

## 1 Introduction

As part of the implementation of the World Bank (Bank) Procurement Framework (launched on 1 July 2016), the Bank committed to establishing an **Industry Engagement Program** (IEP) to improve procurement outcomes in targeted sectors. In FY17, two sectors have been targeted; Large Medical Diagnostic Equipment and High Voltage, Direct Current (HVDC) electricity transmission.

The IEP has been designed to work closely with industry sector experts (both client and supply side) to identify and address recurring procurement problems in Bank financed projects to achieve improved procurement and development outcomes.

Program objectives are to:

- Motivate the right companies to bid;
- Speed up procurements;
- Improve readiness for project implementation;
- Reduce complaints;
- Reduce costs of bidding (clients and suppliers);
- Achieve Value for Money (VfM) to deliver better outcomes and results;
- Bring greater transparency to the bidding process.

The Large Medical Diagnostic Equipment industry actively participated in the consultations on the Bank's new Procurement Framework providing written comment on proposed changes to the Bank's Procurement Regulations for Borrowers. This included identification of specific procurement issues and initial proposed solutions relating to Large Medical Diagnostic Equipment.

## 2 Large Medical Diagnostic Equipment Industry Engagement Workshops.

As part of the Bank's IEP for Large Medical Diagnostic Equipment, a workshop with industry experts was held on June 9, 2017, in Beijing. The workshop was the third of proposed face-to-face engagements with industry and it involved Chinese based manufacturers and industry experts.

The objectives of the workshop were to:

1. Provide attendees with a clear understanding of the IEP;
2. Obtain input on procurement issues in the sector;
3. Obtain input on proposed solutions, including input on how the sector could assist the Bank and clients in implementing proposed solutions;
4. Identify emerging trends and innovation that may influence a procurement approach;
5. Understand how clients and industry operate in the sector.

The primary focus of the workshop was to discuss procurement issues and proposed solutions previously raised by industry and Bank staff, and achieve a common understanding.

### 3 Large Medical Diagnostic Equipment Procurement Identified Issues and Proposed Solutions

A high-level set of issues and proposed solutions have been identified based on prior engagement with industry. One objective of the workshop was to move towards a more granular understanding to develop more effective and precise solutions.

The issues broadly fall into three distinct themes, which map to the procurement process outlined below:

- **Theme 1 - *Identification of Procurement Opportunities and early-Market Engagement***
  - Procurement opportunities need to be publicly available in advance;
  - Procurements need to be better planned to suit the circumstances of the project; and
  - Fair and transparent early market engagement with industry needs to be put in place.
- **Theme 2 - *Approach to Market and Contract Award***
  - Specifications need to be better defined and not biased;
  - Contract award decisions need to focus less on price;
  - Borrower and Bank technical expertise needs to be bolstered to support improved evaluation of proposals; and
  - Complaints handling, management and escalation needs to be improved.
- **Theme 3 - *Capacity and Capability Building***
  - Allocation of risk between parties needs to be more realistic and equitable;
  - Lengthy negotiations on contractual terms and conditions need to be avoided; and
  - Client capacity needs to be strengthened for procuring Large Medical Diagnostic Equipment.

### 4 Workshop Format

The workshop opened with remarks from the Bank's IEP Program Lead Procurement Specialist providing background and context on the IEP. The identified sector issues and proposed solutions were outlined along with a high-level program timeline.

The workshop was structured in three different plenary sessions to discuss sector specific issues and solutions based on the three procurement themes. Each session was facilitated by a Bank representative.

- **Theme 1 - *Identification of Procurement Opportunities and early-Market Engagement***
- **Theme 2 – *Approach to Market and Contract Award***
- **Theme 3 – *Capacity and Capability Building***

Annex 1 provides a list of all workshop attendees.

## 5 Plenary Session Discussions

A summary of the session discussions is detailed below:

### Theme 1 – Identification of Procurement Opportunities and Early-Market Engagement

1. **Industry does not have input during Project design phase, or earlier.** Currently, industry is not engaged until bidding opportunities are advertised. At this point specifications are already defined. Industry should be engaged at a much earlier stage, to help define what equipment is best suited based on actual clinical needs. As it stands, equipment could be procured that is not the best solution to the needs of patients.
2. **Bank policy and practices are not always applied consistently at a local level.** The policies of the Bank can sometimes be different to local policies and practices.
3. **Information on Projects and Procurement is too vague.** Granular information on procurement opportunities appears at a late stage of project preparation. Project Plans that are published are inconsistent and in some cases not detailed enough. Overall project needs are not defined well enough in published project-related documents.

### Theme 1 – Suggested Outcomes

- Earlier and more regular engagement should be undertaken with industry, with more interaction across the whole procurement process.
- Wider advertisement of bidding opportunities should take place to ensure both national and international suppliers are aware of opportunities.
- There should be better sign posting on where to find details of opportunities.
- Key suppliers should be identified suppliers and proactively sent them copies of adverts for bids.
- Engagement with industry trade associations such as APAC MED (Association of Medical Devices Manufacturers) should be used to facilitate feedback on draft requirements, proposed bid documents and awareness of opportunities.
- Pre-bid workshops should take place to promote and discuss bid requirements with industry prior to commencement of the formal bid process.
- Industry involvement should occur at an earlier stage of project preparation to enable discussions and input on specifications, requirements and request for proposals prior to issue for the formal Request for Proposals.
- Lotting strategies that do not consolidate multiple medical equipment requirements that are restrictive to suppliers who specialize only in MDI equipment should be considered to avoid blocking these suppliers from bidding.
- Publication of procurement opportunities and information should be in a consistent format, in particular procurement plans.
- External technical experts (i.e. trade associations or a panel of approved experts) should be used to define the clinical needs of a project at the earliest possible stage in the project cycle.

## Theme 2 – Approach to Market and Contract Award

1. **Technical specifications are too detailed.** Specifications are too detailed, which leads to accusations of bias. Specifications should be based on outcomes, and allow for private sector to propose solutions, rather than comply with detailed specifications.
2. **Equipment in many cases are procured in mixed lots.** In many cases equipment is grouped in lots which are not consistent, i.e. a supplier bids knowing that some of the goods will have to be sourced from third parties. This makes the process inefficient, as the right supplier may not be willing to bid, as they cannot supply every item in the lot.
3. **Timelines for tenders are too tight.** Six weeks is currently the standard; this should be extended to 2 to 3 months. Complaints are sometimes submitted by suppliers just to slow the process down. This issue would also be eased if there were earlier engagement with industry.
4. **Procurement processes are very traditional.** Procurement approaches are traditionally based on international competitive bidding and do not use pre-market engagement, alternative procurement approaches, total cost of ownership and rated criteria.

## Theme 2 – Suggested Outcomes:

- Longer bidding time-scales should be the norm so that bids of the required standard can be submitted.
- More interactive procurement approaches such as competitive dialogue should be used.
- Clinical need should be identified prior to finalizing the procurement approach and approaching the market.
- Independent panel of experts reviewed by all manufacturers should be used to help develop and review specifications, ensuring that they are not biased towards any particular product or manufacturer
- Specification should be standardized as much as practical to reduce the burden of bidding, but also to drive consistency of requirements.
- Specifications should also consider carefully what is the actual need as in many instances the most innovative equipment is not required.
- The hierarchy of requirements detailed in a specification focus on safety, efficiency and effectiveness in delivery of the clinical solution, using technology as an enabler.
- Specifications should also cover non-functional requirements.
- More focus should be placed on providing clarity on the mechanical and electrical (M&E&) requirements of a project and manufacturers expectations for installation to the M&E connections.
- Equipment life cycles are between 5 to 10 years, therefore requirements should also consider potential upgrade paths as clinical needs develop.
- Industry and trade associations/bodies should be sent draft specifications, and draft request for proposal documents to provide independent and non-attributable feedback..
- Use performance based outcomes/specifications to help ensure wider competition and encourage innovative solutions to meet the clinical needs.
- Request for proposals/specifications/requirements should be used that stipulate the requisite level of service to be delivered, providing freedom for suppliers to propose the optimum service level to maximize outcomes such as utilization of equipment, and patient throughput.

- Patient and operator safety (i.e. dosage levels) should be a primary requirement set out in all specifications.
- The use of refurbished equipment should be considered more often and bidding/proposal documents should explicitly state if refurbished equipment is an option for the contract.
- Manufacturers should be required to provide a warranty of the supply of refurbished equipment.
- Standards of universal applicability need to be set for the procurement of refurbished MDI equipment. (Note: DITTA are in the process of finalizing a standard).
- Requirements for refurbished equipment should ensure the provision of spare parts, consumables and support and maintenance services are adequately specified and evidence from bidders to demonstrate compliance is provided.
- Prequalified lists of suppliers (a standing list) should be put in place to improve efficiency and effectiveness of the procurement process, in particular to reduce the bidding overhead for suppliers as well making prequalification a less resource intensive activity for Borrowers.
- Equipment trials could be used to help determine the most appropriate technical solution considering country environment e.g. mobile MRIs.
- The Bank should better understand the MRI market and the suppliers operating within it by undertaking activities such as visits to manufacturers (to learn about a suppliers' processes, etc.).

### Theme 3 – Capacity and Capability Building

1. **Government officials and World Bank expertise in medical technology is low.** This sector is highly dynamic, with fast moving technology. Implementing agencies and Bank staff do not have the knowledge on the latest innovations within the med-tech industry.
2. **Difficulty retaining capacity in implementing agencies.** It is difficult for government agencies to retain high capacity personnel. Adequate training programs and guidance needs to be put in place to mitigate this.
3. **Terms and conditions are unclear.** Clarification of terms and conditions after contract award delay contract signature. An industry standard set of terms and conditions, such as with civil works (FIDIC), should be established to mitigate this.

### Theme 3 – Suggested Outcomes:

- The Bank should evaluate the opportunity of establishing an industry standard set of contract terms and conditions agreed by all manufacturers through direct engagement with manufacturers and trade associations / bodies.
- Standardization on requirements such as manufacturer warranties, spare parts support and service levels should be considered to help ensure a more equitable and realistic balance of risk is established.
- Industry are able to offer consultancy services that help identify equipment based on clinical needs and should be engaged earlier in the project cycle to perform this activity to augment Borrowers capability.
- Guidance to clients on procuring MDI equipment and how to specify and evaluate requirements would be beneficial. The Guidance should also offer advice on how specific requirements based on a country's individual circumstances are considered.
- Engagement should take place early with the private sector to ensure the correct technology is

being procured based on clinical needs.

- Capability should consider three main aspects – people (skill and technical aspects), technology (knowledge of the product and innovation in the industry) and process (how is the equipment used most efficiently and effectively).
- Industry should be given the opportunity to provide support to capability building support to Borrowers and Bank staff.
- Consideration of clinicians and technicians training requirements should be considered as an ongoing requirement (as part of the contract) to help mitigate turnover of key staff and ongoing efficient operation of the equipment.
- Training providers should include manufacturers and trade associations.

The Bank will continue to engage with the Large Medical Diagnostic Equipment Sector as part of our engagement plan during 2017/18. Outcomes of all workshops will be posted on the Industry Engagement Program website.

## **6 Priority of issues/solutions (based on individual participant feedback)**

- Early and interactive engagement with industry should take place.
- More information on a project's requirements should be provided, advertising should be wider and the procurement approach being followed should be made clear.
- Equipment should be specified on basis on actual clinical needs and should include detailed plan for hospital i.e. that is the clinical objective of the equipment purchase.
- Unbiased specifications based on actual clinical needs, covering functional and non-functional requirements should be used.
- Standards for support and maintenance contracts should be established.
- An independent evaluation panel should be established as a filter for specifications and to support bid and proposal evaluation.
- There should be a focus on building government/implementing agency capacity and capability through the provision of training and ongoing support, which could be provided by the industry.
- Standard contractual terms and conditions should be established for the sector.

**Annex 1 - List of Workshop Attendees**

Representation	Organization	Attendee name
<b>Non-Profit</b>	ECRI	1. Eric Woo
<b>Supplier</b>	Neusoft Medical Systems Co. Ltd	2. Hao Wang
<b>World Bank</b>	Standards, Procurement, and Financial Management (OPSPF)	3. John Williams 4. Barnaby Wiles