Privacy (Solution)

Refer to Section 5.2.6 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

64. Describe how your solution supports ensuring the privacy of our patients.

<< Insert response here.>>

65. Describe the privacy program you have in place.

<< Insert response here.>>

>> 5.7 Security (Solution)

Refer to Section 5.2.7 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- **66.** Describe how your solution is architecture to protect the security of our patient information.
 - << Insert response here.>>
- **67.** Describe the security program you have in place. List any standards that your program meets.
 - << Insert response here.>>
- **68.** Describe the type, process, and frequency with which you conduct security testing on your software and hosting environment.
 - << Insert response here. The Bidder may append documentation such as results audit or third-party assessments confirming compliance with known security standards.>>>
- **69.** Describe the approach and frequency with which you conduct security program reviews or audits.
 - << Insert response here. The Bidder may append documentation such as results audit or third-party assessments confirming compliance with known security standards.>>

>> 6. Service Offerings

Section contents

- This section should ask the Bidder to describe which services they provide and how they provide them. This is an important section in the Detailed Technical Responsiveness Form because it will be used as the basis for negotiation and / or the roles and responsibilities chart in the contract.
- It will also be important in this section to confirm what services the Purchaser will be responsible for delivering. For example, many Bidders will propose a train-the-trainer model of training. The Bidder will train the Purchaser's staff, who will in turn train the end-user. This section should ask for clarity around what services the Bidder will provide and what services the Purchaser will need to do itself.

Changes from the High-Level to Detailed Technical Responsiveness Form

- Much more detailed questions and responses should be requested in the detailed form. This section should include RACI charts to clearly identify who is responsible for what (e.g., Is implementing software just installing it? Does it include configuring it? Does it include adding all of the users?), deliverables lists to understand exactly what the Bidder is offering (e.g., are training materials electronic or on paper?), and acceptance criteria (e.g., is go-live when the software is installed, after the first person uses it, or after a remediation period)?
- ⇒ Similarly, the Market Sounding Stage may drive out changes in the service requirements which would need to be reflected here.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

Section 5 and 6 of the Purchaser's Requirements Document (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read, and will result in zero being assigned.

>> 6.1 General Requirements

Refer to Section 6.1 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- 70. Describe the high-level project approach (e.g., phasing, big bang versus staged rollout, etc.) that you would take for this initiative.
 - <<Insert response here. The Bidder may append a high-level charter, work plan, Gantt chart, or other supporting documentation.>>
- 71. Describe your project management approach for this initiative. In your response, describe how you will manage the project scope and constraints, and any other project management processes (e.g., risk management) that you would employ.
 - <<Insert response here. The Bidder may append documentation such as a project management plan.>>
- 72. Describe your project reporting mechanisms.
 - << Insert response here. The Bidder may append documentation such as examples of reports or agendas for bi-weekly status meetings.>>

>> 6.2 Installation and Configuration

Refer to Section 6.2 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

Data Center

- 73. Describe your approach to installing and configuration the solution in the data center. In your response, describe the steps that you will take to install and test the software and third-party software, confirm the configuration with HSP, and configure and test the software.
 - <<Insert response here. The Bidder may append a work plan, Gantt chart, or other supporting documentation.>>

74. Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities for installation and configuration in the data center.

ACTIVITY	ACTIVITY SUPPLIER'S RESPONSIBILITIES PURCHASER'S RESPONSIBILI		
e.g., Software installation	 E.g., Initiating installation package, configuring third-party software). 	E.g., Providing access to the data center.	
	÷	→	

Health Facilities

- 75. Describe your approach to installing and configuration the solution in each health facility. In your response, describe the steps that you will take to install and test the software and third-party software, confirm the configuration with the health facility, and configure and test the software.
 - <<Insert response here. The Bidder may append a work plan, Gantt chart, or other supporting documentation.>>
- **76.** Describe your approach to gathering end-user requirements to ensure the solution is appropriately configured to meet the **health facilities**' needs.
 - << Insert response here. The Bidder may append a work plan, configuration workbook, or other supporting documentation.>>
- 77. Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities for installation and configuration in the **health facilities**.

ACTIVITY	SUPPLIER'S RESPONSIBILITIES	PURCHASER'S RESPONSIBILITIES
e.g., Software installation	 E.g., Initiating installation package, configuring third-party software). 	E.g., Putting end-user devices in place.
	÷	→

Data Migration

- **78.** Describe your approach to data migration. In your response discuss how you will source and target data sets, perform the migration, and test the migration.
 - <<Insert response here.>>
- 79. Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities for data migration.

ACTIVITY	CTIVITY SUPPLIER'S RESPONSIBILITIES PURCHASER'S RESPONSIBILIT		
e.g., Software installation	 E.g., Initiating installation package, configuring third-party software). 	E.g., Putting end-user devices in place.	
	÷	÷	

Testing

- **80.** Describe your testing strategy. In your response, describe the entire testing process (e.g., smoke testing the installation, end-to-end testing, performance testing, security testing).
 - << Insert response here.>>
- 81. Describe how you will support HSP conduct acceptance testing and make a go-no go decision about go-live for each health facility.
 - << Insert response here.>>

Milestones, deliverables, and acceptance criteria

- **82.** Describe any other key deliverables or supports that will be provided during the installation and configuration phase (e.g., training materials, system documentation, configuration documentation, etc.
 - << Insert response here.>>
- 83. Describe the key milestones and deliverables from the above and propose appropriate acceptance criteria for each. At a minimum, the table must identify software installed, proposed configuration documented, software configured, and go-live. It should also include other project deliverables such as the project plan, the project management plan, technical architecture documentation, training materials and so forth.

DELIVERABLE / MILESTONE	PROPOSED ACCEPTANCE CRITERIA		
e.g., Software installation	E.g., Smoke test completed, 100% of tests passed, End-to-end test report provided and approved, etc.		
	÷		

Standards

84. Identify any standards that that you meet with respect to your installation and configuration services.

<< Insert response here.>>

>> 6.3 Implementation and Post-Deployment

Refer to Section 6.4 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

Implementation

- 85. Describe at a high-level your implementation and post-deployment approach.
 - << Insert response here. The Bidder may append a work plan, Gantt chart, or other supporting documentation.>>
- **86.** Describe your training approach. In your response, describe how you plan and deliver training as well as the training materials that are provided.
 - << Insert response here.>>
- 87. Describe your experience integrating change management in technological and non-technological projects. The work could have been provided by your staff or in collaboration with others. In your response, summarize the scope, general approach and key products delivered in the more relevant projects.
 - << Insert response here.>>
- **88.** Provide the bios and brief resumes of the change management personnel that will be assigned to this project.
 - << Insert response here.>>
- **89.** Describe your solution configuration approach. In your response, describe how you confirm requirements at each health facility, configure the solution, and document the configuration.
 - << Insert response here.>>
- **90.** Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities during the implementation process.

ACTIVITY	SUPPLIER'S RESPONSIBILITIES	PURCHASER'S RESPONSIBILITIES
e.g., Training	E.g., Developing training materials.	 E.g., Reviewing and approving training materials.
	÷	÷

Go-live and post-deployment

- 91. Describe your approach for testing the solution deployment in each health facility. In your response, describe the testing process and how you will support HSP in acceptance testing prior to making a go-no go decision for go-live.
 - << Insert response here.>>
- **92.** Describe the onsite support that you will provide during go-live and the period immediately thereafter. In your response, identify the number of resources that will be onsite for go-live in each facility, the duration, the hours, and so forth.
 - << Insert response here.>>
- 93. Describe the onsite support that you will provide during the stabilization period. In your response, identify the number of resources that will be onsite for go-live in each facility, the duration, the hours, and so forth.
 - << Insert response here.>>
- 94. In consideration of how operational acceptance is defined in the requirements, describe how you propose operational acceptance (i.e., the end of the stabilization period) be triggered in each of the health facilities (e.g., the longer of 3 months or 168 hours since a high severity issue being reported).
 - << Insert response here.>>
- **95.** Complete the following table that describes specifically the Bidder's responsibilities and HSP's responsibilities during the go-live and post-deployment process (i.e., prior to operational acceptance).

ACTIVITY	SUPPLIER'S RESPONSIBILITIES	PURCHASER'S RESPONSIBILITIES	
e.g., Onsite go-live support	→ E.g., Provide X onsite resources 24x7.	→ E.g., Appoint clinical champions.	
	÷	→	

Standards

- **96.** Identify any standards that that you meet with respect to your implementation and post-deployment services.
 - << Insert response here.>>

>> 6.4 Ongoing Services

Refer to Section 6.5 of the Purchaser's Requirements for the core and desirable requirements that the Bidder or solution should meet.

- **97.** Describe the preventative and corrective maintenance activities that you will provide after operational acceptance. In your response, identify any standards that you meet.
 - << Insert response here.>>
- 98. Identify your service level commitment.

SEVERITY	SERVICE HOURS	INVESTIGATION INITIATED	TARGET RESOLUTION (80% OF THE TIME)
1 - Critical	→		
2 - High	→		
3 - Medium	→		
4 - Low	→		
5 - Very low	→		

- 99. Identify the average age of your service tickets by severity.
 - << Insert response here.>>
- **100.** Describe your solution performance monitoring and management approach to ensure that the solution is able to meet the performance requirements.
 - << Insert response here.>>
- 101. Describe your security monitoring and incident management approach. In your response, identify any external security standards that you meet.
 - << Insert response here.>>

Service management

- 102. Describe how you manage your services to ensure client satisfaction. In your response, describe any service management standards that you meet.
 - << Insert response here.>>
- 103. Describe how you will provide service reporting to HSP. In your response, identify the types and frequency of reports that HSP can expect to receive.
 - << Insert response here.>>

Standards

104. Identify any standards that that your ongoing services meet.

<< Insert response here.>>

>> 7. Information Capabilities

Section contents

This section should ask the Bidder to describe how their solution supports the information requirements such as information captured, reporting and analytics capabilities, and so forth.

Changes from the High-Level to Detailed Technical Responsiveness Form

Although the Purchaser may have more detailed questions in some areas such as reports available or analytics, many of the questions in this section are likely to mirror the High-Level Technical Responsiveness Form from the Marketing Sounding Stage.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

- The questions about how the solution supports the information requirements below should draw on the business processes and system stakeholders' needs outlined in Section 7 of the *Purchaser's Requirements Document* (see Appendix B).
- If you compare the example headings and questions below, you will notice how they match the high-level headings in Section 7 of the *Purchaser's Requirements Document* (see Appendix B).

The Bidder should provide clear and detailed responses to the questions below. The Bidder is reminded that all responses to the question must immediately follow the question unless specifically stated otherwise. References to responses in other questions or appended documentation will not be read, and will result in zero being assigned.

>> 7.1 Conceptual Data Model

>> 7.1.1 Patient Profile

7.1.1.1 Basic Demographics

Refers to Section 7.1.1.1 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

105. Describe how your solution meets HSP's requirements for recording patient demographics.

```
<< Insert response here.>>
```

106. List the fields that your solution captures to record patient demographics.

```
<< Insert response here.>>
```

>> 7.2 Reports

Refers to Section 7.2 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

107. Describe the reporting functionality that your solution provides. In your response, describe the types of reporting tools available (e.g., dashboards, extract tools) and how users are able to manage them (e.g., creating own dashboards, etc.).

```
<< Insert response here.>>
```

108. Describe the functionality that supports a user developing, saving, and running their own report templates.

```
<< Insert response here.>>
```

>> 7.3 Data Analytics

Refers to Section 7.3 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

109. Describe how your solution meets HSP's data analytics requirements.

```
<< Insert response here.>>
```

>> 7.4 Data Standards

Refers to Section 7.4 of the Purchaser's Requirements for the core and desirable requirements that the bidder or solution should meet.

110. Describe how your solution meets HSP's data standards requirements.

```
<< Insert response here.>>
```

111. List the data standards that the solution complies with.

```
<< Insert response here.>>
```

>> 8. Cost Modelling

Section contents

- This section should ask the Bidder to estimate costs associated with different scenarios.
- Discuss the best format for receiving costing from the Bidders with IDB Procurement Specialist.

Changes from the High-Level to Detailed Technical Responsiveness Form

Although the Purchaser may choose to include this in the High-Level Technical Responsiveness Form in the Market Sounding Stage, this section is likely to be new.

The questions below are based on the following sections of the *Purchaser's Requirements Document* (See Appendix B):

⇒ N/A.

The Bidder should provide clear and detailed responses to the questions below. The following information is to support calculating the total cost of ownership, which is the basis for the financial evaluation.

>> 8.1 Bidder Pricing Table

>> 8.1.1 Licensing Initial Sites

The types of licenses below are examples only. The Bidder should complete the rows with the licenses that will be required for the initial sites. The sites are:

<<Site name>>.

Add any costing notes.

Notes:

- The licensing fees must be one-time, perpetual, and transferable.
- The licensing fees must not depend on the number of users.
- The Bidder must include licensing fees for any third-party software necessary for the EHR to meet the requirements identified in this bid document.
- The licensing fees must include licenses for any customizations necessary for the EHR to meet the requirements identified in this bid document.

LICENSE	UNIT PRICE (USD)	DISCOUNT APPLIED	NUMBER OF UNITS	EXTENDED PRICE (USD)	COMMENTS
Site 1					
Site 2					
Site 3					
Etc.					
Total "All in" Licensing Costs					

Future Licenses

The types of licenses below are examples only and the Bidder should include all the licenses required to deploy the EHR to additional sites.

HSP will reserve the right to procure future licenses for the same or lesser rate as above for deployment at future sites. Provide the pricing for future licenses, noting where volume discounts apply.

LICENSE	UNIT PRICE (USD)	DISCOUNT APPLIED	COMMENTS
Site			
Etc.			

>> 8.1.2 Development Services

Development Services within Scope of this Project

Identify any fees for product customizations or development that are required to meet the requirements specified in this bid documentation.

The below are examples only.

Notes:

The development costs must include all related services, including requirements gathering, development, testing (e.g., unit, integration, acceptance), validation, deployment, and updating documentation as required.

DEVELOPMENT COST	ASSUMPTIONS	COST (USD)	COMMENTS
Integration to PACS/RIS via DICOM.			
etc.			
Total "All in" development costs			

Out-of-scope Development Services

Identify the hourly rates for development services that would be considered out-of-scope.

The below are examples only.

Notes:

- The cost of implementation services may not increase for a three-year period, at which point it can increase at no more than 2.0% per annum or as aligned with the cost-of-living index, whichever is lower.
- Any functionality that the Bidder feels requires customization to meet HSP's needs must be include in the *Development Services within Scope of this Project* above.

ROLE	COST / HOUR (USD)	COMMENTS
Developer		
Business analyst		

>> 8.1.3 Installation and Configuration

Initial Sites

The below must reflect the scope of services (e.g., deployment in data center and facilities, training, change management, etc.) that the Bidder describes.

SERVICE	ASSUMPTIONS	COST (USD)	COMMENTS
Hosting Setup			
Site 1 Setup			
Total "All in" Implementation Costs			

Future Installation and Configuration Costs

Identify the cost of implementation services for future sites if HSP chooses to purchase them. Identify the cost in a manner that enables HSP to easily estimate the cost of scaling (e.g., per type of site, per site smaller than 10 users, etc.).

SERVICE	ASSUMPTIONS	COST (USD)	COMMENTS
User			
Etc.			

Hourly Installation and Configuration Services

Identify the rates for out-of-scope services that can be purchased on an hourly basis. The below are examples only.

Notes:

The cost of implementation services may not increase for a three-year period, at which point it can increase at no more than 2.0% per annum or as aligned with the cost-of-living index, whichever is lower.

ROLE	COST / HOUR (USD)	COMMENTS
< <insert role="">></insert>		
Etc.		

>> 8.1.4 Implementation and Post-Deployment

Initial Sites

The below must reflect the scope of services (e.g., deployment in data center and facilities, training, change management, etc.) that the Bidder describes.

SERVICE	ASSUMPTIONS	COST (USD)	COMMENTS
Hosting Setup			
Site 1 Setup			
Total "All in" Implementation Costs			

Future Implementation and Post-Deployment Costs

Identify the cost of implementation services for future sites if HSP chooses to purchase them. Identify the cost in a manner that enables HSP to easily estimate the cost of scaling (e.g., per type of site, per site smaller than 10 users, etc.).

SERVICE	ASSUMPTIONS	COST (USD)	COMMENTS
User			
Etc.			

Hourly Installation and Configuration Services

Identify the rates for out-of-scope services that can be purchased on an hourly basis. The below are examples only.

Notes:

The cost of implementation services may not increase for a three-year period, at which point it can increase at no more than 2.0% per annum or as aligned with the cost-of-living index, whichever is lower.

ROLE	COST / HOUR (USD)	COMMENTS
< <insert role="">></insert>		
Etc.		

>> 8.1.5 Ongoing Services

Initial Sites

The types of support identified below must align with the support that the Bidder proposes above. The Bidder should complete the rows with the support that will be required for the initial sites.

Notes:

- ⇒ HSP may decide to conduct some or all of the support services internally (e.g., help desk) to reduce costs.
- ⇒ HSP expects that support and maintenance charges will not be charged until after Operational Acceptance is granted.
- Costs should be indicated on a per annum basis.
- The cost of support and maintenance may not increase for a three-year period, at which point it can increase at no more than 2.0% per annum or as aligned with the cost-of-living index, whichever is lower.

SUPPORT	DESCRIPTION	UNIT PRICE (USD)	DISCOUNT APPLIED	NUMBER OF UNITS	EXTENDED PRICE (USD)	COMMENTS
Help desk						
Application						
Etc.						
Total "All in" Support and Maintenance Costs						

Additional Support and Maintenance

Provide the pricing for adding new sites to the support and maintenance contract.

Notes:

- ⇒ HSP anticipates a volume discount.
- The cost of support and maintenance may not increase for a three-year period, at which point it can increase at no more than 2.0% per annum or as aligned with the cost-of-living index, whichever is lower.

SUPPORT	UNIT PRICE (USD)	DISCOUNT APPLIED	COMMENTS
Site			
User			
Etc.			

>> 8.1.6 Other Costs

Identify other costs that have not been considered above but which will be required.

ITEM	DESCRIPTION	UNIT PRICE (USD)	DISCOUNT APPLIED	NUMBER OF UNITS	EXTENDED PRICE (USD)	COMMENTS

>> 8.1.7 Five-year Cost Scenarios

For clarity, please calculate the "all in" cost to HSP over the first 5 years.

Initial Sites

The categories below are customizable.

ITEM	ONE-TIME	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL PRICE (USD)
Licensing							
Installation and Configuration							
Implementation and Post-Deployment							
Development							
Ongoing Services							
Total							

Additional Sites

Estimate the cost for deployment at additional sites. A range to accommodate for sites of various sizes is acceptable. However, provide notes about the assumptions or cost ranges.

ITEM	ONE-TIME	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL PRICE (USD)
10 additional sites							
25 additional sites							
50 additional sites							
100 additional sites							
All remaining sites							
Total							

Assumptions

<<Bidder to insert assumptions here>>

Appendix G: Key Business Terms



Introduction to this Tool

This tool supports the Purchaser considering the general "business" terms that it wants from the relationship with the Supplier. This includes general terms such as what happens if the relationship is terminated, how much can the Supplier increase the cost of the software annually, and so forth.

The business terms should form part of the *Purchaser's Requirements Document* (See Appendix B) and be defined at least before the Detailed Bid and Evaluation Stage. The business terms and conditions should be included in the *Purchaser's Requirements Document* (See Appendix B) and the Detailed Technical Responsiveness Form so that the Bidders know what the Purchaser expects from the relationship. These will then be included in the contract. Failing to include the business terms in the bid documentation greatly undermines the Purchaser's negotiating power so it is important that these be included in the bid documentation.

The business terms identified in this tool are not exhaustive and are focused on the technical relationship between the Purchaser and the Supplier. The Purchaser will need to consider and include other general business terms such as liability, indemnity, and insurance.

Additionally, the type of contract and how it is structured will vary considerably, depending on the requirements of the Purchaser as well as the nature of the procurement. Therefore, the Purchaser will need to include its legal counsel and procurement specialists to ensure that the business terms are appropriately captured in contracts.

Important!

The Purchaser cannot rely on verbal assurances for any terms that it expects of the Supplier. If the Purchaser wants the Supplier to commit to an obligation, it must be in the contract. In addition to protecting the Purchaser, the contract is an important document to ensure that what has been agreed upon is not forgotten, as team members come and go from the program.

Note that the terms in the tool are suggestions and can be customized to the Purchaser's needs in consultation with the Purchaser's procurement team, legal counsel, and the IDB Health Specialist or IDB Procurement Specialist.

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>> 1. Fees

In addition to the actual fees which will be incorporated into the contract after the bids are received and the final costs negotiated, there will be a number of business terms related to pricing that the Purchaser will need to address.

General business terms should be documented in the *Purchaser's Requirements Document* (See Appendix B, Section 5.2.5.1) and include:

- Payment terms Terms related to frequency of payment, installments and so forth.

 Generally, for the deployment related services, a Purchaser would expect to make milestone payments on successful delivery of various milestones. For the ongoing maintenance and support services, the payment would generally be monthly or annually. Finally, for licensing, the payment terms will vary depending on licensing model. There may be an upfront capital cost associated with procuring the license if it is a one-time licensing fee or it may be on a "pay-as-you-go" model if it is software as a service.
- Payment triggers Payment triggers are particularly important for ongoing licensing, maintenance, support, or hosting fees.
 The Purchaser should identify and negotiate when ongoing fees begin. For example, will the Purchaser be required to pay ongoing maintenance fees during the implementation period when no maintenance is being done? If software-as-a-service, do the subscription fees begin at contract signing or when the solution has been made operational?
- Increases Terms capping future increases in future licensing and service fees (e.g., fee increases can be no more than 2% per annum or the cost of living, whichever is less).
- Additional functionality Restrictions against charging additional fees for additional functionality if the Purchaser is required to install them to meet the base functionality specified. For example, this

would restrict a Supplier enhancing a particular module such as reporting and wanting to charge the Purchaser more because it is better than that which the Purchaser requested.

If you are using the Special Conditions of Contract template from the IDB, these can be incorporated generally into *Part C. Payment*.

>> 2. Termination

The termination section should establish the Purchaser's right to terminate for convenience and identify any obligations the Supplier has to support the Purchaser in transitioning off the solution.

General business terms should be documented in the *Purchaser's Requirements Document* (See Appendix B, Section 5.2.5.2) and include:

- Reasons for termination Establishes the reasons for which the Purchaser or the Supplier can terminate the relationship. The Purchaser should retain the right to terminate for convenience and where the Supplier is purchased by another company.
- Notice The period of notice that the Purchaser and the Supplier will need to provide one another. The Supplier should be required to provide a lengthy notice period such as 12 or 24 months where it anticipates terminating the relationship or ceasing support for the solution. This will provide the Purchaser with time to procure another solution.
- Obligations of the Supplier on termination

- This will include a variety of obligations to support the Purchaser moving to a new solution, such as extracting the data in a standard, machine-readable format, providing data dictionaries, and supporting the transition into the new system. However, it could also include providing a license to access archival copies of the data.

⇒ Fees on termination – Whether any fees are payable on termination (e.g., payment to support the data transfer) or whether the Supplier needs to pay a penalty fee for contract cancellation (e.g., to address switching costs).

If you are using the Special Conditions of Contract template from the IDB, there is no section addressing termination. It is only defined in the General Conditions of Contract. The Purchaser would need to include an addendum to the contract.

>> 3. Privacy and Security

As the data controller, the Purchaser should not provide the Supplier with any rights over the data. The Supplier should be required to handle the data only for the purposes of providing services under the agreement and protect the data. Where the Supplier is hosting the data, outlining the security standards will be even more important.

General business terms should be documented in the *Purchaser's Requirements Document* (See Appendix B, Section 5.2.5.3) and include:

- Privacy terms Establishes the privacy obligations that the Supplier will need to meet, such as:
 - Acknowledgement of the relevant privacy legislation, if any, and the roles of the Purchaser and Supplier under it.
 - Acknowledgement that the Supplier has no right over the data and that it has no authority to withhold data from the Purchaser (even in situations of non-payment or contractual non-compliance).
 - Restrictions against accessing, using, or otherwise handling the data for any other purpose than providing the described services
 - Referring any data related requests to the Purchaser in the unlikely event that the Supplier receives a request.
 - Providing services that enable the Purchaser to meet its privacy obligations.

- Notifying the Purchaser of incidents impacting data privacy within a reasonable timeframe, such as 24 hours.
- Logging and monitoring its own staff and contractors to ensure their access is appropriate.
- Imposing any relevant privacy obligations on its staff and contractors and ensuring that the staff and contractors are aware of them.
- Security terms Identifies the security obligations that the Supplier must meet, such as:
 - Acknowledging relevant security program standards, such as ISO 27001/2, cloud hosting standards such as ISO 27017, or application security standards that the Supplier needs to meet.
 - Ensuring access by its own staff is controlled including appropriate:
 - ▶ Identity verification, authentication, and authorization.
 - Principle of least access is respected (i.e., no more access than necessary).
 - Segregation of duties.
 - Disaster recovery requirements.
 - Monitoring requirements, such as intrusion detection systems.
 - Notifying the Purchaser in a reasonable amount of time for security breaches (e.g., 2 hours).
 - Business continuity and disaster recovery plans and procedures.
 - Any specific security obligations required by the Purchaser, such as firefighter IDs.
- Evidence of compliance Specifies how the Purchaser must provide evidence that they continue to be compliant with their privacy and security obligations. This can range from simple attestation to providing results of a third-party audit. Oftentimes, the Supplier will provide to all its clients annual or semi-annual attestations from a third-party auditor that the Supplier is meeting particular standards for its program, application, and hosting environment.

If you are using the Special Conditions of Contract template from the IDB, these can be incorporated generally into Section 11. Confidential Information (GCC Clause 17) for the privacy clauses and Section 14. Design and Engineering (GCC Clause 21) for the security clauses.

>> 4. Governance and decision-making

General business terms should be documented in the *Purchaser's Requirements Document* (See Appendix B) and include:

- Decision-making It usually describes the decision-making bodies involved in the procurement, the scope of their decisionmaking, and how decisions are escalated. This may include gating and approval processes if they are not described elsewhere in the agreement.
- Reporting Information that the Supplier needs to make available to the purchase on an ongoing basis. This information will change as the project evolves. For example, the reports made available during project design and implementation will look different than the ongoing reports provided.
- Dispute resolution Disputes should be solved where possible within the project structure, such as escalation to senior executive as necessary. If external support to resolve an issue is required, a mediation process may be considered prior to legal action.

If you are using the Special Conditions of Contract template from the IDB, these can be incorporated generally into Section 13. Project Plan (GCC Clause 19) for reporting clauses and Section 12. Representatives (GCC Clause 18) for the governance-related clauses.

>> 5. Intellectual property

A Purchaser will often request intellectual property considerations for helping a Supplier improve their product, such as developing new templates or supporting requirements development of a new module. Vendors are unlikely to provide intellectual property rights, particularly where they have a long-established solution into which they have invested much more heavily than the particular enhancement. The Purchaser should instead consider what it hopes to achieve from requesting rights. Often, it simply wants to avoid being charged for the enhancements later. This can be achieved through other means, such as those described above. If the Purchaser does contribute meaningfully to solution enhancements, the Supplier may entertain other benefits such as reduced licensing costs or similar, but it would expect the contribution to be commensurate with the benefit provided.

If you are using the Special Conditions of Contract template from the IDB, IP clauses can be incorporated generally into Section 9. Copyright (GCC Clause 15) and licensing can be included Section 10. Software License Agreements (GCC Clause 16).

>> 6. A note about incorporating other artifacts

The agreement may incorporate other artifacts such as the Purchaser's Requirements Document (See Appendix B), the Supplier's proposal, minutes form negotiation meetings, and so forth. Consideration should be given to the authority of these documents; oftentimes, what is being requested or agreed upon will evolve during the course of the evaluation and negotiation, and the intent of the service or solution offering is not adequately captured in the proposal nor the minutes of the meetings. It can be difficult to discern retrospectively what was agreed upon or committed to in the proposal. As a rule, any key terms, rights, or offerings that the Purchaser wants from the Supplier should be explicitly set out in the agreement. It helps to avoid issues associated with misunderstandings or differing interpretations. One way to determine whether the contract is comprehensive is to ensure that new team members would be able to understand what has been agreed upon simply by reading the contract and schedules.

Appendix H: Statement of Work



Introduction to a Statement of Work

The statement of work typically describes the "one off" services and deliverables being provided during the deployment phase and during the stabilization period immediately after golive. It also includes the terms of those services (e.g., acceptance criteria, how testing will be done).

The Purchaser should be clear on the services and deliverables it requires from the Bidders, which should be included in the *Purchaser's Requirements Document* (See Appendix B) before the Detailed Bid and Evaluation Stage. It should also require the Bidder to provide very detailed information about those services and deliverables in their response to the Detailed Technical Responsiveness Form. This information will be used as the foundation for the Statement of Work included in the contract and as the basis for negotiation.

The Purchaser's legal counsel and procurement specialists may have a different format in which to create the Statement of Work or they may have other topics that also need to be addressed, but key components and examples are included below.

Important!

The Purchaser cannot rely on verbal assurances for any terms that it expects of the Supplier. If the Purchaser wants the Supplier to commit to a deliverable or service, it must be in the SOW. In addition to protecting the Purchaser, the SOW is an important document to ensure that what has been agreed upon is not forgotten as team members come and go from the program.

This section includes two parts:

- 1) Developing a Statement of Work which provides key considerations for developing a statement of work.
- 2) Example excerpts which provides examples of how key sections of the statement of work can be written.

Note that the discussion below identifies the key sections of an SOW. They are suggestions and should be customized to the Purchaser's needs in consultation with the Purchaser's procurement team, legal counsel, and the IDB Health Specialist or IDB Procurement Specialist.

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>> 1. Developing a Statement of Work

>> 1.1 Product Description

The purpose of defining the product in the contract is to ensure that the Supplier is bound to providing it initially as well as on an ongoing basis. Note that this may be included instead in a licensing schedule instead of the SOW.

The Supplier will hopefully evolve their solution over time and improve it. In the course of doing so, the Supplier may develop new modules or retire functionality that it feels is not commercially viable. For example, a Supplier may move ancillary functions such as reporting and analytics to a new, enhanced module for which it asks the Purchaser to pay extra. It is important that regardless of how the product evolves, the Purchaser can continue to use the solution to execute the business functions defined in the contract.

In the example discussed above, the Purchaser should be provided this new, enhanced module at no extra cost even though it is an improvement to the existing functionality because it supports the business functions that the Supplier agreed to supporting in the contract.

This section of the agreement should address:

- ➡ Business and stakeholder requirements The business and stakeholder requirements that the solution must support. If referring back to the Business Purchaser's Requirements Document (See Appendix B), this would be based on Sections 2 and 3 of the template. When developing this section, do not forget about supporting or ancillary business functions and stakeholder requirements (e.g., ability for a privacy or security officer to conduct user access audits).
- Solution and Information Requirements Any core solution requirements (i.e., functional, non-functional, and information related) that the solution must support. This would be based on the core requirements you identified in Sections 4, 5, and 6 of the Requirements Template.
- Support Materials Any supporting materials and a description of the materials that must be made available to the Purchaser. This will include materials such as end-user training materials, but it may also include other products such as change management plans, application support guidelines, knowledge transfer documentation, etc.
- Standards A description of any relevant standards that the above must meet. Technical standards, for example, may related to interoperability, cybersecurity, and coding. Other supporting materials, such as a change management plan, might need to align with standards developed by a change management institute.
- Updates Terms describing how frequently solution upgrades and patches will be made available or how soon after a major upgrade supporting materials such as training materials need to be made available. This may also be included in the Service Level Agreement (See Appendix I).
- Warrantee Terms of any warrantee for the work performed. Where the Supplier is providing ongoing support services for a fee or software-as-a-service, the warrantee may instead be a deferral of ongoing service or licensing payments until the solution has been delivered and is reliable.

If you are using the Special Conditions of Contract template from the IDB, these can be included in Section 20. Functional Guarantees (GCC Clause 37) for the description of scope, Section 14. Design and Engineering (GCC Clause 21) for standards, and Section 15. Product Upgrades (GCC Clause 23) for the product updates. These can also be included as an addendum to the contract.

>> 1.2 Installation and Configuration Services

The purpose of describing the installation and configuration services is to be clear what the Supplier will do and what the Purchaser is required to do.

Installation and configuration require a significant amount of effort because it can involve everything from installing the software on the servers to preparing the hardware in the end-user environment (e.g., in a hospital), configuring clinical templates and workflows, or adding system users. Many Suppliers install the software but offer limited configuration services. They will instead show the Purchaser how to configure the solution. Being clear in the contract who is doing what and ensuring the Supplier minimally provides documentation helps to avoid unpleasant surprises of having what is felt to be a half-deployed solution.

This section of the agreement should address:

- Installation and Configuration Services The installation and configuration services to be provided. This should be quite detailed because it should address requirements definition, solution configuration, solution installation, deployment activities and Operational Acceptance Testing. Where it is client-server software, centrally hosted software or multiple facilities sharing a single instance, it may also need to address this installation and configuration at varying levels. For example, the Supplier may be responsible for installing and configuring cloud software but the Purchaser may be responsible for installing whatever software is required on the local machines to run the cloud software. It should also be quite detailed. For example, if the Supplier is facilitating requirements-gathering workshops, how many will they facilitate per site? Are they required to document the results? This section should provide detailed information about the services that the Supplier is providing and how the Purchaser will know the service has been provided to satisfaction.
- → Approach The approach that the Supplier will follow to install and configure the solution. This will describe both the process that the Supplier will follow (e.g., start with requirements gathering to understand how the solution needs to be configured, etc.) but also any gating, acceptance, and approval processes. It should also include any required timelines.
- → Acceptance Criteria The high-level criteria that the Supplier must meet for the service to be accepted as delivered. What are the criteria to accept the service? For example, if the service is installation of software, is it simply installing the software? Does the software have to work? How will the Purchaser know that the service has been provided?
- Standards A description of any relevant standards that the above must meet. The standards are likely to be more process-related rather than technical. For example, the installation and configuration process need to be managed according to a recognized project management methodology and so forth.
- Roles and Responsibilities The responsibilities for both the Supplier and the Purchaser. That is, what is each party doing with respect to configuration and development? This should be quite detailed. For example, if configuration starts with requirements gathering, whose job is it to schedule and facilitate the sessions? Who is responsible for documenting the sessions?
- ➡ Warrantee Terms of any warrantee for the work performed. Where the Supplier is providing ongoing support services for a fee or software-as-a-service, the warrantee may instead be a deferral of ongoing service or licensing payments until the solution has been delivered and is reliable.

If you are using the Special Conditions of Contract template from the IDB, the acceptance criteria can be included in Section 16. Inspections and Tests (GCC Clause 25) and Section 17. Commissioning and Acceptance (GCC Clause 27). Standards can be included in Section 14. Design and Engineering (GCC Clause 21). The description of services and roles and responsibilities should be included in an addendum to the contract.

>> 1.3 Implementation and Post-Deployment Services

The purpose of describing the implementation services is to understand the implementation supports that the Supplier will provide and the services that the Supplier will provide immediately post deployment (e.g., a 3-month period of optimization). The above services (i.e., installation and configuration) involve preparing the software for readiness. Implementation and post-deployment services can be broadly thought of as preparing the Purchaser and people to receive and use the solution, and supporting them through the changes the solution brings as they get used to and optimize the solution.

This section of the agreement should address:

- ➡ Implementation and Post-Deployment Services The services that the Supplier will provide with respect to planning, deployment and go-live support. In addition to considering services prior to go-live, this section should also address the supports that will be provided to the Purchaser immediately after go-live and before regular support and maintenance are initiated. Implementation support should include an optimization period post deployment. For example, a facility may receive dedicated onsite user and application support personnel for the first few months after go-live to help smooth the transition prior to moving over to the regular support and maintenance process.
- Approach The approach that the Supplier will follow to implement the solution. The implementation approach will include timelines, activities and so forth. It may also be at both the "project" level as well as facility level. For example, the implementation of the same solution in multiple sites should describe what the implementation approach at a single site involves but also what the overall implementation strategy involves.
- Acceptance Criteria The high-level criteria that the Supplier must meet for the service to be accepted as delivered. How will the Purchaser know that the solution has been implemented? For example, if implementation includes training end-users, how will the Purchaser determine that the end-users have been appropriately trained? Do they have to vote on whether they are ready to go-live? Do they have to pass a test? What are the Purchaser's criteria for accepting the implementation service as complete? Similarly, when has the Supplier completed their obligation to provide post-deployment support? Is it after a period of operation with no significant bugs? After a pre-determined amount of time (e.g., 3 months).
- Standards A description of any relevant standards that the above must meet. The standards are likely to be more process related rather than technical.
- Roles and Responsibilities The responsibilities for both the Supplier and the Purchaser. That is, what is each party doing with respect to implementation? This should be quite detailed. For example, if implementation includes training, whose job is it to develop the training plan? Whose role is it to create the training materials?
- ➡ Warrantee Terms of any warrantee for the work performed. Where the Supplier is providing ongoing support services for a fee or software-as-a-service, the warrantee may instead be a deferral of ongoing service or licensing payments until the solution has been delivered and is reliable.

If you are using the Special Conditions of Contract template from the IDB, the acceptance criteria can be included in Section 16. Inspections and Tests (GCC Clause 25) and Section 17. Commissioning and Acceptance (GCC Clause 27). Standards can be included in Section 14. Design and Engineering (GCC Clause 21). The description of services and roles and responsibilities should be included in an addendum to the contract.

>> 1.4 Development Services

The purpose of describing the development services is to be clear what the Supplier will do and what the criteria would be for accepting the services.

Many initiatives will not require extensive custom development because the Purchaser will be procuring an off-the-shelf product and preferably configuring (i.e., no code). However, there may be some functionality or non-functional requirements such as interoperability that require customization.

This section of the agreement should address or follow the software development lifecycle:

- Development Services The development services to be provided. This should be quite detailed because it needs to address requirements definition and technical specification development, as well as testing services in addition to code development.
- Development Approach The approach that the Supplier will follow when developing any custom code. This will describe both the process that the Supplier will follow (e.g., start with requirements gathering, etc.) but also any gating, acceptance, and approval processes.
- → Acceptance Criteria The high-level criteria that the Supplier must meet for the custom development to be accepted. This would include criteria such as having been Operational Acceptance Tested by the Purchaser, meeting the requirements that were established for the custom module, functioning error-free in a live environment for a set period, and so forth.
- Standards A description of any relevant standards that the above must meet. Technical standards for example may relate to a development process or technical standards the custom module must meet (e.g., interoperability customizations need to support FHIR).
- → Roles and Responsibilities The responsibilities for both the Supplier and the Purchaser. That is, what is each party doing with respect to development?
- ➡ Warrantee Terms of any warrantee for the work performed. Where the Supplier is providing ongoing support services for a fee or software-as-a-service, the warrantee may instead be a deferral of ongoing service or licensing payments until the solution has been delivered and is reliable.

If you are using the Special Conditions of Contract template from the IDB, the acceptance criteria can be included in Section 16. Inspections and Tests (GCC Clause 25) and Section 17. Commissioning and Acceptance (GCC Clause 27). Standards can be included in Section 14. Design and Engineering (GCC Clause 21). The description of services and roles and responsibilities should be included in an addendum to the contract.

>> 1.5 Testing Process

The purpose of describing the test process even at a high level is to ensure that the Supplier provides products in a ready state that allows the Purchaser to focus its testing on acceptance. Testing will occur not just on customized solutions but on any solution in the course of configuration or deployment.

This section of the agreement should address:

- Test and fix process A high-level description of the steps and key deliverables within the testing and fixing process. This is likely to include sub-processes because the processes for new code, solution configuration, and data integrations are likely to be slightly different from one another. The section should address development of a testing strategy, plan, and support materials, such as test cases and test scripts. These will be particularly important to support solution acceptance.
- ➡ Validation process A high-level description of the process by which the Purchaser will validate or accept the solution once ready. This should include validation prior to pilot or go-live as well as validation after a time.
- Severity definitions Definitions for bug severity as well as target benchmarks for correction times and acceptance (if not defined in the acceptance section above). For example, critical bugs must be addressed within 1 day. The solution will be accepted after 100% of critical issues are addressed, 90% of high issues are addressed, and so forth. Similar to the testing and validation processes, there may be different benchmarks or target times for fixes depending on the stage of testing. A critical bug stopping pilot testing in a care environment would usually have quicker target fix times than a critical bug stopping Operational Acceptance Testing in a test environment. A test log, containing bug and resolution descriptions, dates, and responsible parties, must be kept.
- Warrantee Terms of any warrantee for the work performed. Where the Supplier is providing ongoing support services for a fee or software-as-a-service, the warrantee may instead be a deferral of ongoing service or licensing payments until the solution has been delivered and is reliable (i.e., a stabilization period after deployment).

If you are using the Special Conditions of Contract template from the IDB, the acceptance criteria can be included in Section 16. Inspections and Tests (GCC Clause 25) and Section 17. Commissioning and Acceptance (GCC Clause 27). Standards can be included in Section 14. Design and Engineering (GCC Clause 21). The description of services and roles and responsibilities should be included in an addendum to the contract.

The below are examples of key excerpts from a Statement of Work. The Purchaser should work with its legal counsel and procurement specialist to identify other sections that may need to be included (e.g., definitions, objectives, etc.). The Purchaser should also customize the examples according to its situation. The Purchaser' can ask for advice and support from the IDB Health Specialist or IDB Procurement Specialist.

>> 2. Example Excerpts from a Statement of Work

>> 2.1 Product Description

The product description can be included in the Statement of Work, the Service Level Agreement, or be another appendix to the agreement. Importantly, it should describe the scope of functionality that the Supplier must provide. It needs to list what the Purchaser is able to do with the solution. It can be copied from the *Purchaser's Requirements Document* (See Appendix B) if it is detailed enough. The supported business functions in the table below would derive from the core requirements and the key functionality would derive from the more important desirable requirements of the Bidder's proposal in the Detailed Technical Responsiveness Form.

MODULE	SUPPORTED BUSINESS FUNCTIONS	KEY FUNCTIONALITY
Registration	 Register new patients. Manage patient demographics. Manage patient charts (e.g., merge patients with two charts, split registrations of two concatenated patients). Etc. 	 Flag duplicates. Register patients to multiple units. Etc.
Scheduling	Scheduling patients to a clinic.Etc.	→ Etc.

>> 2.2 Services

The services described below are an example only and should be customized to reflect the services that the Purchaser is procuring.

The format can also be modified if the Purchaser has an existing manner of capturing services. Importantly however, the service description should be clear to prevent ambiguity about the service that the Supplier is providing, including any standards that they need to meet. It should also clearly articulate the acceptance criteria so that the Purchaser and Supplier can determine when the service has been delivered.

>> 2.3 Project Plan

Prior to initiating any further installation and configuration activities, the Supplier will submit for approval a plan that includes:

- Project Governance and Organizational Structure.
- Project Management Sub-Plan (e.g., mechanisms in place to manage project scope, constraints, and processes).
- Implementation Sub-Plan with a detailed workplan including schedule and responsibilities.
- Stakeholder Engagement and Communications Sub-Plan.
- High-level drafts of the following, which will be refined during the initiative:
 - Training Sub-Plan.
 - Change Management Sub-Plan.
 - Testing and Quality Sub-Plan.
 - Warranty Defect Repair Sub-Plan.
 - Technical Support Sub-Plan.

The project plan will be developed in discussion with the Client and provided to the Client for review. The Client will be given adequate time to review and provide feedback on areas of non-conformity in the project plan (i.e., where the project plan materials differ from those presented in the proposal and/or agreed upon during negotiation). The Supplier will remediate areas of non-compliance and refer back to the Client for review. This cycle will be repeated until the plan is accepted by the Client. Acceptance of the plan is contingent on it being substantially aligned with the Client's proposal and agreements during contract negotiation.

>> 2.4 Installation and Configuration Services

>> 2.4.1 Scope

When writing the scope statement, where possible include information such as the standards that must be met, descriptions of "how many" or "how much", and any other information that supports understanding what the Supplier is intended to deliver.

The scope of the Supplier's installation and configuration services will include:

- Planning, facilitating, and documenting requirements to inform configuration of the Solution in the data center and health facilities.
- Deploying and configuring the solution in the data center.
- Deploying and configuring the Solution in five facilities.
- Deploying and configuring the Solution on:
 - 2000 workstations.
 - 500 tablets.
 - 500 phones.

- Testing the installation including system, functional, performance, and security testing.
- Creating User and Operational Acceptance Test plans and scripts for the Client.
- Interoperability:
 - HL7 FHIR-based integrations
 - Integrations including:
 - ▶ Laboratory information system
 - » Supported functions to include creating and sending orders to LIS, and receiving order status and results from LIS.
 - » LOINC.
 - Pharmacy information system
 - » Supported functions to include creating and sending orders to pharmacy, and receiving status and order refills from the pharmacy system.
 - » ATC.
- ⇒ Etc.

>> 2.4.2 Roles and Responsibilities

When writing the responsibilities, it is important to be specific and include what the Purchaser's responsibilities are. This helps provide clarity and avoid surprises down the road.

Data Center Installation and Configuration

The Supplier will be primarily responsible for configuring the data center infrastructure and installing and configuring the Solution. The Client will be responsible for providing the physical data center including hardware according to specifications provided.

More specifically the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Project Management	 Develop and maintain a project plan. Host kickoff meeting with the Client's staff. Regular status reporting to the Client (e.g., biweekly). Facilitate project team meetings. Manage Supplier's resources. 	 Participate in project team meetings. Manage Client resources.
Data Center Setup	 Provide minimum hardware specifications. Configuring the primary and failover servers to receive the Solution including but not limited to configuring operating systems, application servers, database servers, and web servers. Installing and configuring server-side third-party software required for the Solution to operate as normal. Document technical architecture and configuration. 	 Putting hardware devices in place and physically connecting them. Installing server and device operating systems including installing all relevant patches. Configuring network and security related devices such as routers, firewalls, and switches.
Data Center Testing	 Plan and conduct relevant technical tests in the data center, such as system and integration testing, and regression testing. Plan and conduct performance testing. Plan and conduct security testing (i.e., vulnerability assessment and penetration testing). Prepare test reports. Develop Operational Acceptance Test plan and scripts. Remediate issues. 	Conduct Operational Acceptance Testing.
Solution Deployment	 Install Solution. Install any ancillary software required to support the software (e.g., clinical nomenclatures). Configure database, screens, modules, and reports (i.e., global configuration). Document configuration. Test configuration prior to delivery. Develop Operational Acceptance Test plan and scripts for Client. 	Conduct Operational Acceptance Tests on Solution.
Etc.	÷	÷

Facility-level Installation and Configuration

The Supplier will be responsible for leading and documenting configuration workshops, and initial Solution configuration for each facility. The Client will be responsible for managing scheduling of and participating in the configuration workshops, loading users and configuring access rights, and optimizing configuration post go-live.

More specifically, the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Hardware Setup	 Provision of minimum specifications. Install and configure any third-party software required to operate the Solution. 	 Installation of the devices. Configure the devices. Prepare devices to accept the Solution.
Solution Design	 Plan and facilitate up to 3 information gathering workshops in each clinical and administrative unit. Document requirements and configuration workbooks. 	 Make staff available to participate in information gathering workshops. Participate in workshops.
Solution Installation and Configuration	 Migrate legacy data (e.g., patients, users, etc.) including mapping, transforming, loading, and testing. Configure database, screens, workflows, and modules in the local health facility. Load users, configure access rights, clinical templates, reports and dashboards, and complete all other locally-required configurations. 	 Extraction of legacy data from existing solutions. Operational Acceptance Testing installation and configuration.
Etc.	→	÷

Integrations

The Supplier will be responsible for building and testing connections from the Solution to other systems. The Client will be responsible for ensuring other systems are able to communicate with the Solution.

More specifically, the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Planning	 Review existing solutions to confirm purposes and interoperability capabilities. Confirm the interface strategy (e.g., scope of data exchange, formats, functions supported, purposes of exchange). 	Make staff and subject matter experts on the solutions available.
Conduct data mapping	 Establish the data map between the Solution and existing software. Identify the data transformation requirements. Document the data map and transformation requirements. 	 Provide data dictionaries for existing software. Provide access to subject matter experts.
Develop integrations	Establish development environment.Code the integrations.	Provide access to existing software.
Test integrations	 Conduct unit and system tests. Produce the test report. Develop the Operational Acceptance Test Plan and Scripts. 	Conduct Operational Acceptance Testing.
Etc.	→	→

>> 2.4.3 Acceptance Criteria

The acceptance criteria should be as specific as possible. How will you know when the service has been delivered? How will you know when the product has been provided? For example, is the software installation complete when the solution has been installed or does it also have to be configured? Does the data have to be migrated prior to calling the installation complete? Consider how you will know when the product has been delivered.

SERVICE OR DELIVERABLE	ACCEPTANCE CRITERIA
Configuration workbook (Data center)	 Configuration documented for all in-scope modules. Two rounds of client review and edit after a complete draft of the workbook has been delivered.
2. Installation Acceptance at Data Center Achieved	The Installation Certificate for the Solution in the data center will be issued when the Solution is: Loaded and configured at the data center. Test plan approved. Functional and non-functional testing completed. Performance and security testing completed. Report provided. Installation acceptance tests have been executed. All severity 1, 2, and 3 issues discovered during testing resolved.
3. Data Center - Technical architecture documentation	 Documents physical network architecture including devices and settings. Two rounds of client review and edit after comprehensively-drafted documentation has been provided.
4. Configuration workbook (Health facilities)	 Supplier has conducted at least two meetings with each clinical and business unit in each health facility to define requirements. Configuration documented for all in-scope modules in each health facility. Two rounds of client review and edit after a complete draft of the workbook has been delivered.
5. Health Facilities - Technical architecture documentation	 Documents physical and network architecture including devices and settings. Two rounds of client review and edit after comprehensively-drafted documentation has been provided.
6. Installation Acceptance in Health Facility Achieved	 → Solution and required third-party software loaded in the health facility including: ♦ 2000 workstations ♦ 500 tablets ♦ 500 phones → Test plan approved. The Installation Certificate for the Solution at each health facility will be issued when the Solution is: → Loaded and configured at the health facility. → Test plan approved. → Functional and non-functional testing completed. → Performance and security testing completed. → Report provided. → Testing completed. ♦ System testing ♦ Functional testing ♦ Regression testing ♦ Performance testing ♦ Security testing (i.e., vulnerability assessment and penetration testing) → Installation acceptance tests have been executed. → All severity 1, 2, and 3 issues discovered during testing resolved. → 80% of severity 4 and 5 issues resolved. For clarity, the above acceptance criteria will be assessed separately for each individual health facility.

SERVICE OR DELIVERABLE	ACCEPTANCE CRITERIA
7. Interoperability	 → Integrations completed: ◆ Laboratory information system. • Create and send an order to LIS • Receive order status from LIS • Receive results from LIS ◆ Pharmacy information system. • Create and send an order to pharmacy • Receive order status from pharmacy • Receive request for refill from pharmacy • Operational Acceptance Test plan and scripts provided. → Operational Acceptance Tests completed. → 100% of severity 1, 2, and 3 issues resolved.
8. Data Load	 Data mapping approved. Data load completed. Data checks completed including integrity, consistency, and validity passed.

>> 2.4.4 Relevant Standards

The following relevant standards will be met for these activities:

- ⇒ Data center architecture must be compliant with NIST SP800-144.
- Integrations must leverage HL7 FHIR.
- Laboratory interfaces must use LOINC messaging standards.
- Etc.

>> 2.5 Implementation and Post-Deployment

>> 2.5.1 Scope

The scope of the Supplier's implementation and post-deployment services will include:

Training

- Delivering up to 40 hours of training for global and local solution administrators.
- Delivering up to 40 hours of train-the-trainer sessions to super users at each of the health facilities.
- Delivering up to 20 hours of training for helpdesk staff.
- Producing training materials including 50 tip sheets, materials (e.g., presentations) to support trainers, I comprehensive Solution manual, and scripts for help desk.

Change management

- Developing a Change Management Plan aligned with ADKAR.
- Conducting business process reviews and developing refreshed processes considering the impact of technology, including reviewing results with each impact clinical or administrative unit
- Creating and sending:
 - ▶ Up to 10 sector-wide communications.
 - ▶ Up to 5 activation activities (e.g., townhall, etc.) in each health facility.

Configuring the health facilities

- Configuring the solution in each of the health facilities, including loading users, creating the templates and workflows, etc.
- Documenting the configuration.

Go-live support

- Proactive performance monitoring.
- Two onsite resources for each clinical and administrative unit from 7am to 6pm during post go-live period.
- Ten onsite resources for each health facility for 24 hours each day during post go-live period.
- At least two onsite resources for each health facility from 7am to 6pm each day during stabilization period.
- Telephone support available 24-7 during the stabilization period.

>> 2.5.2 Roles and Responsibilities

Training

The Supplier will be primarily responsible for training the trainers and solution administrators as well as providing training materials. The Client will be responsible making trainers available to be trained as well as training end-users in the facilities.

More specifically, the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Training	 Develop a training plan for Solution administrators and help desk. Train Solution administrators. Train Tier 1 help desk staff. Document revised workflows and business processes (e.g., help desk procedures). Document help desk support scripts. Provide training documentation. 	 Make Solution administrators and Tier 1 help desk staff available for training.
Develop training plan	 Facilitate stakeholder meetings to understand needs. Develop the plan for training solution administrators, help desk, and trainers. 	 Make staff available for information gathering sessions.
Create training materials	 Develop the training materials described in the scope statement above. Review training materials with the Client representatives. 	 Make staff available to review training materials.
Train MOH solution administrators	 Plan and facilitate up to 60 hours of training with MOH solution administrators. Conduct follow-up discussion 1 month after training. 	→ Make staff available for training.
Etc.	→ Etc.	→ Etc.

Change Management

The Supplier will be responsible for creating the change management plan and executing the activities. The Client will be responsible for making staff available to participate.

More specifically the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
General strategy and Change Management Plan	 Plan and facilitate at least 10 information. gathering sessions / workshops involving MOH, health teams and patients. Document the outcomes of the meetings. Draft the general strategy and Change Management Plan, including the general guidelines for the 5 specific executive plans (sponsorship, couching, training, communication and resistance management) as well as the evaluation chapter and knowledge transfer plan. 	 Provide the necessary information and counterparts to design the strategy and specific plans. Make staff available to participate in the activities.
Engaging sponsorship	 Develop and implement the sponsorship plan. Execute at least 5 actions for each group/sector/department, according to the approved plan. Report and document the process. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Communication	 Develop and implement the communication plan. Draft and publish at least 5 communication products per group/sector/department, according to the approved plan. Report and document the process. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Resistance plan	 Develop and implement the resistance management plan. Execute at least 5 actions per group/sector/ department, according to the approved plan. Report and document the process. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Coaching plan for managers	 Develop and implement the couching plan for managers. Execute at least 5 actions per group/sector/ department, according to the approved plan. Report and document the process. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Training plan	 Develop and implement the training plan. Execute at least 5 training actions per group/ sector/department, according to the approved plan. Report and document the process. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Optimizing processes	 Facilitate preparation meetings with client counterparts. Review existing business processes in the organization and collect the required information. Systematize and analyze the information gathered, and present the reports. Participate in general project meetings when it is required/necessary to provide updates or advice. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Monitoring and evaluation	 Apply the monitoring and evaluation process of the conducted according to the general plan. Document and report. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.
Knowledge transfer plan	 Develop and implement the knowledge transfer plan before end of contract. Present a document with lessons learned and recommendations. 	 Provide the necessary information and counterparts to design and implement the plan. Make staff available to participate in the activities, access to the products, and so forth.

Go-live Support

The Supplier will be responsible for providing the go-live support. The Client will be responsible for having trainers available to support go-live activities.

More specifically the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES
Health Facility User Acceptance Test	 Prepare User Acceptance Test Plan and scripts. Support acceptance testing in each health facility prior to go-live. Resolve Severity 1, 2, and 3 issues prior to go-live. Participate in go/no-go decision meeting prior to go-live. 	 Conduct acceptance testing. Participate in go/no-go decision meeting prior to go-live.
Intensive onsite support immediately post go-live	 Two onsite resources for each clinical and administrative unit from 7am to 6pm each day for a period of 14 days. At least 10 onsite resources for each health facility for 24 hours each day until the longer of: No severity 1, or 2 issues have been identified for a period of 72 hours; or 14 days have passed. 	 Reduce patient load during initial two weeks post go-live by 50%. Five trainers to support each facility for the initial two weeks support go-live.
Stabilization support	 At least 2 onsite resources for each health facility from 7am to 6pm each day until the longer of: The stabilization period has completed; or 90 days have passed. 	→ Have at least 1 super user on shift in each unit or department during the stabilization period.
Telephone support	 Telephone support available during the stabilization period. 	÷
Etc.		÷

>> 2.5.3 Acceptance Criteria

SERVICE OR DELIVERABLE	ACCEPTANCE CRITERIA	
1. Change management	 Change management plan provided. Optimized business processes documented for each health facility. Up to 10 sector-wide communications completed. Up to 5 activation activities (e.g., townhall, etc.) in each health facility completed. 	
2. Training	 Training materials provided. Two rounds of client review and edit after comprehensively drafted training materials have been delivered. Training provided to all target super users. 	
3. Go-live	 Installation Acceptance Certificate provided for all in-scope modules. User Acceptance Tests completed. 100% of severity 1, 2, and 3 issues resolved. All target users provisioned with accounts and trained. 	
4. Operational Acceptance (Health Facility)	The Operational Acceptance Certificate for the Solution in the health facility will be issued when the Solution is: → The longer of: ◆ All target modules have received Installation Acceptance Certificates. ◆ No severity 1, 2, or 3 issues have been reported by the health facility for 14 days. ◆ 3 months have passed. Note that operational acceptance will occur on a facility-by-facility basis. Operational acceptance is an extremely important concept because it represents when the initiative moves beyond deployment and into operations, at which point supports costs usually begin and the service level agreement guides the relationship. It is also commonly used as a milestone for which financial penalties are applied if it is delayed.	

>> 2.5.4 Relevant Standards

The scope of the Supplier's development services will include:

- Severity levels are defined in Agreement X: Service Level Agreement.
- Business analysis activities must be aligned with International Institute of Business Analysis methodologies.
- PROSCI's ADKAR for change-management activities.
- Etc.

>> 2.6 Development Services

>> 2.6.1 Scope

The scope of the Supplier's development services will include:

- Developing a web-based customized population health management module, including:
 - Defining the business requirements.
 - Creating technical specifications and architecture to interoperate with the Solution.
 - Developing the module, including unit, system and regression testing.

- Creating the Operational Acceptance Test plan and scripts for the Client.
- Developing the training documentation and providing up to 10 hours of training.
- The business processes and functions to be supported by the module will be defined during requirements definition but are expected to include:
 - Screening the patient population for non-communicable disease risk factors.
 - Stratifying patients according to the level of risk.
 - Identifying and emailing patients who would benefit from early intervention.
 - Reporting capability to support population profiling and trend analysis.

>> 2.6.2 Roles and Responsibilities

The Supplier will be primarily responsible for developing the requirement and developing and testing the module. The Client will be responsible for Operational Acceptance Testing using scrips developed by the Supplier.

More specifically, the parties' responsibilities include the below as well as any related activities which are reasonably aligned:

SERVICE	SUPPLIER RESPONSIBILITIES	CLIENT RESPONSIBILITIES	
Requirements and specification	 Plan and facilitate requirements- gathering sessions with key stakeholders. Document requirements. Develop mockups and prototypes to support end-user feedback on the design. Develop technical specifications. 	 Participate in requirements-gathering meetings. Provide input into the design and specification. 	
Development	 Developing the population health management module. Conducting unit, system, and regression testing. 	→ N/A	
Operational Acceptance Testing	 Developing an Operational Acceptance Test plan. Writing Operational Acceptance Test scripts. 	Conduct the Operational Acceptance Tests.	
Training	 Develop training materials for the new module. Provide up to 10 hours of training on the solution. 	 Coordinate scheduling of the training sessions. Make staff available to attend training sessions. 	
Etc.	→ Etc.	→ Etc.	

>> 2.6.3 Acceptance Criteria

SERVICE OR DELIVERABLE	ACCEPTANCE CRITERIA
1. Requirements document	 Stakeholder engagement plan delivered and conducted. Comprehensive requirements document outlining the ley business and stakeholder requirements and core functional requirements is provided as well as core functional and non-functional requirements. Up to two rounds of review and edit cycles have been completed.
2. Population Health Module	 Meets the core business and stakeholder requirements defined. Functional and non-functional testing completed. 100% of severity 1, 2, and 3 bugs have been resolved. 100% of severity 1, 2, and 3 issues identified in Operational Acceptance Testing have been resolved.
3. Training	 Comprehensive training materials have been provided. Up to two rounds of review and edit cycles have been completed.

>> 2.6.4 Relevant Standards

The following relevant standards will be met for these activities:

- Severity levels are defined in Agreement X: Service Level Agreement.
- Tiers 2 and 3 support services are defined in Agreement X: Service Level Agreement.
- The development methodology must be agile.
- Etc.

>> 2.7 Testing

Testing will be guided by the test strategy and plan developed during the initial project phases but is expected to generally include the following:

TESTING	DESCRIPTION	RESPONSIBILITY	ACCEPTANCE CRITERIA
System tests (e.g., unit, integration, regression)	All technical testing required for error-free operation of the Solution including any configuration or customizations	Supplier	 100% of severity 1, 2, and 3 issues resolved. 80% of severity 4 and 5 issues resolved.
Functional testing	Testing to ensure that the Solution meets requirements	Supplier	 Business, stakeholders, and core functional requirements supported.
Performance testing	Load testing to meet performance requirements (See Schedule X: Service Level Agreement for performance requirements)	Supplier	Performance requirements met.
Security testing	Penetration testing and vulnerability assessments	Supplier	 100% of high and medium security risks or issues resolved. Plan in place to resolve 100% of low risks or issues.

>> 2.8 Fees

>> 2.8.1 Licenses

The method for documenting the licensing fees will vary greatly depending on the licensing and costing model of the Supplier. This will likely need to be customized significantly. See <u>Appendix G</u>: Key Business Terms for a discussion of other terms that should be addressed in the contract, such as cost increases, payment terms, and so forth.

LICENSE	DESCRIPTION	INITIAL COST	MONTHLY COST
Hospital License	License to install in a hospital with more than 50 beds	\$125,000.00	\$5,525
User License	License for users 1 to 100	N/A	\$100
User License	License for users 101 to 500	N/A	\$75
Data Analytics License	License for the analytics module only	N/A	\$10
Etc.			

>> 2.8.2 Milestones and Deliverables Payments

In addition to licensing costs, the Supplier will likely charge for installation and implementation services as milestones are reached or deliverables are provided. The milestones should match closely with the deliverable or services lists in the acceptance criteria. If the deliverables or services list in the acceptance criteria are very detailed, multiple milestones could be included in a single payment.

MILESTONE(S)	DESCRIPTION		AMOUNT
Contract signature	As stated	5%	USD 150,000
Configuration workbook (Data center)	Configuration documentation provided and approved	5%	USD 150,000
Installation Acceptance (Data Center)	Solution is installed and configured in the data center	10%	USD 300,000
Installation Acceptance (Health Facility)	Solution is installed and configured in the health facility	5% (per health facility)	USD 150,000 (per health facility)
Operational Acceptance (Health Facility)	Health facility transitions from post go-live to operations	5% (per health facility)	USD 150,000 (per health facility)

>> 2.8.3 Penalties

The following penalties will be applied:

The Contract Price (exclusive of recurring costs) of USD 3,000,000 will be reduced by 0.5% for each week that a health facility does not achieve operational acceptance after the date specified in the Project Plan.

>> 2.9 Reporting

The Supplier will provide written reports monthly to the Client, including:

- Activities and accomplishments since the previous report.
- Upcoming activities and accomplishments.
- Deviation from the project scope or constraints.
- Issues and risks arising and corrective action to be taken.
- Client responsibilities for the upcoming period.

Appendix I: Service Level Agreement



Introduction to a Service Level Agreement

The Service Level Agreement typically describes the ongoing services and deliverables being provided during the solution has stabilized and is considered operational. It also includes the terms of those services (e.g., performance requirements, hours of service).

The Purchaser should be clear on the ongoing services and deliverables it requires from the Bidders, which should be included in the *Purchaser's Requirements Document* (See Appendix B) before the Detailed Bid and Evaluation Stage. It should also require the Bidder to provide very detailed information about those services and deliverables in their response to the Detailed Technical Responsiveness Form. This information will be used as the foundation for the SLA included in the contract and as the basis for negotiation.

The Purchaser's legal counsel and procurement specialists may have a different format in which to create the SLA or they may have other topics that also need to be addressed, but key components and examples are included below.

Important!

The Purchaser cannot rely on verbal assurances for any terms that it expects of the Supplier. If the Purchaser wants the Supplier to commit to a service or performance benchmark, it must be in the SLA. In addition to protecting the Purchaser, the SLA is an important document to ensure that what has been agreed upon is not forgotten as team members come and go from the program.

This section includes two parts:

- 1) Developing a Service Level Agreement which provides key considerations for developing a statement of work.
- 2) Example excerpts which provides examples of how key sections of the service level agreement can be written.

Note that the discussion below identifies the key sections of an SLA. They are suggestions and should be customized to the Purchaser's needs in consultation with the Purchaser's procurement team, legal counsel, and the IDB Health Specialist or IDB Procurement Specialist.

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>> 1. Developing a Service Level Agreement

>> 1.1 Ongoing Services

The purpose of describing the ongoing services is to clarify the Supplier's responsibilities with respect to keeping the solution in good working order, supporting new and existing end-users, and administering the solution on an ongoing basis.

Ongoing services are very likely to involve some sort of application support and maintenance particularly if it is an off-the-shelf solution. These are generally considered Tier 2 and 3 support. However, the Purchaser will also need to consider who is providing support for existing end-users (e.g., an end-user needs help running a report), supporting new end-users (e.g., training) and who is responsible for administering the solution (e.g., adding new users, creating new clinical templates). In many instances, this will be the responsibility of the Purchaser. Regardless, the contract should be clear on which party is responsible for the activity.

This section of the agreement should address:

- Ongoing Services The ongoing services that the Supplier specifically related to:
 - Application support and maintenance, such as patching the solution, installing server patches, and installing upgrades to the solution.
 - End-user support, such as help desk.
 - Site checks to provide advice on optimization.
 - Services related to onboarding new users or new facilities.
 - Solution administration, such as creating new reports or workflows.
- Standards A description of any relevant standards that the above must meet. The standards are likely to be more process related rather than technical, such as following ITIL for service management.
- → Roles and Responsibilities The responsibilities for both the Supplier and the Purchaser.
 That is, what is each party doing with respect to the services? This should be quite detailed.
- Processes Any processes that need to be followed or service constraints that need to be observed. For example, if the solution fails and nobody is able to work, can any end-user call the help line or does it have to be IT? Can the Supplier shut down the service during a busy workday to apply patches or do they have to do that on the weekends?
- ⇒ Performance Metrics Target benchmarks that the Supplier must meet in providing the ongoing services, such as length of time that an end-user is on hold, resolution of end-user issues within a particular length of time, and so forth.
- Reporting Ongoing reporting that the Supplier must provide.
- Term of service The length of the anticipated relationship (e.g., anticipate services to be provided for the following 5 years).

If you are using the Special Conditions of Contract template from the IDB, this information can be included in *Section 3. Scope of the System (GCC Clause 7)*. The Term of Service would correspond to the contract termination date. This information can also be included as an addendum to the contract.

>> 1.2 Solution Performance

The purpose of the solution performance section is to address how available the solution is. When considering solution availability, it is important to consider productive usage. Although a solution may be technically available (i.e., responding to input), an end-user may not be able to effectively use it because it is slow to respond, making it essentially unusable, a high frequency of brief unavailability is disruptive, or recovery time from unavailability is long. Productive availability relates instead to a Purchaser's ability to use the solution.

This section of the agreement should address:

- → Availability targets Anticipated uptime for the solution, such as 99.9%, which includes the response time of the solution (e.g., time between a user clicking a button and the solution producing the desired results).
- Reliability targets Maximum number of times that a solution can be unexpectedly unavailable during a period such as monthly or quarterly (e.g., no more than twice during the period).
- → Recovery time The target amount of time between a solution failure and restoration of productive usage.
- Recovery point The amount of data that could be lost (e.g., 1 hour of data generated after solution failure) if the Purchaser needs to restore systems from backup. For a mission-critical application, such as with healthcare delivery, this is likely to be zero. That is, the restore would need to include all data entered prior to the failure.
- Response time The length of time between a user interacting with a solution and the solution responding.
- → Availability monitoring Mechanisms that the Supplier and the purchase will use to proactively monitor solution availability. This would be software that scans for system responsiveness and performance. The Supplier is likely to do this, but the Purchaser may consider doing it as well to independently verify the Supplier's reports.
- → Performance penalties Penalties for failing to meet the performance targets. Where the Purchaser is hosting the solution, the Supplier is likely to also require a contractual commitment from the Purchaser to maintaining the hosting environment to a particular standard.

Note that the above performance targets are often expressed as a percentage of incidents. For example, the system needs to be recovered within 30 minutes 90% of the time that a failure occurs. Additionally, the targets may vary depending on the module or functionality. Functionality supporting mission critical care processes will have lower tolerance than non-mission critical functionality, such as running analytical reports.

Solution performance issues are also at times treated mistakenly as "one off" issues. If a pattern of solution performance issues emerges, the root cause of these would need to be identified and addressed to limit user frustration.

If you are using the Special Conditions of Contract template from the IDB, this information can be included in *Section 14*. *Design and Engineering (GCC Clause 21)*. This information can also be included as an addendum to the contract.

>> 1.3 Fees

The fees section outlines the licensing and service fees. Importantly, it should also discuss fees for additional licensing if necessary and fees for out-of-scope work.

This section of the agreement will address:

- Service Fees Costs for the services specified in the contract but also establishing the rate for out-of-scope work. The scope of work should be clear from the services sections above. If it is not, this section could include a discussion of in scope and out-of-scope.
- **Payment terms** Terms related to frequency of payment, installments and so forth.
- □ Increases Terms capping future increases in future licensing and service fees (e.g., fee increases can be no more than 2% per annum or the cost of living, whichever is less).
- → Additional functionality Restrictions against charging additional fees for additional functionality if the Purchaser is required to install them to meet the base functionality specified. For example, this would restrict a Supplier enhancing a particular module, such as reporting, and wanting to charge the Purchaser more because it is better than that which the Purchaser requested.

If you are using the Special Conditions of Contract template from the IDB, this information can be included in *Section 7. Terms of Payment (GCC Clause 12)*. This information can also be included as an addendum to the contract.

The below are examples of key excerpts from a Service Level Agreement. The Purchaser should work with its legal counsel and procurement specialist to identify other sections that may need to be included (e.g., definitions, objectives, etc.). The Purchaser should also customize the examples according to its situation. The Purchaser' can ask for advice and support from the IDB Health Specialist or IDB Procurement Specialist.

>> 2. Examples of Excerpts from a Service Level Agreement

>> 2.1 Services

The services list below is an example only. It will be based on the list and description of services that the Bidder provides in the *Detailed Technical Responsiveness Form* (see <u>Appendix F</u>) and any follow-on negotiations to clarify the services.

The Supplier will be responsible for the followin:

Support and maintenance

- Preventative maintenance, including deploying patches, minor bug fixes, and upgrades.
- Corrective maintenance, including applying high-priority patches and bug fixes as required to fix issues according to the SLA.
- Preventative and corrective maintenance for integrations.
- Solution upgrades, including developing and installing patches and minor upgrades on a quarterly basis and major upgrades annually.
- Cybersecurity maintenance, including installing server and Solution patches and updates on a critical priority basis.
- Etc.

Monitoring

- Maintaining solution monitoring tools.
- Continuous solution monitoring for performance and uptime issues.
- Monthly assessments for performance and optimization to enhance responsiveness.
- Ftc.

Backup and disaster recovery

- Regular system backups to prevent data loss.
- Maintaining the failover system.
- Maintaining and testing annually a disaster recovery plan.
- Etc.

User training

- Annual updates to Solution training materials to reflect changes in the previous year.
- Quarterly training to solution administrators and helpdesk personnel.
- Etc.

Cybersecurity

- Monthly vulnerability scans.
- Annual penetration testing.
- Deploying patches and updates to address security vulnerabilities.
- Etc.
- ⇒ Etc.

>> 2.2 Availability and Performance

There are many different metrics that can be used to determine system availability and performance. The appropriate ones will depend partially on whether the Supplier or the Purchaser is hosting the Solution and meeting minimum specifications for networks and end-user devices. The below are examples of some indicators but the Purchaser should request information about system performance in the bid documentation that can be included in the SLA. Additionally, measuring the below requires monitoring them on an ongoing basis. The responsibility for monitoring should be confirmed between the Purchaser and the Supplier.

There is an opportunity to apply penalties for failing to meet the availability or performance metrics (e.g., 1% of the monthly fee for every hour of downtime exceeding the target or 1% of the monthly fee for every high severity issue received beyond the target). These will again depend on a number of factors, including which party is hosting the solution, minimum specifications being met, and so forth.

METRIC	DEFINITION	BENCHMARK
Availability	Uptime of the solution as calculated over a one-month period excluding planned downtime of no more than 2 hours per month.	99.9%
Downtime duration	Maximum time that the Solution can be unavailable calculated over a one-month period.	2 hours
Recovery time	Maximum time required between resolution of an outage and a health facility to operate normally (e.g., back entering data, etc.).	2 hours
Frequency of outage	Maximum number of unplanned downtimes in a one-month period.	1 per month
Frequency of medium to critical Issues	Maximum number of Severity 1, 2, and 3 issues that can be received in a month.	5 in one month
Normal response time	Maximum time that the Solution will take to respond in a given percentile. Note that this metric is often expressed by module or type of transaction because a user would expect much faster response times from a clinical or administrative module than they would from an analytics module (e.g., when running quality improvement reports).	95%- 3 seconds 90% - 2 seconds
Average response time	Average time that the Solution will take to respond. Note that this metric is often expressed by module or type of transaction because a user would expect much faster response times from a clinical or administrative module than they would from an analytics module (e.g., when running quality improvement reports).	1 second
Peak response time	Average time (or expressed as percentiles) for the Solution to respond under high loads.	2 seconds
Time to first byte	Average time (or expressed as percentiles) for the first byte of data to be received at the user's workstation.	0.5 seconds
Ready for input time	Average time (or expressed as percentiles) for the screen to be ready to accept user input.	2 seconds

>> 2.3 Incident Response

>> 2.3.1 Severity Definitions

SEVERITY	CRITERIA	EXAMPLES
1 - Critical	 Clinical unit unable to function. Unable to provide safe care. Cybersecurity event. 	 Solution unresponsive. Emergency department unable to see patients. Solution responsiveness is slow enough that users are unable to function as usual.
2 - High	 Administrative unit unable to function. Clinical unit significantly impaired. Significant difficulties providing safe care. 	 Operating theatre has reduced capacity. Data analytics team unable to work Laboratory results not being received.
3 - Medium	 Multiple users prevented from conducting normal functions. Clinical users impacted but a workaround is possible. Patient experience significantly degraded. 	 Health records are unable to perform information management activities (e.g., merging patients with two charts). Patient wait times increasing significantly due to slowdown with registration and scheduling functions.
4 - Low	 Minor bugs impacting a few users but generally able to function normally. Patient experience mildly degraded. 	 Scheduling staff unable to drag and drop appointments for rescheduling but able to reschedule in another way. Patient unable to retrieve results through portal and has to call the clinic for the results.
5 - Very low	Questions.Feature requests.	 Questions related to configuration or functionality. Suggestions for improving functionality.

>> 2.3.2 Service and Response Time

SEVERITY	SERVICE HOURS	INVESTIGATION INITIATED	TARGET RESOLUTION (80% OF THE TIME)
1 - Critical	→ 24/7	→ 15 minutes	1 hour
2 - High	→ 24/7	→ 2 hours	4 hours
3 - Medium	→ 24/7	→ 8 hours	24 hours
4 - Low	→ 7am to 7pm, local time → Business days	→ 24 hours	72 hours
5 - Very low	7am to 7pm, local timeBusiness days	→ As possible	Next patch or as negotiated

>> 2.3.3 Escalation and Reporting

Where the issue is not resolved in the target resolution time, it will be escalated and reported on according to the following schedule unless otherwise agreed to by the Client when the issue arises.

SEVERITY	ESCALATION	REPORTING
1 - Critical	After: → 1 hour – Support Manager. → 2 hours – Support Director. → 3 hours – VP, Operations and Client Services.	→ Hourly
2 - High	After: 4 hours – Support Manager. 8 hours – Support Director. 12 hours – VP, Operations and Client Services.	Every 4 hours
3 - Medium	After: • 24 hours – Support Manager. • 48 hours – Support Director. • 72 hours – VP, Operations and Client Services.	→ Daily
4 - Low	After: 72 hours – Support Manager. 7 calendar days – Support Director.	→ Weekly
5 - Very low	→ N/A	→ Monthly

>> 2.4 Service Fees

Suppliers will have varying models for ongoing fees related to support and maintenance. The Purchaser should ensure that the bid documentation requests clarity on how the fees are calculated and that the contract includes same. See <u>Appendix G</u>: Key Business Terms for a discussion of other terms that should be addressed in the contract such as cost increases, payment terms, and so forth.

SERVICE	DESCRIPTION	FEE
Application Support and Maintenance	Patches and upgrades	\$10,000 / hospital / month
Application Support and Maintenance	Patches and upgrades	\$2,000 / polyclinic / month
Backup and Recovery	Ongoing backup	Etc.

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