PROCUREMENT INNOVATION CHALLENGE

World Bank Institute

Procurement Innovation Challenge
FOREWORD

Dear Readers,

We are very pleased to present the top entries to our first ever Procurement Innovation Challenge. On behalf of the World Bank Institute and our partners, I would like to take this opportunity to thank you for your interest in our work and to invite you to learn more about these inspiring case stories in public procurement innovation.

We hope you will find these case stories as inspiring as we have. This publication is a reflection of the work being done around the world to help advance openness, transparency and efficiency in procurement processes. The overwhelming response we received to our call for entries to the Challenge is a testament to the importance of, and interest in, this work worldwide.

One of the most exciting outcomes has been a tangible demonstration of the vital role played by public procurement. It is an essential government function, but perhaps most importantly, it can provide a means for socio-economic development and improved social equity, particularly in fragile settings. In developing countries, public service delivery is important both for alleviating poverty and enhancing government credibility. High-performing and transparent procurement systems are fundamental in guaranteeing cost-effective delivery of goods and services for societies at large, and particularly for the poor.

We would like to extend our thanks to all those who submitted an entry for consideration – we wish we were able to include each of them! This publication showcases the top 15 case stories, chosen from over 60 entries.

Our special thanks go to their authors, for their willingness to elaborate on their submissions.

The publication’s aim is to highlight a variety of innovative solutions and approaches used by practitioners to address common challenges related to procurement reform, or to improve procurement performance. It also identifies common trends and learning. We hope it will advance understanding of barriers to reform, lessons from experience and the success stories that can help accelerate shared standards of good practice. The format used to capture these experiences is designed to inform you in a practical way.

This publication would not have been possible without the support of our partners at the UN Procurement Capacity Development Centre (UNPCDC), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH with the financial support of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Public Procurement Research Group from the University of Nottingham (UK) and Integrity Action.

We owe our gratitude to the members of the Circle of Advisors who provided guidance, helped peer-review the case stories and contributed to the selection of top entries and awarded authors. We are also grateful to the WBI Procurement and Innovation Teams who have been essential in formulating and overseeing the entire Challenge process. For their efforts in making this publication possible, and to our editor, thank you.
Our hope is that this publication will be a useful tool in the growing global movement toward innovative procurement reforms. We hope that it promotes further knowledge-sharing and learning, and contributes to strengthening a community of practitioners.

We also hope that you will keep us informed of any thoughts you have on how we might make this publication more useful, or of any innovations that you implement in your own work as a result. Please continue to share your ideas and experiences with us!

We invite you to engage in the discussion through the ProAct community (www.pro-act.org), where you can support the knowledge exchange and learning of this nascent network. We envision ProAct as space to share, learn and collaborate with your peers worldwide, and look forward to seeing you there.

Happy reading and innovating,

Marcela Rozo
Procurement Team Lead

The WBI would like to thank the Procurement Innovation Challenge Circle of Advisors for their invaluable support:

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INTRODUCTION

An innovative crowdsourcing mechanism

The World Bank Institute Open Government Practice (WBIOG) provides cutting-edge knowledge and capacity building opportunities to practitioners in the public and private sectors and civil society in developing countries. This work focuses on some of the most challenging areas of governance reform, including procurement – areas where success could have transformational impacts on the lives of the poor.

Organizations around the world face a common challenge to promote the documentation and sharing of experiences for further learning. Efforts offering powerful insights into the drivers of reform are frequently not documented because practitioners lack the tools, incentives, channels or support to share their work. At the same time, those experiences that are documented remain fragmented, and the opportunity for peer-to-peer connections around that knowledge is limited. To address this and similar challenges, the World Bank Institute (WBI) seeks to adopt new approaches to identifying experiences, knowledge and good practices. With this in mind, the WBIOG Procurement Program designed the Procurement Innovation Challenge as an innovative crowdsourcing mechanism to identify and highlight evidence of new approaches, processes, initiatives, policies or tools that have led to effective procurement reforms or better performing systems.

The Challenge addressed the common objectives of collecting practical experiences and facilitating learning and sharing in what has worked and in the lessons learned in procurement reform. Innovative approaches to reform build on traditional capacity by enhancing existing practices or embracing new ones intended to make public procurement more open, fair, inclusive, transparent and accountable. Such approaches lead to improved procurement performance, and may include: Greater use of information and communications technology (ICT); Better access to, and use of, data in making decisions; Adoption of performance- or results-based processes, and the establishment of industry- or sector-wide framework agreements for commonly purchased items. Fundamentally, these innovative approaches transform existing capacity and capability, producing better development outcomes.

In February and March 2012, to boost the effort toward procurement reforms, the WBI in collaboration with a group of partners asked practitioners and stakeholders from around the world and across sectors to submit entries online to a competition on innovations in procurement. The strong response of over 60 entries conveyed experiences from diverse settings worldwide, including fragile and conflict-affected countries. These were shared under the competition’s four thematic areas:

- Use of ICT to improve performance of procurement systems
- Procurement reform in fragile and conflict-affected countries and small states
- Managing procurement systems for enhanced performance
- Contract monitoring to enhance accountability and effectiveness of public contracts.
Throughout the Challenge, organizations, companies and individuals from civil society and the public and private sectors were engaged through traditional and non-traditional communication channels. This virtual engagement fostered peer-to-peer interactions and inspired practitioners to participate in the Challenge, sparking further discussions around these thematic areas. In April, all case stories were peer-reviewed by the Challenge’s Circle of Advisors using four evaluation criteria: Clarity, innovation, lessons learned (including impact) and scalability. The 17 advisors were identified for their expertise in the overall Challenge theme and its key thematic areas. They provided guidance throughout the Challenge process.

As a result of this evaluation, five top entries were selected and their authors recognized and awarded with participation at the Open Contracting Global Meeting in Johannesburg, South Africa, in October 2012. These top five case stories are:

- **Creating Public Oversight in Nigeria: The Procurement Monitoring Portal Observatory**, by Seember Nyager of the Public and Private Development Centre, Nigeria
- **Promoting Transparent Contract Awards: Shedding light on unannounced public tenders**, by Sergej Muravjov of Transparency International Lithuania
- **The Best of Both Worlds: Centralized purchasing power meets local autonomy**, by Jorge L. Gonzalez of the National Institute of Public Purchases, Ecuador
- **The Power of Grassroots Procurement: Transforming Assam by giving farmers choice**, by Mustaqr Rahman of the Assam Agricultural Competitiveness Project (AACP), India
- **Saving Costs and Trees: Using desktop IT for green procurement**, by Steven R. Samlalsingh of Petrotrin, Trinidad and Tobago.

Innovation in procurement can have transformational impacts on the lives of the poor, through initiatives such as O trade’s Local Community Procurement Program (left) and the Assam Agricultural Competitiveness Project.
In addition, the Innovation Award from UNPCDC further recognized the Ecuador case story mentioned above, and the Public Procurement Law Review granted awards to:

- Profiling Public Procurement: Leveraging e-procurement databases in Ireland, by Anthony Flynn of Dublin City University

As well as the top five case stories, this publication showcases the next 10 leading entries. All 15 authors received guidance to further develop their original submissions for publication, in the hope that this will contribute to a common knowledge-base, drawn from experience, on what is working and of lessons learned in dealing with issues related to procurement reform. The publication is designed to help promote further knowledge-sharing and learning between practitioners, procurement professionals and reformers around these issues.

The Challenge revealed several key lessons and common trends spanning the global effort toward innovation in procurement reform. These include the critical role of ICT in improving public procurement systems, the potential for a ‘ripple effect’ to spread procurement innovation among countries, and recognition of the need for ongoing improvement. These common trends further demonstrate the vast potential of good procurement systems in efficiency savings, reduction of corruption, better service provision, better value for money, environmental benefits and economic development, among others.

All the case stories from the Procurement Innovation Challenge, including those not included in this publication, are now part of a growing knowledge base on procurement reform in the ProAct community. We hope this will continue expanding, with more experiences and stories gathered from around the world and across sectors. These case stories contribute to enhancing collective understanding of which innovative solutions have been used by organizations and practitioners, what has worked and what challenges remain in addressing procurement reform.

Our mandate at WBI is to gather and consolidate global knowledge and learning in how reform can best be approached. We hope these practitioner-driven experiences will strengthen learning, support network-building and help scale-up reform in existing areas of focus in public procurement.
Strong procurement innovations can have a ripple effect, driving improvements around the world. *Clockwise from top left*: Trinidad and Tobago, South Korea, Paraguay and Liberia.
Challenging secrecy in procurement  page 1
Public and Private Development Centre (PPDC)
PPDC has created an online portal that helps train procurement monitors across Nigeria, and collates and analyzes their findings. The reports are used to promote accountability and transparency, challenging a culture of secrecy in the procurement process.

Making the most of freedom of information  page 7
Transparency International (TI) Lithuania
TI Lithuania used freedom of information laws to obtain government procurement data. Its analysis confirmed alarmingly high numbers of unannounced tenders. Published online, the findings helped fuel public and media scrutiny of procurement reform.

Purchasing power meets local autonomy  page 13
National Institute of Public Purchases (INCOP), Ecuador
By centralizing procurement of medicines, then listing items in an electronic catalogue, Ecuador's health system has escaped fragmentation while still enabling local health institutions to order the medicines they need.

Driving an agricultural revolution  page 19
The Assam Agricultural Competitiveness Project
By trusting local farmers to procure the irrigation pumps they need, a once-failing scheme to improve Indian farm production turned itself around, resulting in increased productivity of more than 95 percent.

Saving costs and trees  page 25
Petrotrin, National Oil Company, Trinidad and Tobago
Using standard desktop computer software in new ways, Petrotrin has slashed the environmental impact of its procurement function through electronic meetings and tenders and a document tracking database.
Aggregating buried data  page 31
Transparency International (TI) Slovakia
Scattered public procurement data was preventing meaningful contract monitoring or analysis. In response, TI Slovakia created a publicly accessible online database, with simple, effective tools to browse, filter and visualize procurement data for evidence-based advocacy.

Recognizing untapped potential  page 37
Dublin City University Business School
Researchers harnessed Ireland's e-procurement database to carry out an innovative survey, giving valuable insights into the market for public sector contracts. The findings have already led to policy changes for more effective procurement.

Beating corruption with biometrics  page 43
The Public Procurement Service of Korea
By adopting the latest fingerprint recognition technology, Korea has dramatically cut bid-rigging and illegal proxy bidding, increasing transparency and fairness in its electronic tendering system.

Boosting efficiency and local business  page 49
Public Procurement Office, Paraguay
Although less than 13 percent of Paraguay's population had internet access, the country found a way to introduce electronic reverse auctions without harming small business. Success lay in giving emerging local companies a chance to improve submitted bids.

Starting from scratch  page 55
Government of South Sudan
Through a novel system of on-the-job training and mentoring, South Sudan is creating a professional cadre of public procurement staff who are helping to build the world's youngest country.

Equipping stakeholders to rebuild a nation  page 61
Government of Liberia and the World Bank
Liberia's urgent need for post-war reconstruction demanded a strong procurement function, so the government took a comprehensive three-pronged approach: reforming procurement regulation, training a new cadre of professionals and engaging the private sector.

Opening up the supply chain  page 67
O trade and market access
A Canadian firm has developed the Local Community Procurement Program, which equips marginalized people with the technical and business skills to enter the supply chain, earn a sustainable living and help develop their local economies.

An IT revolution on India's railways  page 73
Indian Railways
To help modernize the country's rail system, Indian Railways successfully rolled out a grand-scale switch from paper-based procurement to electronic bidding, real-time performance monitoring, priority identification and contract management tools.

Creating an online community  page 79
National Resources Fund (FNR), Uruguay
Uruguay's national high-cost medical treatment insurer has used web-based technology to create a 'social network' between the government, healthcare providers, patients and medical suppliers, resulting in significant cost reductions and better treatment for patients.

Harnessing volunteer power  page 85
Procurement Watch, Inc.
A Philippine civil society organization has trained parents and staff to monitor furniture procurement in schools – turning round quality and value for money, and raising local people's involvement in promoting transparency across public procurement.
The Procurement Monitoring Portal Observatory is an online mechanism to collate, analyze and channel feedback from citizen procurement monitors across Nigeria. Its library is an open source of procurement-related resources, including reports, guidelines and training tools.

‘Over 200 procurement monitors receive training and reporting support through the portal’
CREATING PUBLIC OVERSIGHT IN NIGERIA
The Procurement Monitoring Portal Observatory

Author: Seember Nyager,
Procurement Program Administrator

Organization: The Public and Private Development Centre
(Civil Society Organization)
Theme: Contract monitoring
Country: Nigeria

SUMMARY
Citizen participation in the public procurement process can make significant contributions to achieving a transparent, accountable and efficient procurement system. Oversight by trained members of civil society helps deliver value for money in procurement and raise the quality of public services. To promote and facilitate citizen oversight in Nigeria, the Public and Private Development Centre (PPDC) has created a robust web-based system: the Procurement Monitoring Portal Observatory. This central online portal provides training for procurement monitors across Nigeria and a mechanism to collate, analyze and channel their monitoring feedback. The resulting evidence-based reports are then used to promote accountability and transparency in the procurement process and enforce compliance with regulations. This way, effective procurement oversight can help improve service delivery and reduce poverty.
**CHALLENGE**

Nigeria's Public Procurement Act requires all federal public procurement processes to be monitored, whether for goods, works or services (except procurement involving national security, unless with presidential approval). To hold government officials to account, the media, regulatory bodies and civil society need evidence-based monitoring reports on procurement processes. Such reports are vital for detecting early warning signals of processes that are not compliant with good practice or regulations. In a country as large as Nigeria, the need for procurement monitors is vast. But few civil society organizations have the technical knowledge, skills or resources required to monitor procurement. Those that do are distributed unevenly within the country.

Civil society procurement monitors therefore needed a central mechanism that would allow them to collate, analyze and channel feedback from various monitoring activities. Their reports would be made available to relevant bodies (from the media to the regulators) who could use them to demand compliance with procurement regulations. This would enable monitors to make a real difference in supporting the oversight functions of Nigeria's procurement regulators (the Bureau of Public Procurement and the legislature).

Civil society also needed access to resources to train more monitors and raise public awareness of the vital role they play in public life, encouraging ordinary people's support and participation. In response, PPDC sought a way of collating monitors' feedback from across the country, while increasing the spread of monitoring oversight through training and support for civil society organizations.

**INNOVATION**

To help achieve the statutory objectives of transparency and accountability in procurement, PPDC decided in November 2009 to build on its previous procurement-watch initiatives and develop a web-based system to support civil society monitoring of Nigeria's federal procurement process. Using free and open software, the system was launched in June 2010 after a four-stage development process:

- **Setting clear objectives**
  PPDC sought to develop an online analytical tool that would allow the submission of feedback reports from procurement monitors across the nation, perform a wide range of analysis, and disseminate the results to people and organizations (from journalists to regulators) who could demand compliance with procurement regulations. Through a blog, the system would also channel real-time procurement-related legal advice to investigative journalists and procurement monitors seeking clarity on a point of law. Online training and tutorials would also improve the capacity of procurement observers and other stakeholders, while a library would give accurate, timely and detailed information for anyone interested in the Nigerian procurement system.
• **Stakeholder consultation**
  With these aims in mind, the procurement portal observatory was innovatively designed with careful consideration for the needs of stakeholders across the procurement process, including civil society, the media, procuring entities, regulators, suppliers and Nigeria’s people. All stakeholders were involved in the portal’s development, with regular consultations to ensure that the system was user-friendly and met their needs. So that procurement information can be reported with uniformity, a standard checklist was developed based on benchmarks in the Public Procurement Act. Stakeholders’ feedback helped make the portal easier to use – for example, the reporting checklist was simplified, with some of the compulsory fields removed and the availability of some questions dependent on the previous responses.

• **Developing the structure**
  Based on the identified objectives, the portal was designed with two sections:

  1. Descriptive pages, for information receiving and sharing, including an open-source library. Access is open to the general public, with regular website tab displays for ease of navigation.

  2. Participatory monitoring, analytical and technical pages, with access restricted to verified procurement monitors. These are focused on generating procurement reports, offering online procurement training and providing procurement-related legal advice to registered monitors. PPDC staff verify that monitors meet legal monitoring requirements (that they are a trained procurement monitor and are a representative of a relevant NGO or professional body). Staff also check they are fully independent, with no conflicts of interest, and that they are affiliated with an organization that has also been checked. This helps ensure the integrity of submitted reports.

• **Seeking expert advice**
  To create shared ownership and synergy with existing development programs, the portal has an independent Advisory Board, with members from the development sector, the regulators, the media and the legislature. The board helps ensure the portal remains relevant to all stakeholders. It feeds back on new program developments and peer review assessments before release and meets in person at least once a year. The board keeps the portal truly independent, its ownership lying with the stakeholders.

**RESULTS**

The project has successfully established the Procurement Monitoring Portal Observatory as a web portal for the collation, analysis and e-reporting of citizen-led procurement monitoring in Nigeria. The portal provides 24-hour access for the virtual submission and collective analysis of procurement monitoring reports by registered monitors, and is equipped with free online support materials. The results are immediately evident:

• **A trained cadre of procurement monitors**
  Over 200 procurement monitors receive training and reporting support through the portal. The
system provides a user's guide to the public procurement checklist (benchmarks set under the Public Procurement Act) and guidelines to help monitors access procurement information from federal bodies. Separate training modules include the Public Procurement Act, bid evaluation, the complaints mechanism and codes of conduct for procurement monitors. The site also provides a facilitator's manual to enable trained procurement monitors to pass on their learning.

- **Detailed procurement reports submitted to key stakeholders**
The portal has received 135 reports from procurement monitors. These have been collated, analyzed and made available to stakeholders such as regulators, legislative committees and development partners. Monitors are freely posting reports of wrongdoing and non-compliance and regulators receive summarized analysis of reports from the portal. This supports early intervention by regulators and legislators to prevent wrongdoing and improve budget implementation. For example, soon after the portal was launched, the Bureau of Public Procurement responded promptly to a report that a college had not carried out bid-opening for a tender as advertised. An annual procurement assessment report is also released through the portal, and reports have been used in advocacy with federal ministries for better access to procurement information.

- **Library of procurement resources**
The portal has provided an open source of procurement related resources for various stakeholders, including three series of procurement reports, guidelines on accessing procurement information, and training tools and manuals.

- **Ongoing evolution to reach more people**
Although still a work in progress, the portal has already proven useful in mobilizing, coordinating and sustaining citizens' engagement with the public sector on issues of accountability and transparency. Stakeholder consultations are ongoing and procurement monitors constantly provide feedback to help improve the reporting platform. The portal’s approach is new and very different from the culture of secrecy within government that has long existed in Nigeria. It therefore requires much awareness-raising and capacity building – both within the government and among civil society.

**LESSONS LEARNED**

As the portal continues to be developed, several useful lessons are emerging:

- **Give users material support**
Technology-based development projects can benefit from incentives that encourage people to participate, such as help covering their costs. Reporting on the portal is just supporting the core mandate of actual procurement monitoring – but monitoring can be a long process, due to difficulties in accessing information from federal ministries. It can entail costs from photocopying large documents to travelling...
between ministries over a period of months. The process is also time-consuming – monitors may work more than 10 hours a week trying to access relevant information. PPDC therefore tries to provide a token amount to help with monitors’ expenses.

- **Assign monitors to subjects they care about**
  Experience shows that people find it easier to monitor procurement in subject matters they are already interested in. This makes training and mobilization more effective. Ultimately, people are the drivers of the procurement reforms. The portal is only an enabler and is wholly reliant on willing citizen participation.

- **Share credit for your success**
  Civil society should take care to share the credit for successful program outcomes – for example, with public regulators, whose long-term support is essential. It is important to acknowledge their valuable input to policy enforcement – even if civil society contributed more to the workload.

Despite the portal’s initial successes, many more trained monitors are needed to ensure that procurement becomes truly transparent and accountable across Nigeria’s public sector. PPDC will keep working through the portal to boost the number of trained monitors and reinforce civil society’s capacity to monitor procurement.

**RESOURCES:**

Procurement Monitoring Portal Observatory: www.procurementmonitor.org
Portal library: www.library.procurementmonitor.org

Members of the portal’s stakeholder advisory board join representatives of development organizations for the public launch of the procurement monitoring portal. The advisory board ensures the portal remains objective and independent.
Lithuania’s Prime Minister said procurement reforms would allow “fewer undisclosed tenders”.

TI Lithuania’s report brought attention to the number of unannounced tenders across government ministries.
PROMOTING TRANSPARENT CONTRACT AWARDS
Shedding light on unannounced public tenders in Lithuania

Authors: Sergej Muravjov,
Executive Director
Ruta Mrazauskaite,
Project Coordinator

Organization: Transparency International Lithuania (NGO)
Theme: Open contracting
Country: Lithuania

SUMMARY
With the number of unannounced tenders in the country’s public sector alarmingly high, Transparency International (TI) Lithuania decided to investigate. Although an undisclosed tender is not necessarily corrupt, it does incur higher risks of corruption and unfair competition. Using freedom of information legislation to obtain data from the Public Procurement Office, TI Lithuania analyzed the occurrence of unannounced tenders, creating graphs and charts for comparison. It found that many tenders were not publicly announced, including for high-value contracts. Armed with these hard facts, it published its findings, helping fuel public and media scrutiny of the implementation of reforms to reduce the scope for unannounced tenders.
CHALLENGE

In Lithuania, the use of unannounced tenders as a means of awarding the country’s public sector contracts had become widespread. Such tenders involve the use of either simplified procurement procedures without prior notice, or negotiated procedures without prior publication. Although the fact that a tender was undisclosed does not necessarily mean it was corrupt, it does have limited provisions for transparency, meaning higher risks of corruption and unfair competition. In order to prevent discrimination and ensure fair competition, both EU and national legal regulations encourage public institutions to restrict the use of unannounced tenders.

In Lithuania the practice had grown to account for a worryingly large percentage of public tenders – including some of high value. In 2006, for example, the Ministry of Justice had used an unannounced tender to award construction company UAB Vetruna a contract worth approximately US $11.5 million. In 2008, the Ministry of Health awarded Siemens a contract with a value of around US $14.5 million. Although unannounced tenders may be conducted with perfect integrity (and may, for example, take place due to a misinterpretation of legal regulations), the extremely limited provisions for transparency mean the risks of corruption increase significantly in a context involving many unannounced tenders. This means the method could theoretically be chosen deliberately to create favorable conditions for certain suppliers.

In order to tackle the practice, TI Lithuania needed to quantify its extent. But TI’s research found that all Lithuania’s on-line data on public procurement was scattered in the form of different reports across different websites. The organization had to find a way of consolidating all the data about public procurement, so it could profile the practice of using unannounced tenders and take action against it.

INNOVATION

In 2011, to tackle the proliferation of unannounced tenders, TI Lithuania mapped the country’s existing procurement landscape, before drawing attention to the hidden practice of closed tendering.

- **Assessing available information**
  TI began by analyzing how Lithuanian ministries publish their public procurement reports – on past procurements, planned tenders and tender announcements. For example, how detailed are the published annual or quarterly plans for upcoming procurements? TI wanted to see if consolidated data was available, but found that many Lithuanian government ministries lack this information on their websites. All tender announcements and reports of past tenders are published only on the Public Procurement Office website, but they are scattered and hard to locate, and often lack information. They can also be downloaded only in PDF format, making it hard to extract information for comparison and analysis. Under such a system, the proliferation of unannounced tenders could easily go unnoticed.
- **Obtaining new data**
  To obtain the information it needed, TI Lithuania filed requests to the Public Procurement Office under the country’s freedom of information legislation. It asked for details of all unannounced public tenders and the share of such procurement in the total of all procurement carried out by each ministry annually. Once this data was received, TI Lithuania processed it and prepared an overview profiling practices of unannounced public procurement through diagrams, comparative statistics and key insights. Although a new profiling system was being introduced on the central procurement website, allowing at least general comparisons, TI Lithuania decided to take the quest for readily available information one step further, creating a detailed publicly-available report on unannounced tenders. This would allow it to draw attention to this generally neglected issue.

- **Publicizing findings**
  The initiative aimed to publish clear visual data on the practice of unannounced public procurement in Lithuanian ministries, inviting the public and the media to monitor the situation and press for policy changes that would restrict the use of unannounced tenders. These should only be used in special cases, such as unforeseeably urgent procurements, or those where only a sole supplier is available. TI also conducted advocacy with the media and the public, emphasizing the general need for transparency in public procurement and highlighting the risks that accompany unannounced tenders.

A report of its findings was published in September 2011, coinciding with the government’s introduction into parliament of amendments to the Law on Public Procurement. TI’s analysis received wide media coverage, both in print and online, with one headline quoting Lithuania’s Prime Minister commenting on the proposed reforms: “There will be fewer undisclosed tenders.”

- **Increased public scrutiny**
  The 2011 amendments to Lithuania’s procurement legislation restricted the current widespread practice of using unannounced public procurement in ministries. The amendments rule that a tender can only be conducted through a negotiated procedure without prior notice when permission is given in advance by the Public Procurement Office (the national procurement oversight body) or where the contracting authority issues a prior voluntary
transparency declaration on a particular tender. The Public Procurement Office either issues permission to proceed with the proposed unannounced tender or changes it to an open public procurement procedure.

These rules do not apply where the contracting authority has to conduct a tender of particular urgency and no other types of tenders are applicable. In this case, the Public Procurement Office must be presented with arguments for this choice as soon as possible. All the requests are made public on the central public procurement portal, along with decisions by the Public Procurement Office, so that the public and the media can monitor the use of unannounced tenders.

- **Diversification of investigative journalism**
  By identifying a problematic issue and linking the use of data analysis with concrete legal reforms, TI Lithuania helped spark interest among the media in probing into national statistics (or the lack of them) and using findings to drive legal and social change. Recent media content suggests that by demonstrating what can be done with freedom of information requests and data analysis skills, TI Lithuania might have encouraged local journalists to take a similar approach themselves, using formal requests for information to obtain data for oversight and analysis.

- **Better public awareness of the right to know**
  Using freedom of information requests to hold the public sector accountable is still a relatively new concept in Lithuania. The country has adequate freedom of information legislation, but the logistical and attitudinal framework needed to implement it is lacking. A survey by TI Lithuania in 2011 revealed that there are no major legal obstacles to the public accessing of information, but less than a third of respondents had made requests to public institutions for information over the previous two years. The main factors preventing people from exercising their right to information are practical ones (such as people not knowing they can ask for information or not knowing whom to ask). TI Lithuania’s work to tackle unannounced tenders provides an essential example of how ordinary citizens can use their right to know to engage in democratic processes and call for change.

**LESSONS LEARNED**

The analysis of unannounced tenders in government ministries revealed useful insights into optimizing public oversight of procurement processes:

- **Make data visual**
  The response to the report on procurement in ministries showed just how powerful visual aids to understanding data can be. Graphs, tables and diagrams all helped TI’s audiences understand key messages instantly, making them memorable and accessible. For a subsequent similar report on procurement in municipalities, TI Lithuania sought local infographers and designers to work with on a pro-bono basis, who created highly engaging visuals, including maps, charts and comparative diagrams.
• **Promote the approach, not just the issue**
Focusing on a specific issue can drive not only change around that issue but can also promote use of a new methodology, which can then be beneficially applied in many different situations. By tackling the issue of unannounced tenders this way, TI Lithuania promoted public oversight and a legal framework to tackle a corruption-prone procurement practice. But it also promoted public and media awareness of legal rights to access information, which can be used to demand accountability and promote change in any area of public life.

In 2012, TI Lithuania applied the approach in a different context, launching a second round of procurement analysis, this time covering all national municipalities (instead of ministries) – also attracting a strong media and public response. Its experience shows that this initiative can be replicated in any country or context with similar legal and practical circumstances.

An unintended benefit was a boost for data-based investigative journalism and higher awareness of public rights to freedom of information.
Tenders were opened and evaluated transparently, to ensure suppliers met the necessary criteria to participate in the auction. The system of reverse auction, time-bound agreements and electronic cataloguing can be widely replicated.
THE BEST OF BOTH WORLDS
Centralized purchasing power meets local autonomy

Author: Dr Jorge Luis González Tamayo, Executive Director (2008 – August 2012)

Organization: National Institute of Public Purchases (INCOP), Ecuador (Government)
Theme: Managing procurement systems
Country: Ecuador

SUMMARY
Ecuador’s highly fragmented system for procuring medicines involved around 1,200 separate state health bodies carrying out autonomous purchases. Such decentralized purchasing absorbed high levels of time and human resources, and resulted in unstable, cost-ineffective supplies of medication. To deliver improved medical services and make better use of resources, the government initiated a three-pronged system. It centralized the procurement of medicines for all institutions through the use of electronic reverse auctions, and signed two-year framework agreements with chosen suppliers to commit them to agreed terms. Medicines were then listed in an electronic catalogue through which individual health institutions could requisition supplies as needed. Ecuador’s health system now enjoys both the purchasing power of centralized procurement and the benefits of local autonomy in ordering medicines.
CHALLENGE

Before 2011, the acquisition of medicine across Ecuador’s public health sector was highly fragmented. Responsibility for ensuring a steady, reliable supply of essential medicines was spread across four governmental bodies: the Ministry of Public Health, the Ecuadorian Institute of Social Security, and the Army and Police Social Security Institutes. Between them, they had around 2,800 public health establishments across the country, approximately 1,200 of which carried out autonomous purchases. This traditional, highly decentralized purchasing of medicines was seriously undermining planning, efficiency and control. It caused duplication and erratic supply, and reduced the state’s ability to negotiate favorable prices and delivery times. The ultimate effect was on the health of Ecuador’s people.

INNOVATION

In 2010, INCOP began developing a new system that would allow centralized procurement of medicines, while retaining the role of individual health establishments in ensuring they have the medicines they need. To ensure transparency and oversight, INCOP invited national oversight bodies to participate in the process, and worked with the Department of Transparency throughout. The system has three stages:

• Centralized reverse auctions
  The initial step was to establish the overall need for drugs in the health sector. Each of the four participating bodies was asked to supply quantities required of each drug so they could be consolidated into a big auction. However, each institution lacked a centralized system that would enable it to see its overall demand for a particular drug. So INCOP released a form to be completed by each of the hundreds of health units within each organization. Many units (especially small ones) did not complete this properly, which made it difficult to consolidate so much information. To get round this, projections were made based on similar health units.

  A record of authorized drug suppliers was then established, including pharmaceutical laboratories and distributors legally licensed to provide drugs to the public health sector. To calculate reference prices for each drug, INCOP used a formula based on the official price used by the health authority (Ecuador’s
Information about the upcoming reverse auction was then broadcast to potential suppliers, informing them clearly about the process to follow, and giving them the chance to respond and raise concerns. Some were worried about the logistical expenses of the new approach. Previously they only made deliveries to one location in a main city. Under the new system, they would be obliged to make deliveries directly to each health entity, regardless of location. Bidders also asked for a reduction in the economic warranties they would be asked to give. Usually in framework agreements, a winning contractor is required to present warranties such as insurance policies for faithful fulfillment of the contract. To reassure bidders, INCOP asked only for technical warranties for the product, relying on other mechanisms to enforce contract obligations, such as fines or disqualification from participation in public procurement for five years. Free from insurance obligations, bidders were able to offer better prices when tendering.

The reverse auction was then carried out through a special website, created using experience gained in electronic reverse bidding in other areas of Ecuadorian public life since 2008. Offers from suppliers that qualified went through to the bidding process (or negotiation if there was only one qualifying offer).

- **Two-year supply agreement**
  Winning suppliers signed a framework agreement with INCOP, establishing the commercial and technical conditions for the purchase of medicines over a two-year period. The agreements mean the technical characteristics of the medicines cannot vary and the prices are frozen, ensuring quality and value for Ecuador's people.

As a result of the reverse auction, close to 50 suppliers were selected. Each signed a two-year framework agreement. The medical products were then uploaded to the electronic catalogue and access given to the four participating health institutions. Each chose which of its subsidiary entities would be able to use the system. More than 350 health entities can now submit purchase orders according to their needs. These will then be met by the supplier according to the timeframe, cost and quality specified in the framework agreement.

- **Electronic catalogue of medicines**
  The electronic catalogue is accessible online by professionals at the health establishments, who can order medicines as required. The catalogue reduces the workload at the health units, freeing them from having to carry out complete procurement processes. Logistics become the suppliers' responsibility, allowing the entities to reduce their storage infrastructure, eliminate waste through expiry and reduce the risk of shortages.

INCOP trained all participating health entities to use the electronic catalogue and produced procedural manuals to help users carry out purchases. This was a substantial change: procurement staff were not used to such a simple, paperless procedure. Some entities worked very well with the electronic system, but others – especially small ones – were uncomfortable about not having paper back-up documents. Experience is now showing that it is simply a matter of time before all users are at ease using this completely electronic procurement system.
RESULTS

The resulting increases in management efficiency have allowed Ecuador's health establishments to focus on their core activity: delivering quality healthcare to the country's people.

- **Financial savings**
  More than 520 reverse auction processes for the supply of medicines have been planned, worth around US $948 million. More than 320 processes have already been awarded for US $447 million, resulting in a cost reduction of US $327 million or 42 percent.

- **Better relations with suppliers**
  The process improved relations and understanding between Ecuador's state medicine purchasers and authorized suppliers. The high levels of participation by pharmaceutical labs and sales and distribution organizations demonstrated their trust in the process, helping ensure a smooth, cost-efficient supply of medicines.

Socio-economic benefits

As part of government policy, the reverse auction process was designed to give preference to medicines produced in Ecuador. A total of 41 percent of the contracts awarded were for medicine of Ecuadorian origin. Although this meant that some contracts were awarded not based solely on price, this cost to the state was balanced by wider social and economic gains, such as industrial development and improved working conditions.

LESSONS LEARNED

Given the magnitude of the change and budgets at stake, the process revealed the importance of several crucial factors:

- **Win strong commitment from participating institutions**
  It was important that within each of the four institutions taking part, there was strong commitment to the process, from the top leadership through to the staff implementing change at the technical level. Even though the process was defined in the Procurement Law and Guidelines, without such managerial and technical engagement, implementation would have been difficult. There was criticism of the process from some public officials unable to conceive that such a huge change could be carried out efficiently and improve the way public institutions acquire medicines. But once INCOP had demonstrated that the process had been successful and attained the expected results, it gained the necessary support.

- **Ensure the right resources**
  Crucial to the success of the project was a team of experts dedicated exclusively to the process. This meant that proper foundations could be laid. The team carried out effective market studies so as to ensure the reference prices of medicines were realistic, and was able to build a database of trusted, reliable...
suppliers. Realistic timeframes for the process could also be established. For example, it took more than two months to calculate realistic levels of demand, based on the input of over 1,200 health entities. Had this been rushed, the whole process would have been based on faulty demand calculations.

- **A replicable system**
  This three-stage system of reverse auction, time-bound framework agreements and electronic cataloguing can be replicated anywhere with electronic procurement systems, and across many sectors well beyond health and medicines.

At the end of this two-year process, the system will indicate to a precise degree the levels of use of each item, by each health unit. So future planning will be based on real data, enabling the system to deliver even greater benefits to Ecuador’s health sector.

**RESOURCES:**

Ecuador’s electronic procurement system: www.compraspublicas.gob.ec
Farmer Moinul Islam irrigates his small farm using a pump procured through the Assam Agricultural Competitiveness project. This assures him of a good crop during the dry season, enabling him to switch to grow high-value vegetables during the rains.

"Community Procurement has meant wider uptake of pumps, better value from manufacturers and improvements to agricultural productivity."

With irrigation from the pump-sets to sustain them through the dry season, farmers can now grow two rice crops per year.

Photos: Michael Foley
THE POWER OF GRASSROOTS PROCUREMENT
Transforming Assam by giving farmers choice

Author: Mustaqur Rahman,
Procurement Engineer

Organization: Assam Agricultural Competitiveness Project
(Government of Assam)
Theme: Managing procurement systems
Country: India

SUMMARY
In a bid to increase farm production, the Assam Agricultural Competitiveness Project began a scheme in 2005 to supply farmers with centrally procured irrigation pumps. But when low uptake by farmers left the irrigation drive on the brink of failing, the project devised an innovative community procurement process instead. This allows small groups of farmers to choose their own irrigation pumps from a pre-selected databank drawn up through a competitive process. This demand-driven process is transparent and cost-effective. It enables farmers to tailor purchases to their preferences and encourages dealers to provide quality after-sales service, while still permitting economies of scale. Farmer empowerment resulted in a high uptake of pumps—leading to increased productivity of more than 95 percent and a high rise in cropping intensity.
CHALLENGE

Irrigation is the core intervention of the World Bank-financed Assam Agricultural Competitiveness Project. Most of the state’s cultivation – including 70 percent of its rice crop – takes place during the monsoon season. Without access to water in the dry winter months, farmers are unable to increase their yields, improve their cropping intensity or diversify away from rice growing. Irrigation would enable farmers to exploit Assam’s significant but largely underused groundwater resource during the long dry season.

Under the project, groups of 3-5 small-scale farmers were to receive a 50 percent grant to purchase a shared irrigation pump for shallow tube wells. The project tried four times to carry out international competitive bidding processes (worth some US $5 million each) to procure tranches of 10,000 pumps centrally, but none of them were successful. Low-priced, poor-quality and unpopular pump manufacturers kept winning the bids. Unfamiliar with the brands, farmers were slow to take up the opportunity to acquire a pump-set for irrigation. The pumps that were installed experienced frequent breakdowns and received little after-sales service from suppliers, resulting in complaints from farmer groups. By midterm review, the project had resulted in the installation of fewer than 3,000 pump sets (out of a target 60,000) – a spend of only 16 percent of the allotted budget. There was even a suggestion that the project should close. The need for a new approach was urgent.

INNOVATION

The project analyzed the situation from the farmers’ viewpoint in search of a solution that addresses their needs and preferences. The idea was conceived during a field visit, when one farmer asked: “We may be poor, but since we’re paying half the cost of the pump-set, don’t you think we should have a right to select the type and model?”

• Making farmers the procurers
  Based on this, an innovative ‘Community Procurement’ process was devised and adopted. It had never previously been tried in India – nor perhaps anywhere. The model was based on three principles:

  1. Farmers would be able to choose and procure pump-sets themselves, from a pre-selected list of different manufacturers and models. The list is compiled through a transparent, competitive selection process, to guarantee cost-effectiveness and quality.

  2. Driven by open competition and the potential size of the market opportunity, pump-set manufacturers would offer lower competitive prices and provide better after-sales service to attract and retain farmers’ custom.

  3. An audit process would verify that pump-sets were delivered, installed and used by the groups of farmers they were intended for.
Creating a catalogue of pump-sets
To ensure that pump-sets of acceptable quality were procured at reasonable prices, technical standards were defined by the state. Pump-set manufacturers were then invited to submit offers through a widely-published open competitive process. This sought manufacturers willing to sell pump-sets to the farmers’ groups at predetermined prices, against laid-down technical specifications and with after-sales service. After evaluation, the shortlist of qualified manufacturers, and their brands, models, prices and local dealers was given wide publicity through newspapers, local NGO networks, and officials and village-level extension workers from Assam’s Agriculture Department.

Farmers’ groups can procure pump-sets of their choice from this list, at their own preferred time, from the manufacturer’s local outlets or from authorized dealers. To maximize their autonomy and ensure their needs are met, farmers are also able to select pump-sets from other manufacturers, provided they receive prior approval from the state agriculture department and the cost of the alternative pump-set is not more than 10 percent above that of the average price of the models shortlisted. (Very few farmers have chosen this option as they were satisfied with the list, which includes almost all major brands and models available in India which meet the technical specification.)

Getting pumps into the fields
Once a farmers’ group has chosen a pump-set, it contributes 50 percent of the costs of the set and installation, paying in cash to the manufacturer’s local dealer. The project bears the remaining 50 percent of the cost, paying the dealer once a bill is submitted with necessary certification by the project officer responsible and leader of the farmers’ group. The project also developed a robust system for monitoring the targeting and use of pumps. A third party physically monitored 10 percent of every batch of 4,000 pumps distributed. The review helped identify deficiencies and areas of weakness in systems, controls and the equipment’s field performance. But above all, it reassured the project that the pump sets were being used by the intended recipients.

RESULTS
The Community Procurement process adopted by the project transformed the apparent failure of the pump-set scheme into significant success. As the process was compatible with government promises to involve and empower community groups in developmental schemes, it was widely met with immediate acceptance. By trusting the farmers to select pumps-sets to meet their own needs, the project has resulted in wider uptake of pumps, better value and service from manufacturers, and significant improvements to agricultural productivity and cropping intensity.

Increased uptake of pumps
More pumps were distributed in the six months of the 2009-10 winter dry season than in the project’s previous four years. The project won approval from the farming community, which translated into high demand for the irrigation pumps on offer, in place
of the previous low uptake. The process allowed manufacturers of varying sizes and capacities to apply. So instead of a large single supplier being selected through international competitive bidding, the process resulted in a catalogue of differing pumps, covering 13 suppliers and 25 models for farmers to choose from. This range of choice and the accompanying autonomy allowed farmers to buy the pump-sets they knew and found reliable – resulting in complete ownership of the asset. Farmers have also been able to build relationships with local dealers for efficient after-sales service.

- **Reduced costs, better service**
  In most cases, the unit cost of pump-sets was reduced by up to seven percent below the market price – probably because suppliers were local and no longer had to distribute pumps across the state. This use of local dealers also meant communities were able to get prompt after-sales service, with dealers providing services proactively as a marketing strategy.

- **Higher agricultural production**
  The wide use of pump-sets is helping farmers to increase crop production. Most of their produce is now being marketed rather than consumed by the family, resulting in significant increases in income. Productivity has risen by more than 95 percent and cropping intensity leapt from 128 percent pre-project to 195 percent. A typical group of three small farms sharing a single diesel pump-set will almost double its rice production. Home consumption of rice has increased by about 10 percent, while marketed surplus has increased more than five times. In total, the project has increased Assam’s rice production by over 300,000 tonnes and vegetable production by about 100,000 tonnes. This process is credited with switching the state from being a net importer of rice to having a surplus to export. It has since won a national award for improved food security.

- **A replicable model**
  Building on the success of this model, the Government of Assam has mainstreamed this community procurement process for the procurement of irrigation pump-sets, as well as for other farm machinery such as tractors and power tillers. India’s Government has also recently circulated the community procurement model to all the country’s states for adoption wherever appropriate.

**LESSONS LEARNED**

The main success factors were willing participation from farmers, and the authorities’ willingness to empower them.

- **Listen to the community’s needs**
  Considering the problem from the viewpoint of farmers enabled the project to devise an innovative solution that addressed their needs. Pump-set procurement succeeded by adopting an approach driven by community demand.

- **Harness the power of the market**
  Market driven dynamics played a key role. Under this model, manufacturers quoted reasonable prices,
supplied good quality products and provided strong after-sales support, including training to farmers for routine maintenance. The project included twice-yearly workshops to obtain feedback from shortlisted manufacturers and farmers. By acting on their recommendations, it ensured that the process went smoothly.

- **Persevere through initial difficulties**
  Being new to everyone, the process went through a gestation period involving initial difficulties. These included resistance to change among field-level officials, NGOs and farmers, and shortages in the supply of pump-sets. As the process is demand-driven, no one knew which model and brand the farmers would choose. Some local dealers ran out of stock due to sudden spurts of bulk orders by farmers. This resulted in delivery delays. These difficulties were overcome through perseverance. Project staff held awareness meetings across the state to convince field-level staff of the change required. With experience, the supply of pumps has now stabilized in all districts. Farmers of a particular village generally go for the same brand and model, influenced by seeing similar pump-sets in action locally. This gives local dealers an idea of how many pump-sets to keep in stock.

- **Decentralize payment to keep the process flowing**
  In order to streamline the process, payments to local dealers are now decentralized to district level, so suppliers do not have to wait to get paid from a central source before they have funds to restock. Decentralized payment is much quicker, so dealers can constantly replenish supplies.

- **Adapt regulations where needed**
  New procedures can sometimes stall over regulations designed for a previous system. It is important to try and anticipate and prevent regulatory hitches, or respond quickly if they arise. For example, delays arose owing to the limited number of officials allowed to certify the depth of the shallow tube wells used in conjunction with the pump-sets. This obstacle was removed by opening up the certification of boreholes to a wider number of officials. Now, farmers with pump-sets no longer need to wait before they can use them, as village-level agriculture department officials and NGO staff can certify the depth of boreholes for wells.

In one of India's poorest states, each individual pump-set is helping unleash an agricultural revolution. It is testament to the strategy's success that Assam's Government is now using the community procurement model in all similar projects.

**RESOURCES:**

For a 30-minute film about the project, visit Youtube: [http://youtu.be/lSO5CyF_xA0](http://youtu.be/lSO5CyF_xA0)
Petrotrin introduced its procurement initiatives at a large symposium, giving all its contractors the chance to feed into Go Green!

'Using standard desktop software, the initiative reduced paper use by 75 percent and the procurement cycle by 30 percent'
SAVING COSTS AND TREES
Using desktop IT for green procurement

Author: Steven Samlalsingh, Contracts Coordinator

Organization: Petrotrin (State-owned oil company)
Theme: Using ICT to improve procurement systems
Country: Trinidad and Tobago

SUMMARY
When Petrotrin’s Contracts Office adopted Go Green! as its 2010-12 theme, the team leader challenged the staff to embrace the initiative using a readily available existing resource: the Microsoft Office suite of software on their desktop computers. Staff were challenged to come up with innovative ideas to increase efficiency and reduce the environmental impact of the procurement process. Standard desktop software is vastly under-utilized in terms of functional capacity, with most users worldwide embracing just a few of its applications. This challenge resulted in its being used for the development of an electronic meetings system, a paperless document tracking system and the electronic issuance of tenders. These in-house applications enhance the accuracy, cost effectiveness and timeliness of the office’s contracts-related processes – while cutting its carbon footprint.
**CHALLENGE**

Like offices across Petrotrin, the Contracts office had a manual record-keeping system, with incoming and outgoing documents and correspondence logged by hand in a book. This made it hard to track procurement processes and search for specific documentation — as well as requiring expensive and environmentally damaging amounts of paper. One office had a stack of record notebooks three feet (a metre) high.

Within the context of Go Green!, the Contracts Coordinator challenged staff to see if they could use standard desktop software in a creative manner to improve or automate long-standing, deep-rooted business processes. This could enhance the accuracy, cost-effectiveness and timeliness of the office’s procurement system, while minimizing the environmental impact of its operations. The challenge to staff to use existing desktop software grew out of the annual budgeting process, when the line item for the software license arose. Although companies buy the whole suite of Office applications, most staff just use the spreadsheet and word processing functions, ignoring the other applications. By exploring the opportunities to automate processes using the full range of Office software, the Contracts office sought to introduce sustainable practices that would optimize use of existing technology, while achieving the overall goal of reducing the environmental impact of the procurement process.

**INNOVATION**

The team came up with three key initiatives that together have transformed Petrotrin’s procurement process from a slow, paper-heavy system to an agile, low-carbon one:

- **E-meetings**
  
  Paperless Tender Committee meetings are now conducted by scanning and emailing the agenda and recommendations to core members for review in advance of the meeting. Previously for each tender meeting, packages had to be compiled and delivered to each committee member and representatives of the procuring department. These packages were used only during the meeting, with piles of paper being left behind afterwards. At the meetings, a multimedia projector is used to display the scanned recommendations for discussion, which has allowed for more focused and participative meetings. One single document is then presented at the meeting for final sign-off. Additionally, with electronic documents, the committee members no longer risk receiving their tender packages late and have ample time to review the submissions.

  This approach has been effectively used for over a year at more than 50 such meetings. Generally the tenders are for major offshore civil works, equipment hire or drilling services. Further carbon footprint reductions should arise through the acquisition of video conferencing software to conduct Tender Committee meetings. Senior managers can then attend virtually from their offices and would no longer have to spend valuable hours on the road, emitting carbon to attend meetings.
HEARTbeat document tracking system
To manage the high volume of correspondence received and disseminated by the Contracts Office, staff developed an in-house Microsoft Access database system to track the receipt and issue of all incoming and outgoing documentation, both internal and external. The system, known as HEARTbeat (Heartbeat Electronic Access Retrieval and Tracking system), allows recording, reporting, tracking, searching and archiving of all documentation, in place of correspondence being recorded under 'In' and 'Out' in a notebook. The paper system simply did not allow for tracking, nor did it allow for follow-up or at-a-glance status updates.

HEARTbeat allows reports to be generated according to sender, recipient, location and timeframe. The system is integrated with Microsoft's Outlook email application, enabling it to identify sender or recipient. HEARTbeat has now been implemented in a number of offices throughout the organization, including finance, human resources and production operations, replacing the outdated notebook system used for acquisitions procedures. Advantages include improved efficiency, with better document turnaround times and easy tracing of long-outstanding or urgently required documents. The timely retrieval and tracking of documents helps prevent lost documents and unnecessary delays. Offices are more environmentally friendly and vastly less cluttered.

Electronic issuance of tenders
All tender documents are converted to PDF format using Adobe Acrobat, and are issued to all contractors on a CD. This has resulted in a significant reduction of paper. For urgent services, tenders are issued via email using authorized email addresses provided by contractors. Due to limitations of the local legal system, which does not recognize electronic signatures, bids cannot yet be submitted by email and are still received in hard copy.

This new system standardizes the procurement process, ensuring all bidders receive the same documents at the same time. Through the use of a dedicated Petrotrin email address, bidders can send any queries for clarification. All Petrotrin contractors were involved in developing this initiative. Many come from the community where the business is located. They have grown over the years in terms of technical and financial capability, but are limited in terms of technology. In order for this innovation to work it was necessary for the contractors to obtain email addresses, so Petrotrin held a symposium with the contractors at the town hall and encouraged them to bring younger-generation relatives involved in their business. They could act as change agents, recognizing the benefits of new technology and revised business processes. Although a big cultural shift for many suppliers, it is one they have embraced and are now benefitting from.
RESULTS

The gains made by moving from a paper-based culture to automated processes have been significant. This approach allows the entire procurement process to be smoother and faster, promoting operational excellence.

- **Environmental benefits**
  This approach has resulted in a 75 percent reduction in paper consumption over four years. It has also reduced the carbon emissions generated by contractors who used to visit the office physically by vehicle to collect tender packages and related correspondence.

- **Financial gains**
  E-procurement procedures have achieved significant gains for procurement operations. By moving from a paper-based culture to automated processes, the entire procurement process has become smoother and faster, promoting operational excellence.

  The department has seen enhanced operational efficiency, with the overall procurement cycle time improved by 30 percent. As well as the reduction in paper requirements, costs have been reduced in terms of time needed for developing and preparing paper-based tender documentation. The transparency and effectiveness of procurements have also been improved.

- **Better relationships with contractors**
  Enhanced communication and shared experience have improved relations between the company and its contractors. Suppliers have also benefitted from the exposure to new technological approaches. Some have begun to source ideas, research information and purchase materials online as a result.

LESSONS LEARNED

The implementation of the Go Green! initiatives proves the synergy between waste-reducing eco-friendly operations and business efficiencies, revealing several useful lessons:

- **Keep updating the system**
  The success of using ICT in the procurement process highlights the dynamic nature of the business environment. Periodic security checks must be developed and implemented to meet integrity requirements for contract documents and meet changing circumstances. With the passage of the Electronic Transaction Act in 2012, tenders can now be issued via email rather than needing to be on CD. This process is being worked on with special focus on security, compliance and effectiveness.

- **Back up all electronic documentation**
  Just as paper systems retain copies of documents, electronic systems must be designed to ensure that all documents – including emails – are backed-up and retrievable in a readable format for a defined time period.
• **Take time to gain staff support**
  The success of a transition from traditional paper-based procurement processes to a technology-based approach requires general support from staff involved. The Contracts Office conducted around 30 training sessions for almost 500 people throughout the company for explain why this innovation was being introduced, as well as how it would work. The practical training covered areas such as preparing a scope of work, carrying out evaluations, terminology for tenders and contracts, and legal terms and conditions – so that everyone felt confident with the new system.

**RESOURCES:**

www.petrotrin.com
For the e-procurement story on film, visit: http://www.youtube.com/watch?v=bC12RW3ssz4

Petrotrin now intends to spread the message and encourage state enterprises and their stakeholders to reduce their paper and carbon footprint by at least half. In its wider business dealings, the company’s Procurements Office will also seek to share its experience internationally, encouraging organizations in developing countries to embrace sustainable e-solutions for procurement, based on existing desktop technology.

Suppliers were encouraged to bring younger-generation relatives to the symposium, to help them embrace the benefits of technology. For the innovation to work they needed email addresses, which all obtained – some for the first time.
The Open Procurement Portal is entirely automated, with a function which scans new official procurement information every night, rearranges it into a database and visualizes it for the end-user.

' The portal has boosted procurement knowledge and the regional drive for transparency '
MAKING USE OF PROCUREMENT DATA
Slovakia’s Open Public Procurement Portal

Author: Matej Kurian,
Program Coordinator

Organization: Transparency International Slovakia
(Civil Society Organization)
Theme: Using ICT to improve procurement systems
Country: Slovakia

SUMMARY
Official procurement data was published online in Slovakia only as disaggregated individual documents, effectively preventing any meaningful contract monitoring or evidence-based analysis of procurement practices. In a country where 20 percent of public spending is on procurement and where surveys find an overwhelming majority of tenders to be corrupt, Transparency International (TI) Slovakia saw the need to create a new, public, accessible procurement database. It developed the Open Procurement Portal, a single-stop website for procurement analysis in Slovakia. The site provides easy and effective tools to browse, filter and visualize procurement data worth more than €23 billion. Providing high-quality data, it has become an indispensable source for evidence-based analysis (such as estimates of the financial impact of mandatory e-auctions). The portal could easily be replicated across the EU, allowing for pan-European monitoring and analysis.
**CHALLENGE**

How many tenders were won by a particular company in the past three years from a certain ministry? How many bidders did it win against on average? This sort of question was virtually impossible to answer in Slovakia until recently. Official data was publicly available online (at www.e-vestnik.sk), but only in a scattered form, as individual HTML documents. This disaggregated information effectively prevented any meaningful contract monitoring or evidence-based analysis of procurement practices.

In a country where 20 percent of public spending goes on procurement, this obstacle to oversight was a serious barrier to holding the country's public sector to account. In addition, in a public opinion survey carried out for TI in January 2012, 80 per cent of respondents believed public tenders to be 'often' or 'almost always' corrupt. TI Slovakia saw an urgent need for a new, public and wholly accessible procurement database. This would allow increased oversight of the procurement process by anyone interested – from the media and regulators to contractors and civil society – increasing transparency, promoting fair competition and gaining Slovakia's taxpayers value for money.

**INNOVATION**

As a result, in 2010, TI Slovakia set about creating the Open Public Procurement Portal, a single-stop website for procurement analysis in the country. The portal aggregates procurement data and provides business-intelligence tools for its analysis, enabling procurement monitoring and evidence-based advocacy. Based on open-source technology, the portal cost less than €30,000 and is replicable across the EU (and beyond, adjusting for local information requirements and procurement rules).

The portal automatically collects official procurement data (currently worth more than €23 billion), stores it in a database and provides easy and effective tools for data analysis and visualization (as tables, graphs and diagrams). The project serves three main goals. First, it brings transparency to public procurement data, encouraging all parties involved in tenders to act honestly and with integrity. Secondly, it is a monitoring tool for the media, law enforcement agencies or anyone interested. Finally, the portal data can be used for the analysis of procurement practice, to inform future policymaking and implementation.

The portal development had four stages – the last two still ongoing:

- **Site development and launch**
  
  TI Slovakia created the specifications for what the site should be able to do, then worked with an external IT consultant to build it using open-source technology. A beta version of the project was launched in a testing phase lasting almost a year to address any outstanding issues of data quality, analytical tools or usability.
TL approached major Slovak newspaper *SME* – the newspaper with the biggest online presence – to host and promote the site. They responded with enthusiasm, moving the site to their servers. *SME* therefore bears the portal’s operating costs, making the project sustainable while also raising its profile. The revised Open Public Procurement portal was officially launched in late 2011, in partnership with *SME*, whose website now hyperlinks every instance of the words ‘procurement’ and ‘tender’ to the portal.

- **Data analysis**
  The system is entirely automated, with a function which scans new official procurement information every night, rearranges it into a database and visualizes it for the end-user. The only manual input required is the posting in the ‘Analyses’ section of new articles based on data from the portal.

- **User community development**
  In an ongoing process, TI is approaching politicians, journalists, NGOs and procurement experts to encourage them to use the site. Specific niche groups interested in procurement will also be identified, introduced to the tool and consulted on its functionality.

- **Liaison with authorities**
  Perhaps even more importantly, buy-in or even possible incorporation of the portal by public authorities – such as the Office for Public Procurement (the national procurement regulator) – would provide further legitimacy and sustainability for the project. When approached early in the process, the Procurement Office declined to adopt the system and introduce its data, but TI’s efforts to gain their cooperation are ongoing.

**RESULTS**

The portal and subsequent analysis of its data had significant consequences, both in terms of knowledge about procurement and of boosting the regional drive for transparency.

- **Significant research findings**
  The portal has revealed key insights, for example, that 43 percent of tenders attract only one bidder, which leaves room for the significant savings that would result from increased competition. Another finding aimed to shame public institutions drew attention to the fact that while citizens insuring their cars have more than 10 companies to choose from, when the government seeks the same service, it usually receives one offer. This could be due to overly strict terms of supply or potential collusion by bidders.

- **The introduction of electronic reverse auctions**
  TI’s findings based on the portal data provided major evidence for the introduction in Slovakia of mandatory electronic reverse auctions in procurement. TI estimated that mandatory auctions could save €250 million a year as a result of more competitive prices from suppliers in tenders. In 2011, the average number of bidders per tender climbed from 2.3 in 2009 to 3.6, with the widespread introduction of e-auctions being a major factor. In 2009, less than one percent of tenders in Slovakia involved auctions.
Two years later, 20 percent did. Had the portal not existed, the ministry proposing the initiative would not have been able to evaluate the effectiveness of its policy. Slovakia’s main ruling party, which introduced electronic auctions, used TI’s charts in a subsequent election campaign.

- **Momentum for regional transparency**
  Based on open-source technology, the portal can easily be replicated. A similar portal for the Czech Republic was launched in June 2012 under a joint project with Oziveni, a Czech anti-corruption NGO. Another version is scheduled to be implemented in Georgia in early 2013. The portal also serves as a showcase for the open data movement in Slovakia. This is a small but influential movement comprising half a dozen NGOs and many activists, experts and sympathizers from the public administration. It helped push the Slovak government to join early signatories of the Open Government Partnership, an open data initiative led by the UK and US Governments.

**LESSONS LEARNED**

Developing the public procurement portal and making sure it is put to good use is a complicated task – especially for a small NGO with a full-time staff of just five. Key lessons help make it possible:

- **Have a clear vision**
  Having a solid vision of what you want to achieve, but being flexible and planning to allow for early failures, have been important factors behind the project’s success. Building the partnership with SME – which makes the project sustainable while raising its profile – was an important part of this vision.

- **Get your team right**
  TI Slovakia is lucky to have procurement experts who knew what data they needed for analysis and became early users of the portal. Likewise, having a staff member with advanced IT skills was vital for managing the IT supplier. The importance of having the right capacity to manage complex IT projects cannot be overestimated. Support from donors such as the Open Society Institute who are interested in promoting open data projects was also crucial.

- **Maximize early buy-in**
  Early buy-in from the Slovak authorities would have made the development easier and could have driven wider usage. Similarly, activities to create a user community around the portal – of journalists, procurement experts and citizen oversight groups – should have been started early in the project, perhaps even in the development phase.

While ongoing portal development and professional use of the data are well underway, community development and liaison with the authorities will be intensified. TI Slovakia is holding training workshops for journalists and lobbying procurement regulators – demonstrating to all stakeholders the portal’s immense added value.

Co-authored by Gabriel Šipoš
RESOURCES:

SME, the portal’s partner newspaper: www.sme.sk
A similar project recently launched in the Czech Republic: www.vsechnyzakazky.cz

Partnership with major Slovak newspaper SME – which hosts the site on its servers – makes the project sustainable while also raising its profile. SME’s website hyperlinks the words ‘procurement’ and ‘tender’ to the portal.
Researchers at Dublin City University Business School recognized the potential of Ireland’s e-procurement database – with over 4,000 public procurers and 70,000 suppliers – as a basis for profiling public procurement.

‘Complex problems aren’t insurmountable: just deploy existing resources in innovative ways’

Small-business suppliers learn about public procurement opportunities as the SPRU team share their findings at a trade association conference. Findings include the effects of e-tendering and how procurement policy can benefit Ireland’s economy.
SUMMARY

Researchers at Dublin City University Business School identified a knowledge deficit in Irish public procurement. Although a recognized leader in the use of e-procurement across the public sector, Ireland had a poor record in collecting and analyzing public procurement data. Collaborating with academia, industry and the public sector, staff at the School’s Strategic Procurement Research Unit leveraged Ireland’s e-procurement database, creating an innovative survey to obtain data on the characteristics, behavior and opinions of over 600 public procurers and 4,000 private sector suppliers. This allowed comprehensive assessment of the market for public sector contracts, giving insights into procuring and tendering practice, the effects of e-procurement, implementation of measures to support small business and the impacts of EU Procurement Directives. The findings have already led to policy changes for more effective procurement.
CHALLENGE

While Ireland is a recognized leader in the use of e-procurement across the public sector, the same cannot be said of its record in collecting and analyzing public procurement data. Without such analysis, it’s hard to know where opportunities lie for improvements to the public procurement system. Until recently, little if any data existed on the Irish public procurement market. This made the task of policy impact assessment difficult and left all stakeholders - procurers, suppliers, policymakers and researchers - in the dark regarding public procurement trends. Finding a solution to this problem had become a priority.

INNOVATION

SPRU saw the potential of Ireland’s e-procurement database as a basis for researching public procurement. Over 4,000 public procurers and approximately 70,000 suppliers are registered on the government’s e-tenders website, making it an existing database of the research population SPRU needed to access. This presented an ideal way to survey the actors within the market for public sector contracts, including suppliers based overseas.

• Building partnerships

SPRU’s innovation lay in identifying and seizing this opportunity. It collaborated with industry actors and the public sector to make possible the mapping of Irish public procurement. The first step was to form a working partnership with the National Procurement Service of Ireland, which has ultimate control over Ireland’s e-procurement portal and its database of buyers and suppliers. As academic researchers know only too well, the best-laid research plans often come to nothing because access to a research population cannot be secured. But, impressed by SPRU’s idea, the procurement service agreed to partner it in using the e-procurement database to carry out Ireland’s first national survey of public procurement practice. SPRU also gained the support of industry representative groups, ensuring the cooperation of significant numbers of buyers and suppliers.

The collaborative approach was central. Throughout this period SPRU maintained ongoing contact with the National Procurement Service, keeping its partner informed of progress and soliciting its advice and expertise on certain issues. SPRU also used its industry contacts to develop the survey and pilot it with 30 industry experts.
• **Technical and content design**
  Access to the database was granted in autumn 2011. SPRU began work on designing an online survey that would profile current public procurement practice. The design process involved much debate on what data was to be captured and how various procurement practices and behaviors should be measured. SPRU had to work from a blank canvas, but used this as an opportunity to explore contemporary challenges in procurement, such as increasing the number of smaller enterprises competing for public sector contracts, using public procurement to promote the eco-technology sector, and the insertion of environmental criteria into public tenders.

  The survey was innovative in its design. SPRU was firmly of the opinion that both buyer and supplier perspectives were needed in mapping Irish public procurement. They were to be approached separately, with some survey questions common to both, and others particular to one or the other. The survey also made use of the latest data collection software (in this case, Survey Monkey). It allowed for comparison to be made of buyers' and suppliers' responses on the same or similar questions and topics. For example, both buyers and suppliers were asked whether they thought the Irish public procurement market had become more or less business-friendly over the previous three years.

• **Launching the survey**
  In December 2011, after making the necessary adjustments in response to the pilot group's suggestions, SPRU distributed the survey in electronic format to approximately 70,000 suppliers and 4,000 public sector procurers registered on the Irish government's e-tenders website. This step was repeated exactly one week after the first emailing. Although risk is inherent when trying an innovative approach, any apprehension SPRU felt over whether the survey would succeed quickly disappeared, as thousands of responses poured in on the first day.

  Of those registered users who received the survey, more than 4,000 suppliers and 600 public sector procurers responded. With over 50 questions to answer for each survey, many of them requiring detailed information, the level of response from both suppliers and procurers was excellent and adds to the credibility of the data and the general applicability of the findings. This willingness of both suppliers and public procurers to engage with the survey made it a resounding success. It yielded data essential to understanding the profile and workings of the Irish public procurement market. SPRU had achieved its central objective - in a cost-neutral, environmentally-friendly way.

**RESULTS**

Analysis of the survey data in the early weeks of 2012 enabled a benchmark profile of public procurement in Ireland for the first time ever. A report based on the survey findings, *Opportunities in Public Sector Procurement*, was launched in March 2012 by the Irish Government Ministers for Public Works and for Small Business. The outcomes of the survey were extremely useful and almost immediate:
• **Unprecedented insight**

The profiles of buyers and suppliers are now known, as are the organizations in which they are employed. Buyer-supplier interaction has been assessed and the tendering and procuring behaviors of each group analyzed. The impact of e-procurement on buyer and supplier roles has been documented and the translation of procurement policy into practice has been assessed.

The survey report, *Opportunities in Public Sector Procurement*, maps the Irish public procurement landscape and identifies opportunities for the creation of a more effective public procurement system. It profiles the prevailing conditions in both public and private sector procurement. More than 90 percent of respondents use the e-tenders web portal to identify available contracts. The portal is shown to have increased the number of public sector contract opportunities available to suppliers and made the process of tendering for contracts easier. Findings from the survey not only reveal what has happened in the public procurement market but, equally, what is likely to happen in the future. For example, it was found that 40 percent of suppliers intend to increase their tendering activity in 2012.

• **Input for future policy**

The survey will inform government attempts to balance the need for the public sector to obtain the best value for money and find innovative solutions to public needs, with the need to improve access by small and medium-sized businesses to government contracts. The report highlights successful initiatives such as e-tendering and progress in ensuring that financial capacity and insurance requirements are relevant and proportionate to public sector contracts. But the findings also draw attention to areas in need of further reform, particularly barriers to the participation of micro-enterprises in the public procurement market.

The report presents a range of opportunities that its authors believe should be seized by those involved in both public procurement policymaking and everyday practice. Public procurement is discussed at policy level not only in terms of achieving financial savings, but also in terms of offering growth opportunities to small Irish suppliers who have been hardest hit by the downturn in the domestic and international economies. Recommendations include more training for procurers and suppliers to research their markets, reduced paperwork for suppliers and ongoing skills development for those operating in public procurement. Taking these opportunities will lead to better outcomes for all stakeholders in Ireland's public procurement market, while also benefitting the wider economy.

Increased understanding of the procurement function will help the government ensure fair competitive conditions for all businesses, therefore allowing smaller enterprises a better chance to win public contracts. For example, the survey findings will help the government ensure that pre-qualification criteria, such as turnover levels or previous experience, are not weighted against small business and are proportionate to the contract itself.

• **An ongoing resource**

Thanks to its success, the survey will not be a one-off event. SPRU has secured agreement with the National Procurement Service to continue it on an annual basis and benchmark procurement performance from year to year.
LESSONS LEARNED

Several lessons emerge from this experience. By thinking from a completely new angle, SPRU identified and grasped the potential of e-procurement databases – making a seemingly overwhelming challenge easily solvable.

- **Seize opportunities**
  SPRU was proactive in creating access for itself to the e-procurement database of buyers and suppliers. This ‘can-do’ attitude was well rewarded. It was important to nurture partnerships with key stakeholders: without National Procurement Service support, the initiative would never have taken off. Equally, SPRU’s industry contacts proved invaluable in devising, testing and promoting the survey across the private sector.

- **Devise a project plan and manage by objectives**
  SPRU spent approximately four months bringing its innovative solution from conception to fruition. To maximize the chances of success, a project plan was created, a project leader appointed and key milestones set down, linked to the achievement of specific objectives. This enabled coordination and focus throughout the project.

- **Complex problems are never insurmountable**
  The key lesson from this case is a simple but powerful one: complex problems are never insurmountable. All that is needed is ingenuity to deploy existing resources in innovative ways. Among the key difficulties was prioritizing data to be captured. This issue was resolved through consultation with key public procurement stakeholders who advised on desirable questions and topics for inclusion. Among the changes suggested for the 2012 survey are a reduction in the number of questions and more targeted questioning on contemporary topics such as ‘green procurement’.

- **This approach is widely replicable**
  Looking beyond Ireland, this is an initiative that other countries can easily exploit, especially given the common use of e-procurement portals. The cost and resource requirements are negligible and online surveying is environmentally-friendly. However, survey fatigue on the part of buyers and suppliers is one potential obstacle that researchers should take into account.

SPRU’s innovative proposal has led to a strategic partnership with the National Procurement Service, which will prove vital for future research and lead to ongoing improvements in the efficiency of Ireland’s procurement system.

RESOURCES:

The Irish government’s electronic procurement portal: www.etenders.gov.ie
The e-procurement survey report, *Opportunities in Public Sector Procurement.*
Korea has pioneered the use of fingerprint recognition technology to counter proxy bidding and bid rigging in electronic procurement. Vendors' fingerprints act as an electronic key, meaning they can only submit one bid per contract.

‘The fingerprint recognition system prevents bid rigging, ensuring a level playing field for suppliers and value for the authorities.’
SUMMARY

The Public Procurement Service of Korea introduced the Fingerprint Recognition e-Bidding System in April 2010 to prevent forms of corruption such as illegal proxy bidding and bid-rigging. By reading a bidder’s fingerprint electronically and comparing it with pre-registered user data, the adoption of fingerprint recognition technology prevents illegal proxy bidders from participating using borrowed registration certificates. It also means no supplier can enter false bids to skew the tendering process, nor can anyone access submitted bids in an untimely or inappropriate way. As a result, illegal e-bidding attempts have been dramatically cut. Without compromising the economic efficiency and convenience of electronic tendering, transparency and fairness have been reinforced.
CHALLENGE

Korea's Public Procurement Service (PPS) launched the Korea On-line E-Procurement System in September 2002, making the country's entire public procurement process electronic. It became a world-class e-procurement system, used by 44,000 public organizations and 220,000 suppliers. However, the nature of e-bidding conducted on-line enabled illegal proxy bidding and bid rigging. Suppliers or third-party brokers could participate in electronic bids on behalf of others by borrowing registered suppliers’ e-certificates of registration. This meant one broker could submit many bids for a single contract, manipulating the bid price and profiting illegally when the contract was awarded. (Third-party brokers receive on average 2-5 percent of the amount of an awarded contract.)

INNOVATION

After thoroughly reviewing all available measures, PPS decided to introduce a fingerprint recognition e-bidding system, inviting only qualified and registered bidders to take part. The system allows users to submit bids only when their fingerprint matches a pre-registered fingerprint in a biometric security token. Unlike other authentication certificates, this biometric certification cannot be used by anyone other than the registered bid participant. As a result, the system helps ensure transparency and fairness in the e-bidding process. This ambitious innovation required several key stages:

- Finding the right technology
  The system would revolve around a ‘security token’, a USB-type device which stores a user’s biometric ‘e-signature key’ (fingerprint) and other personal information. It is a piece of hardware which generates the e-signature key and verifies a user through the coding software installed. Working with five local certified authentication agencies, PPS discussed ways to register fingerprint information in the token after verification of a bidder’s identification during the process of issuing a certificate.

  To ensure a stable, reliable system, PPS needed to establish functions and standards for the fingerprint security tokens. For 18 months during 2008-9, the procurement service continuously held discussion meetings with certified authentication agencies and manufacturers, developing and reviewing the technical investigations by police and prosecutors, reports from other bidders and internal monitoring processes revealed that such illegal practices occurred continuously, causing doubt about the reliability of e-bidding, as well as wasting portions of the national budget.

To eradicate fraudulent practices, the procurement service introduced measures such as a tighter bidder identification system, an informant reward policy and a system for analyzing corrupt activity. However, the great amounts of time and effort required to investigate fraudulent bidding practices and impose administrative measures against the perpetrators meant some of the measures proved ineffective. Korea’s procurement service needed an alternative way to increase security around electronic bidding.
specifications for the token. The biometric security token chosen for the fingerprint recognition e-bidding system uses the latest technology, making Korea’s procurement service the first in the world to use such a method.

- **Consultation with stakeholders**
Before implementing the system, PPS staff met with specialist IT manufacturers and the public certification authorities to gather opinions and suggestions. Suppliers’ opinions were also gathered online and taken into account before proceeding with the system. Their initial responses were mixed. Supporters agreed that the new system would enhance fairness, transparency and security, while others opposed it on grounds of complexity and additional expense. These concerns were overcome as the program was progressively promoted to bidders via multiple communication channels, including a website, faxes and mailings, and through regional briefing sessions held in partnership with relevant industry associations.

- **Piloting the system**
PPS acquired approval for the fingerprint recognition system from the Korea Internet Security Agency, and in November 2009 recruited a trial group of 300 volunteers from among its suppliers to test the system. The suppliers were chosen according to their experience with submitting electronic bids – each used the system more than 20 times a month. In January 2010, an anti-forgery fingerprint test was also successfully completed in the Biometric Research Center in Seoul’s Yonsei University, verifying the safety of the system. After successful early testing, initial implementation of the fingerprint recognition system began in February 2010.

- **Roll-out to users**
By appointment at local procurement offices nationwide, bidders started to register their fingerprints on the system. An estimated 270,000 potential bidders, including suppliers’ representatives and proxy bidders, were required to register. After a thorough verification of bidders’ identification by relevant officials, their fingerprints were taken electronically.

To make the process as smooth as possible for suppliers, PPS allowed them to make an appointment to register at a time and location of their convenience. Suppliers located in remote areas were visited in person by officials who carried out the registration process on their premises. In April 2010, given stable technological trials and successful bidder registration, PPS first introduced the fingerprint recognition system, starting with construction contracts. After a gradual roll-out across sectors, the biometric system was fully implemented in every bidding process by July 2010.

To boost security, it was reinforced by other new regulations, including the introduction of a measure allowing only one proxy bidder per company. Suppliers wanting to register a proxy bidder had to submit a certificate of employees’ insurance to confirm that the proxy bidder was employed by their company.
The introduction of the fingerprint recognition e-bidding system had direct and indirect effects:

- **Increased transparency, fairness and reliability**
  The system's main objectives – to improve transparency, fairness and reliability – were realized. By reinforcing the verification of bidders' identity, it helped eradicate illegal and manipulative e-bidding practices. As a result, not one case of loaned certificates has been reported since the system's launch – compared to 1,777 cases (worth about US $30 million) uncovered by prosecutors and police involving the illegal lending of certificates prior to implementation. Most of these cases were of a single broker with many e-certificates, gaining inflated profits when the contracts were awarded.

After the introduction of fingerprint recognition, the Korea Association of Procurement and Supply Management conducted a survey among suppliers who had used the system to participate in e-bidding. The results clearly showed that fingerprint recognition had positive effects on the process, with 78 percent of respondents saying it enhanced transparency, 73 percent reporting improved fairness and 80 percent noting improved reliability. The system prompted more accurate verification of actual bidders and provided a fundamental solution to the problem of loaned e-certificates. Bid rigging was prevented, giving participants a level playing field and enabling the Korean authorities to secure the best prices for goods and services.

- **Better rights for legal proxies**
  An indirect social benefit of the fingerprint recognition system was that the need for proxies to be registered, requiring their employee's certificate of national insurance, led to an increase in the number of legal proxies with full employment rights. The employees' insurance is a proof of employment in Korea, and covers health, unemployment, pensions and workers' compensation. During the fingerprint registration, a procurement service official checks via the employees' insurance database whether the registrant is actually employed by the supplier.

After its initial success, the fingerprint recognition system is now the universal approach applied in every e-bidding process in Korea. It is continuously being updated and developed to meet user needs and enhance transparency and reliability for bidders.

**LESSONS LEARNED**

The introduction of the Fingerprint Recognition e-Bidding System was viewed as an exemplary approach to introducing innovation, thanks to its careful incorporation of stakeholders' suggestions and opinions. Despite this, the process still revealed valuable lessons:

- **Communicate openly**
  Although bidders were widely consulted during the process, the new fingerprint system sparked strong opposition among some in its early stages. They objected to the additional registration process, the
cost of purchasing the device and early-stage technical hitches. Through continuous communication and promotions, the procurement service succeeded in convincing users that the system was the fundamental way to eradicate illegal bidding practices and make tendering fairer for them and better for Korea. In order to prevent suppliers becoming disadvantaged by not being registered for the system, PPS hosted meetings with a number of vendors based in the regions and held six regional briefing sessions in collaboration with the Korea Construction Association. Measures were taken to minimize inconvenience to suppliers, such as allowing registration at a time and location of their choice.

- **Be flexible where appropriate**
  Although technical trials of the system went smoothly, there were some cases soon after its launch where the device failed to recognize a fingerprint. In such cases, and where bidders were being excluded from a bid due to having not yet registered, a temporary exceptional procedure was enacted. This allowed bidders to submit the bid using the pre-existing method.

- **Keep on innovating**
  PPS is consistently working to improve the system, both institutionally (so bidders cannot arrange bid-rigging off-line) and technologically. Off-line bid-rigging is by nature difficult to prevent, but by using fingerprint recognition, PPS is preventing multiple tenders from flowing into a single bid through the same computer. It is also examining other biometric information, such as iris, face and voice, for cases where users' fingerprints cannot be recognized, e.g. for people suffering from hyperhidrosis (a condition causing excessive sweating). PPS chose fingerprint recognition because of its wide use with proven technological stability, but is open to alternative options as long as they meet required standards.

With this ongoing innovation, Korea aims to continue its pioneering use of biometric security to promote procurement of the highest ethical standards.

**RESOURCES:**

http://www.pps.go.kr/english/
Despite concerns about implementing an electronic system in a country with low internet usage, Paraguay's reverse auction has been a great success, with over 10,000 registered users and 1,200 auctions in the first three years.

'Paraguay's challenge was to develop an electronic system that did not exclude its small-business sector.'
REINVENTING PROCUREMENT IN PARAGUAY:
Introducing electronic reverse auctions

Author: Dionisio Mereles, Norm Coordinator

Organization: Public Procurement Office (Government)
Theme: Managing procurement systems
Country: Paraguay

SUMMARY
Paraguay faced a potential crisis as the scale of state purchasing and the number of bidders in public tenders could not be managed efficiently using traditional procurement systems scattered across government. Urgent modernization was needed, but with less than 13 percent of Paraguay’s population having internet access, small and emerging companies were at a disadvantage. Paraguay’s challenge was to develop a user-friendly system that would support this vital sector of the economy, while also generating significant government savings. In 2008 the electronic reverse auction was successfully introduced, with measures to give small businesses a second chance to improve their bids, in an attempt to help them win government contracts. In 2011, the system resulted in savings of almost 12 percent in relation to Paraguay’s acquisitions budget, surpassing targets with more than 10,000 registered bidders and over 700 auctions, almost a quarter of which supported the country’s small business sector.
**CHALLENGE**

The Paraguayan state is the country's greatest buyer of goods and services. The scale of transactions was generating an urgent need to amalgamate the many diverse processes and policies of public procurement, and align them with private sector standards. The volume of goods and services required meant large numbers of local and international companies were competing in government tenders. The scale of state needs and the number of bidders were becoming unmanageable via traditional procurement systems scattered across government.

These procurement methods did not allow for adequate planning, and permitted significant degrees of collusion between bidders, sometimes even involving public officials. This meant the state often made acquisitions at inflated prices. Innovation in the system was urgently needed.

In 2003, a new Paraguayan public procurement law was passed, allowing for electronic reverse auctions. But even in 2011, less than 13 percent of the Paraguayan population had access to the internet. This made it difficult for small and emerging companies with little or no internet access to participate. Paraguay's challenge was to develop a user-friendly system that new internet users could access, which was also reliable and could generate significant savings for the government.

**INNOVATION**

Paraguay's public purchasing law of 2003 made imperative the transition to electronic public purchasing. The Public Procurement Office faced the challenge of implementing a public procurement mechanism based exclusively on an electronic platform, despite the low internet usage among small local suppliers. The team set about creating a system for electronic reverse auction, to boost transparency and offer the state significant savings.

- **Harnessing existing expertise**
  
  To make the most of existing regional expertise, the project began with an exchange with Brazilian public procurement experts who had implemented a similar scheme. Paraguayan procurement technicians specializing in legal and IT matters visited their counterpart agency in Brazil's Government to learn about their electronic system. Drawing on these meetings and technical explanations, Paraguay's legal framework and interface were designed. Extensive legal work was required in order to adapt existing procurement regulations to a new electronic purchasing system. Regulations needed to ensure it would be transparent and free of loopholes, providing a fair environment for all bidders and an effective basis for competitive tendering that would give the government the best value for money. Meanwhile, IT experts worked on the development of the custom-made software needed for the electronic platform.

- **Introducing unprecedented transparency**
  
  The reverse auction system was developed by Paraguayan technicians using the latest open-source
technology, providing top security for sensitive data and guarding against cyber-attacks. The electronic reverse auction system authenticates all users' information and enables procurers, bidders, government agencies and citizens to observe the auction process as it happens. To ensure equality and fairness throughout the process, the system maintains strict confidentiality regarding bidders' identities until the final result. Yet the transparency of the process allows any interested observer to follow it. This promotes a fair, competitive environment conducive to driving down the prices of goods and services for Paraguay's government. The bidding process ends with the automatic generation of an audit report detailing every stage of the process, including starting prices, questions asked and the evolution of the bidding down to the second. This report is publicly available online for anyone interested.

- **Supporting small businesses**
  The innovation enabled the government to support certain economic sectors, such as small and emerging businesses. Under Paraguay's reverse auction system, these enterprises are given a second chance to improve their bids, in an attempt to help them access government business opportunities.

- **Training users and winning support**
  A key challenge was addressing entrenched ways of working in a country where internet and even computer usage remain uncommon. Although the procurement service website was being used, it was merely a consultation tool, while the auction system was a highly interactive interface, requiring users to submit information and interact with other users. Paraguay's procurement service tackled this head-on, holding ongoing weekly training sessions for both state agencies and any interested potential bidders. Through videos, brochures and presentations, the service was able to convince potential bidders that the auction system was more effective and fairer, and would give them better chances of participating and winning.

**RESULTS**

Paraguay's bespoke electronic reverse auction system has been very well received, with an ongoing increase in the number of companies registered to bid for government contracts.

- **Targets greatly surpassed**
  From 2009-11, the number of companies registered to take part in electronic auctions doubled from 5,000 to more than 10,000. After a tentative start, with only eight electronic reverse auctions in 2009, the system took off in 2010, with around 500. This growth allowed the procurement office to establish a goal for 2011 of 500 auctions. However, by December, that goal had been surpassed by over 40 percent. More than 700 electronic reverse auctions had taken place.

- **Significant government savings**
  In 2011 savings of almost 12 percent were made across parts of Paraguay's acquisitions budget using electronic auctions. For health services and medical
products, savings of 22 percent were obtained. With 34 percent of Paraguay’s public procurement procedures currently using the reverse auction system, the potential for further savings as it expands across government remains significant.

- **Support for small business**
  In 2011, 157 auctions (22 percent) benefitted small and emerging Paraguayan enterprises, making the reverse auction system an economic stimulus for the small business sector. These companies now see the system as a reliable way of being able to gain access to government business opportunities.

**LESSONS LEARNED**

As Paraguay continues to develop its e-procurement capacity, the process has revealed valuable lessons to take forward:

- **Draw on existing experience**
  The value of the exchange visit with Brazil was immense. Paraguay’s procurement specialists knew they needed to develop a system tailored to their country’s own situation, but gained huge benefit from being able to draw on existing expertise and avoid common mistakes, and from simply not having to start again from scratch.

- **Keep innovating and adapting**
  Paraguay’s greatest challenge is to keep the system working to fast-evolving speed and security standards. Even while the system was being built, international public procurement norms were changing, requiring several modifications and adjustments during the process in order to retain optimal efficiency. These adjustments continue constantly, especially regarding information security and the speed with which the system operates.

- **Foundations for diversification**
  The electronic reverse auction is currently used for generic goods such as office supplies and food products, which are not complex and have a uniform quality level. In the longer term, based on success to date, Paraguay will increase of the number of auctions held and the range of items procured this way. The procurement service is also exploring the possibility of making use of reverse auctions mandatory for certain purchases which yield the most successful results.

**Foundations for diversification**

- **Have faith in people's ability to adapt**
  The implementation process demonstrated the flexibility and adaptability of both companies and government agencies. Paraguay’s procurement service feared a general reluctance to use the radically new system, but it is becoming increasingly popular and widely used. Companies are embracing a system that offers an open and non-restrictive opportunity to participate in the whole auction process, while procurers and citizen groups welcome the opportunity to be able to oversee the process.
Demonstrate clearly how the system helps people
The public response was overwhelmingly positive. Through wide publicity online and in the national media, people realized the system meant better value for public money and fairer opportunities for their businesses. After just three years, Paraguay's reverse auction system has more than 10,000 registered companies. One of the greatest incentives has been the opportunity the system offers for small or emerging suppliers to improve their final bids. Paraguay's Public Procurement Office continues to explore the scope for applying its tailor-made electronic reverse auction system. It is increasing not only the number of auctions held, but also exploring the possibility of using e-auctions for procuring more complex packages of goods or services.

RESOURCES:
Paraguay's electronic reverse auction website: https://www.contrataciones.gov.py

Through weekly training sessions, Paraguay's procurement office convinced potential users that the electronic auction system was fairer and more effective than the traditional paper-based approach.
A wide range of national assets – from schools (above) to roads and water systems – has been acquired thanks to the procurement staff newly in place to conduct the acquisition process efficiently and professionally.

‘From just a dozen national procurement staff in 2007, there are now 84 across 25 ministries, departments and government agencies’
STARTING FROM SCRATCH
Creating procurement capacity in post-conflict South Sudan

Author: Richard Olowo,
Procurement Hub Coordinator, The World Bank Group

Organization: South Sudan Ministry of Finance and Economic
Development (Government)
Theme: Procurement reform in fragile states
Country: South Sudan

SUMMARY
In the world’s youngest nation, South Sudan, a team of national procurement officials has been built after decades of conflict, to enable budgets to be spent and service delivered to citizens in war-torn towns and villages. In place of procurement agents contracted after competitive selection processes, a government scheme is now training young South Sudanese graduates to form the core of a new procurement service. With no prior procurement training or experience, they are learning on-the-job, working alongside specialist procurement consultants, recruited individually to build capacity comprehensively on a one-to-one basis. The process requires a delicate balancing act between the need to rapidly supply highly expectant citizens with peacetime services and infrastructure, and to create procurement capacity mainly through ‘learning-by-doing’, to ensure good governance and sustainable service delivery.
**CHALLENGE**

South Sudan emerged in July 2011 as the world's newest nation, after decades of civil conflict and a Comprehensive Peace Agreement between Sudan and the Sudan Peoples' Liberation Movement in 2005. The autonomous Government of Southern Sudan acquired access to a multi-donor trust fund for delivery of services, and – for the first time – to revenues from oil production. The World Bank was selected to manage the trust fund, an important part of which was supporting the development of a reliable procurement system. A procurement agency was hired to carry out procurement using both government and trust-fund resources, and to build procurement capacity within the new government.

Review of the first agency contract confirmed that no significant procurement capacity was built during its duration (possibly because there is an inherent disincentive for procurement agents to work themselves out of a role). As a result, the second procurement agency contract excluded capacity building, and government procurement staff did not work with or in parallel to the procurement agents. In 2009, the World Bank advised South Sudan's government against renewing the contract with the procurement agent. The new country needed a different way to develop the robust procurement capacity that would enable it to nation-build.

**INNOVATION**

As an alternative to procurement via hired agency, the World Bank's Africa Regional Procurement Manager recommended that individual ministries and departments hire independent procurement specialists for each trust-fund project, and assign counterpart staff to the specialists to train with them while on-the-job in South Sudan's capital, Juba. The government was originally unsure about the idea. One school of thought, fuelled by a fear of the unknown, held that the procurement agency took responsibility for the result of the procurement process and was building capacity. The other saw that the agency was costly and yet wasn't leaving any positive legacy of skills. However, the Bank demonstrated to the government that the procurement specialists working within ministries could perform satisfactorily without the help of a procurement agent – and achieve more in the longer term.

- **Recruiting trainees and specialists**

  Procurement specialists were recruited through advertising in East African newspapers, coming mainly from neighboring countries such as Ethiopia, Kenya, Tanzania and Uganda.

  As an initial step, the Ministry of Finance and Economic Development would hire a procurement specialist and a procurement training adviser, before recruiting 10 graduate nationals to be trained as Procurement Officers. These graduates would go on to support government bodies weak in procurement management. The 10 South Sudanese graduates were not required to have any prior experience in procurement management, but were recruited by the Ministry of Finance using civil service recruitment procedures.
This approach would result in individual ministries taking responsibility for their procurement, with procurement staff in each ministry and department implementing the multi-donor trust fund, drawing support from a pool of procurement officers in the Finance Ministry. This was in line with the South Sudanese Government’s priority of capacity development. Two sets of standards were available to ministries and departments: World Bank guidelines for trust-fund projects, and South Sudan’s Interim Public Procurement and Disposal Regulations for government-financed procurement. Various donors to the trust fund also provided procurement specialists to the Ministry of Finance and funded formal procurement training.

- **Providing ‘training by doing’**
  Procurement training is most effective when done on-the-job and complemented by short-term formal courses. Courses were held by the World Bank, offering targeted training on specific areas of procurement identified as a general problem among government ministries and departments. The procurement specialists trained government staff on trust-fund financed procurement, but the skills acquired are now used mostly for procurement using the government’s own resources.

  Funds that became available when procurement agency contracts were not extended were used to support the procurement specialists in the Ministry of Finance, as well as financing formal training for the private sector. Training suppliers was vital for achieving sufficient impact on service delivery. Companies involved in banking, agriculture, consulting and construction were invited by the Regional Chambers of Commerce to send representatives to a Business Outreach Seminar. This achieved an outstanding attendance rate of more than 80 percent. Participants were informed about the business opportunities created through trust-fund financed projects, and given materials such as procurement guidelines and web-links, as well as tips for preparing successful bids.

**RESULTS**

State procurement capacity has been successfully developed as planned. From just a dozen national procurement staff in 2007, there are now 84 procurement staff at various levels in 25 ministries, departments and government agencies in South Sudan.

- **Funds disbursed for national development**
  These procurement officers can reliably perform the public procurement function and facilitate budget execution, enabling service delivery and promoting good governance. The multi-donor trust fund disbursement rate, very low in early years, has risen significantly, so that only minimal amounts will remain unspent when the fund closes later in 2012. A wide range of national assets – from offices, vehicles and roads to water systems, schools and medication – has been acquired thanks to the procurement staff now in place to conduct the acquisition process effectively and professionally.
• **Ongoing momentum for reform**
These new procurement professionals have become champions of reform, demanding recognition of the procurement profession, as well as international standards in procurement management. They provided crucial input to both the World Bank’s Country Procurement Assessment Report and the drafting of South Sudan’s new public procurement bill, identifying important opportunities for improvement in the national procurement system. As procurement champions, they have also requested further World Bank training for the private sector, as well as for senior government officials, which the Bank plans to provide. Judging from this input, the achievements in procurement capacity-building are sustainable.

**LES SONS LEARNED**
These outcomes indicate that the innovation can be replicated in similar contexts. Several lessons emerged that will help ease the process:

• **Provide adequate capacity for contract supervision**
Procurement agencies, like other consulting services, require a minimum capacity for contract supervision by the employer if they are to give satisfactory performance. This was a problem with the consulting firms, but in general is much less of a problem with individual consultants. However, a proper watch should be kept on the working style of the individual consultant. It is possible that some consultants may not pay sufficient attention to the question of knowledge transfer, simply in order to extend their role for a longer duration. This did not affect the South Sudan program, possibly because it was always clear from the start that transfer of knowledge was a key objective of the consultants’ assignment.

• **Don’t hire agencies to capacity-build**
Procurement agency contracts should not include capacity building, as there is a potential conflict of interest. An agency has little immediate incentive to work itself out of a role by quickly building procurement capacity in its client.

• **Ensure counterpart staff are available**
Take care not to simply assume that counterpart staff (i.e. staff responsible for procurement in government offices) will be available. Special effort needs to be made to ensure that there are dedicated government staff to work with and learn from hired procurement specialists.

• **Improved cross-governmental cooperation**
The activities under the initiative have involved the collaboration of different government ministries and bodies. The Ministry of Finance is in charge of overall procurement policy development and the centralized procurement of the South Sudanese Government. It dealt with the termination of procurement agency contracts and the recruitment of Sudanese graduates for the new positions. The Ministry of Labor and the Civil Service Commission approved the recruitment process, while the Budget Directorate financed some of the training.
• **Be aware of staff turnover**

Although the overall procurement performance of South Sudan's government bodies has dramatically improved, there are early signs of staff turnover, as the best performers leave to take up private-sector or donor-agency postings offering more competitive reward packages. If turnover levels become significant, they could affect further improvements in government procurement performance, so it is important to ensure that government structures of reward and recognition remain attractive for newly-trained professionals.

The World Bank has found that when it provides procurement training, the working relationship between the Bank and the Borrower improves. South Sudan is no exception, and the capacity-building training continues, with several procurement staff taught under the program now taking over from the specialist consultants who trained them and have since left.

Trainee procurement staff from South Sudan's Government gather for a formal course to complement their on-the-job learning alongside expert consultants charged with knowledge transfer.
To rebuild trust and help companies take part in competitive bids, Liberia’s Government runs workshops for the private sector.

‘Building capacity among all stakeholders – regulators, public sector staff and private suppliers – is transforming Liberian procurement’

World Bank staff present training materials from Ghana’s Millennium Challenge Corporation for adaptation into Liberia’s intensive one-year procurement curriculum.
RECONSTRUCTION IN POST-WAR LIBERIA
Holistic procurement reform

Author: Winter Chinamale,
World Bank Procurement Specialist

Organizations: Government of Liberia and the World Bank
(Donor Agency)
Theme: Procurement reform in fragile states
Country: Liberia

SUMMARY
Liberia’s civil war caused the complete destruction of the country’s public procurement system. Yet the urgent need for post-war reconstruction made a strong, effective procurement function more important than ever. So a vital first step to enable the country to rebuild its infrastructure was the launch of a specific program to regenerate public procurement. The government took a comprehensive three-pronged approach: reforming procurement regulation, training a new cadre of professionals and engaging the private sector. Together, these measures ensured that all procurement stakeholders are equipped to help rebuild the country.
CHALLENGE

Fourteen years of civil war (1999-2003) destroyed Liberia’s professional workforce, infrastructure and institutional capacity. The public procurement system disappeared and the country was left without skilled practitioners. Procurement was carried out by civil servants without the necessary training and experience, drafted in to fulfill the requirements of Liberia’s Public Procurement and Concessions Act, which had been revised in 2010. They had only minimal training in the terms of the Act. As a result, the procurement that did take place lacked efficiency and transparency, and was not cost-effective. Quotations were often obtained only from known suppliers or contracts awarded directly to a specific company.

INNOVATION

Faced with such an overwhelming lack of capacity, Liberia’s Government realized it needed to go beyond traditional procurement reform, which tends to emphasize the establishment of a strong regulatory system while often simply hoping everyone concerned will adapt to it. The Liberian approach went further, aiming to ensure that all stakeholders – from monitors to suppliers – had the right knowledge and systems to play their part fully in the new framework.

To drive the massive reconstruction effort, the government adopted a three-pronged approach to procurement reform:

- Creating robust oversight
  Liberia did have an existing oversight body, the Public Procurement and Concessions (PCC) Commission, but this urgently needed strengthening so it could adequately perform its regulatory function. The first step was to define the commission’s immediate needs. With World Bank backing, a consultant assessed its human resource requirements, identifying a severe shortage. As a result, the government employed 12 additional procurement monitors, increasing the total number of staff to 40. It also bought them new equipment and refitted the commission’s offices.

  The consultant then assessed the commission’s overall institutional capacity, in order to develop a roadmap to further strengthen it. The roadmap’s recommendations included specialist staff training, particularly in procurement monitoring within
individual government ministries; the installation of suitable computer equipment; the creation of a role for an advisor to help facilitate smooth procurements, and the revision of procurement regulations. Funding for these activities has been secured from a multi-donor trust fund dedicated to public financial management reform.

- **Developing skilled practitioners**
  To meet the urgent need for procurement staff with specific skills, the government focused both on upgrading the skillsets of existing employees, and on training brand new procurement personnel.

  A short-term in-service training program was begun through an existing parastatal organization, the Liberia Institute for Public Administration (LIPA), to train public sector practitioners in basic procurement. The program leaders were themselves trained at the International Labour Organization in Turin, Italy, while a consultant hired through a World Bank-funded project assisted with development of the curriculum.

  To expand the cadre of procurement staff, the government also established a school to deliver an intensive one-year procurement training course to 25 students per year, for deployment in the public sector. Competition for places is high: the course was advertised to the public in local newspapers, resulting in more than 370 applications. The program is led by experienced international procurement professionals, who deliver a curriculum adapted from a successful program run by the Millennium Challenge Corporation in Ghana. The school was opened in April 2012 by the Deputy Finance Minister for Administration. In parallel, the Civil Service Agency is developing a procurement career track, to recognize and reward professional procurement personnel serving the public.

- **Building suppliers’ capacity**
  The government recognized the importance of going beyond simply reforming its own capacities. To promote competition among suppliers and increase their responsiveness to procurement opportunities, it also needed to work with local companies to develop their skills for taking part in competitive bids – as well as to win their trust. Following the war, the private sector lacked confidence in the public procurement process, seeing it as inefficient and corrupt. Companies also lack knowledge about how to prepare bids for contracts with government institutions. To help local suppliers of goods and services participate effectively in the tender process, the PPC Commission began regular training sessions to teach private sector staff how to submit strong competitive bids. These sessions are open to all interested companies and consultants, and have been welcomed by the private sector. As well as helping suppliers submit quality bids, the sessions are helping rebuild wider public trust in procurement, and increasing companies’ willingness to take part.
RESULTS

By addressing capacity issues for all stakeholders – the regulatory body, public sector personnel and private service providers – the approach is already transforming Liberia’s procurement process.

- **Effective procurement oversight**
  The reforms have strengthened the PPC Commission, enabling it to recruit and train new monitors so it can begin the procurement monitoring expected of a regulatory body. Government institutions must have approval from the commission for their procurement plans before they can access their allocations from the national budget. The commission now has a website open to the public where it publishes information including procurement plans and opportunities. It has also started reviewing government institutions’ procurement documents, for compliance with the PPC Act.

- **Foundations for cadre of professionals**
  The short-term in-service training, along with monthly procurement clinics, has strengthened staff capacity, resulting in better quality documents and reduced lead times for procurement processes. The first session has been evaluated by the training consultant and LIPA staff to identify areas for improvement in subsequent sessions, and there are plans to develop intermediate and advanced courses for those who succeed. Staff are enthusiastic about their new training and are looking forward to taking higher-level courses. The full-time one-year intensive course for external students is being transferred to the University of Liberia, where it can generate a pool of professional practitioners to help the government reduce the existing skills gap.

- **Tangible economic impact**
  The percentage of budget spent rose nine points to 58 percent for the year 2010-11, benefitting all sectors, from agriculture and infrastructure to health and education. Instead of obtaining quotations from only known suppliers or awarding contracts directly to a specific company, procurement staff now place notices of public procurement opportunities in the newspapers for all to see. Tighter procurement practices have helped Liberia improve its score on Transparency International’s Corruption Perceptions Index (which measures perceived levels of public-sector corruption in a country).

LESSONS LEARNED

Even in circumstances where the need for procurement reform is not as urgent as Liberia’s, the country’s three-pronged approach holds valuable lessons:

- **Foster inclusive collaboration**
  Strong commitment from both the government and donors underpinned the entire process, and was nurtured at every stage. The reforms were well-balanced across key procurement stakeholders,
so that the PPC Commission, procurement staff and the private sector all felt equally supported, and no-one felt singled out. Where external expertise was needed, the consultants were experienced and suited to the task. The government took a broad approach to identify potential partners, such as Ghana’s Millennium Challenge Corporation, whose successful training curriculum was adapted for Liberia’s use.

**Ensure capacity building is holistic**
The process highlighted that in a fragile state with a dearth of critical skills, intensive capacity building requires effort from all angles. Training and capacity building should also be accompanied by improved incentive schemes (such as salaries, career development and promotion) in order to retain newly-skilled staff in public institutions and prevent leakage to better-paid donor projects. The intensive in-service training should also have been available as pre-service training. It revealed the importance of ensuring participants’ commitment to the course for their own career development, so they don’t see it simply as a work obligation. As an incentive, the government is developing a cadre system which will define the minimum training and qualifications required for a particular procurement role.

**Bridge the gap between theory and practice**
The process exposed the importance of supplementing reforms with practical coaching so that procurement staff are well equipped with the skills to implement new measures. Beyond their theoretical training, PPC Commission staff need practical coaching in how to oversee procurement processes, especially within ministries. Donor funding has been agreed, and consultants and IT equipment will be put in place for further coaching initiatives.

**Make the approach sustainable**
Among the strengths of the Liberian government approach is that although it was mostly funded by donors, it is sustainable. No donor financing was used for recurrent costs, with salaries for extra PPC Commission staff financed by the government. The approach drew on existing resources wherever possible, with professional training taking place through existing institutions and a curriculum being developed from a successful model in Ghana.

This ongoing three-pronged reform process will ensure that procurement continues to play a vital role in Liberia’s continuing reconstruction.

**RESOURCES:**
Public Procurement and Concessions Commission website: www.ppcc.gov.lr
The program trained 19 local people – mostly from vulnerable social groups – in food handling and management, resulting in six sustainable small businesses. It teaches them to access the local supply chain and compete successfully in the procurement bidding process.

Although she has never attended school, Maria Utitiap (left), from Ecuador’s indigenous Shuar community, successfully completed the Local Community Procurement Program and became one of the first catering suppliers to mining giant Kinross Gold.

‘The program is designed to avoid dependency on the immediate project around which it is based’
USING PROCUREMENT TO DRIVE DEVELOPMENT

The Local Community Procurement Program

Author: Monica Ospina,
Founder and Director

Organization: O trade and market access (Private company)
Theme: Managing procurement systems
Country: Canada / Ecuador

SUMMARY

O trade and market access, a Canadian firm specializing in sustainable supply chain and community development solutions, wanted to harness the potential of large procuring entities (public or private) to impact a community's livelihood and development. In 2007, it developed the Local Community Procurement Program, a market access and capacity-building model which aims to provide small and medium-sized community enterprises with the necessary skills to access their local supply chains and become competitive suppliers in their local economies on a sustainable basis. The program brings together private or public procuring entities, local communities, governments and industry associations, to identify opportunities and provide the necessary training to enable community enterprises to enter the supply chain.
CHALLENGE

O trade realized that as procurers, the private and public sectors both have a powerful ability — and responsibility — to impact a community's livelihood and development. But this potential is often overlooked. In particular, the private sector can be either a source of conflict for communities or a strong force for development, helping local people create meaningful and sustainable livelihoods. O trade was determined to try to nurture this positive powerful force.

The challenge for many local businesses is that they do not meet the pre-qualification criteria of large procuring entities in their region and so are often excluded from the bidding process. This exclusion often results in conflict between local communities and large players. This is particularly true in the extractives industries, which bring together big international business and small local communities. So O trade sought to develop a way to help local communities by enabling them to secure inclusion in the private sector's supply chain. By accessing business opportunities this way, communities can create sustainable livelihoods for themselves, alleviating poverty and stimulating socio-economic development in their region.

INNOVATION

The results was O trade’s Local Community Procurement Program, through which local small businesses are provided with the knowledge and tools to become qualified suppliers and gain access to the supply chain.

Research for the development of the program focused on the extractive industry, as one with a particularly strong impact on local communities and the environment. This focus allowed O trade to implement the model and ensure that it was an effective solution for communities before seeking to expand its scope. The program was successfully implemented in 2009 by Productivity Alberta in Alberta, Canada, and in 2011 by Kinross Gold Corporation in Los Encuentros, Ecuador.

The project sponsor — a procuring organization, either from the private or public sector — is responsible for funding the customized design and implementation of the model, including the necessary background research, initial assessment, and ongoing evaluation and coaching. The model centers on a four-pillar approach to enabling local communities to enter private or public sector supply chains. Each pillar can be customized to meet both the needs of the communities in a company’s area of influence and the operational needs of a big organization, achieving a balance between community and business development:

- **Pillar 1 — dialogue with stakeholders**
  The program starts with engagement with communities, local industries, governments and the private sector, to achieve understanding of each party's needs and establish transparency within the process. O trade works with the private sector and regional stakeholders to understand the industry's demands and requirements and the communities' capacities. It
identifies industries that can serve as job creators for communities, but that will also provide a sustainable livelihood for the community beyond the project lifecycle. The procuring entity is responsible for the wellbeing of the communities in its direct area of influence, the physical and natural environment that its operations impact, and its employees. Throughout the implementation of the program, O trade continues to work with the procuring sponsor and local community members to ensure the ongoing collaboration and support of everyone involved, and that their expectations are met.

To begin the process with Kinross Gold in Ecuador, for example, O trade approached the company’s Community Relations and Procurement teams, leaders from the 23 communities in Kinross’s direct area of influence, local government, and industry associations. It worked to identify the main needs of each stakeholder group, looking for ways in which the company and communities could work together.

- **Pillar 2 – building capacity**
  The program then focuses on transferring technical knowledge to participants to build their capacity in areas where industry demand and market opportunities have been identified. The training is customized to ensure all participants are able to complete the program successfully, regardless of their social status and knowledge level.

  Initial dialogue with Kinross revealed that the company was building a new road to a specific site, which would cut through the community of Pindal. To maximize productivity during construction, workers would need catering services available on-site.

  O trade’s socio-economic assessment identified high unemployment among vulnerable groups in the area, due to the lack of skills and opportunities. So with Kinross’s support, a catering program was established to help vulnerable groups meet the company’s meal requirements during the road-building project. Under the program, 19 local people were trained in food handling and management and six new small businesses established. Of the 19 participants, 17 were from vulnerable groups (including women, indigenous people and the elderly) and six were illiterate (with less than three years’ formal education).

- **Pillar 3 – support to access the supply chain**
  Beyond technical training, the program involves educating participants about how to access the local supply chain and compete successfully in the procurement bidding process. In the case of Kinross, the catering business training built on local people’s existing skills, while opening the possibility of future opportunities for participants by emphasizing how they could diversify their clients in the future. This way, the program creates sustainable change. All six new businesses are now legally registered in shared ownership of the participants, and are active pre-qualified catering suppliers for Kinross Gold, the municipality of Los Encuentros and local schools.

- **Pillar 4 – ongoing support**
  The program provides ongoing coaching, evaluation and training of community participants, to ensure their continuous development. This way, local communities and small businesses are responsible for helping stimulate the local economy by being competitive, creating new jobs, securing access to local market opportunities, and providing required
goods and services. Local governments and agencies are encouraged to support the development of local businesses, and industry associations are brought in to help promote production and secure opportunities for their members. Since the Kinross program, this ongoing support has helped participants diversify to become active food and catering suppliers for local schools and government offices.

RESULTS

The Local Community Procurement Program maximizes efficiencies in the sponsor’s supply chain and procurement process by securing local content, while at the same time developing the existing capacity of local communities and businesses to meet industry standards and demands. In this way, it acts as a tool for conflict mitigation between the private sector and communities by promoting economic inclusion and helping stimulate community development.

- **A win-win situation**
  The program encourages open dialogue, multi-stakeholder collaboration and transparency. Local suppliers are able to develop their capacity to satisfy a procuring organization’s demands and meet industry and market standards. They develop sustainable skills while helping clients maximize project quality and productivity, avoid costly delays and reduce administrative costs associated with the procurement process.

- **Strengthening the supply chain**
  By drawing on local skills and resources, the program helps maximize productivity and quality in the supply chain. It also supports the creation of environmentally sustainable jobs, and promotes agriculture and production.

- **Social and economic sustainability**
  Participants gain the skills to carry on developing themselves and identify opportunities in other markets. The program has been specifically designed to avoid dependency on the employment opportunities and social programs provided by the immediate project around which it is based. It transfers necessary skills and capacity to small and medium-sized enterprises, ensuring that they adhere to industry standards so that procurement managers can hire them. This way, local requirements are met and productivity is maximized in the supply chain.

- **A ripple effect**
  In Ecuador, participants took the initiative and shared their learning in good hygiene and nutrition practices with their families, helping improve health in the community.
LESSONS LEARNED

Key drivers behind the success of the Local Community Procurement Program included:

• **Gain communities’ trust**
  Promoting local procurement can help prevent conflict between communities and the private sector. It’s important to enable communities to identify their competencies and set realistic expectations around their involvement in a project. If local talent is integrated into the supply chain, providing meaningful opportunities, they feel engaged in the process which helps the sponsor to build strong community relations, secure the social license to operate and avoid conflict. The Ecuador program overcame communities’ initial hesitation – due to previous negative experiences with extractive companies – through meetings, informal visits and community observation. This meant realistic expectations were established and then met, gaining people’s trust and securing the social license to operate.

• **Include vulnerable groups**
  To maximize the social impact of a community procurement program, it’s important to include vulnerable groups, transferring knowledge and skills effectively to women, indigenous people, older people, those without education and youth. The program leaves knowledge in the hands of the community and acts in support of dignified and sustainable development. It also helps small local businesses understand and comply with human and labor rights and is designed to meet global standards, such as the International Finance Corporation’s Sustainability Framework, UN Millennium Development Goals and Global Compact.

• **Win the sponsor’s full commitment**
  The Kinross case showed the importance of training a sponsor in the initial program stages. Without sufficient early engagement, the sponsor cannot support implementation as thoroughly as required, resulting in logistical challenges and differences in opinion. The most critical advice is to gain early and ongoing engagement, in order to ensure transparency and ease of program implementation. Without long-term commitment from the sponsor (a projected timeframe of 1-3 years), the vital ongoing evaluation and coaching in the fourth pillar of the program cannot be guaranteed.

After the success with the local catering businesses in Ecuador and with local metal fabricators in Alberta, Canada, the Local Community Procurement Program can now be customized to fit the needs of varying industries and communities. O trade continues to work with both the private and public sectors and development banks to identify new opportunities to implement the LCPP as a solution in achieving sustainable procurement and supply chain practices, as well as acting against poverty.

RESOURCES:

www.omarketaccess.com
E-procurement is underpinning the Indian Government’s drive to develop the country’s rail network, enabling modernizations such as electrification.

‘Increased flexibility and reduced crisis management mean ongoing cost reductions across the whole organization’
MODERNIZING INDIA’S RAIL NETWORK
Electronic procurement as a key step

Author: Pon Sivalingam,
Deputy Chief Material Manager, Indian Railways Stores Service

Organization: Indian Railways (Government)
Theme: Using ICT to improve procurement systems
Country: India

SUMMARY
When India’s Government sought innovations to modernize its railway system, Indian Railways decided to switch from a paper-based procurement system to electronic tendering. It created automated systems to comply with industry benchmarks in data-driven approaches and procurement ethics. These included electronic bidding, real-time performance monitoring, contract management tools and priority identification. It also developed a roll-out program to help users adapt from existing systems – vital in overcoming resistance to change. The new system has increased the effectiveness of the procurement process across India’s vast rail network, while cutting overall costs. Benefits include better lead-time and reorder calculation, identification of successful suppliers and transparency throughout the procurement process.
CHALLENGE

Until 2011, Indian Railways' procurement procedures were based on time-consuming and unproductive yearly reviews. Across the organization, individual staff carried out hundreds of separate review procedures, trying to assess past performance and anticipate future needs based on information that was often inconsistent or incomplete. When the Indian Government decided to modernize its railway network to improve safety and efficiency, it was soon evident that this laborious process would hold back progress. As well as facilitating modernization of the rail network infrastructure, revitalizing the procurement process itself would be a crucial step in modernization.

INNOVATION

Once it had identified its needs and developed a brief for the ICT systems engineers, Indian Railways worked with specialists to develop a portal for electronic tender solicitation and software to handle all aspects of the procurement process – from warehousing and inventory management to financial controls. The bespoke system was developed by experts from the Centre for Railway Information Systems – an Indian Railways umbrella organization for all computer activities – with IT industry support from an external supplier. Starting in 2003, it took two years to develop a common system platform at corporate level. This was then customized and rolled out gradually in different departments, with implementation across the entire Indian Railway system in 2008-09.

The resulting system (Indian Railways Material Management Information System) has three interfaces: one for the procurement office, one for warehousing and one for the finance branch. Each covers two main aspects of procurement:

- **Demand forecast planning**
  Instead of monthly demand forecast planning reliant on two-way paper flows, the system identifies priority needs and schedules them into the daily program of the procurement officer and warehouse manager responsible. A soft copy of the data is accessible through a customized menu online on a real-time basis. By addressing these priorities first every day, procurement staff can ensure a steady availability of...
materials for the rail network, before proceeding with other aspects of their work. The system also helps procurement managers identify effective suppliers and establish the rate at which items needed on an ongoing basis should be procured to avoid 'stock-outs' (gaps in availability within the organization).

- **Electronic tendering system**
  Automated tender solicitations and submissions are now made via a password-protected online portal, the Indian Railways e-Procurement System. Instead of printing and sending solicitation bulletins to vendors, the electronic system posts bulletins online where they can be accessed by registered suppliers. Every stage of a tender is handled through this portal, which allows protest and clarification provisions for vendors, online negotiations, real-time workload monitoring for each

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**RESULTS**

In the three months after the system was fully launched, staff across Indian Railways noticed increased efficiency in the procurement processes needed to keep their departments running smoothly. Previous difficulties in ensuring constant availability of safety items such as buffer coupler components, springs and bearings have been resolved through the new real-time monitoring and data-driven approach. In light of these improvements, users are overcoming their initial reluctance to adopt this radically different system, instead appreciating its ease of use and efficiency.

- **Increased system responsiveness**
  In a public procurement process where competition among suppliers is central to achieving value for money and public accountability, lead times for an item can change according to market conditions. The old paper-based system of lead-time calculation was rigid and unable to respond quickly to market fluctuations. The new system enables procurement officers to react to changes such as advances in product technology, a new supplier offering quicker delivery times, or a readiness to pay higher rates for earlier delivery. Lead-time assumptions for each item can be quickly adjusted to reflect organizational needs and the market, so Indian Railways can still get the best from its suppliers.

- **Reduced crisis management**
  The previous system offered procurement managers
• no help in advance identification of priorities, meaning much of their time was absorbed in crisis management as they struggled to source items quickly that were suddenly out of stock. As well as impairing Indian Railways operations, this increased costs, often necessitating higher prices because of the urgency of a purchase. The electronic system enables procurement and warehouse managers to know at once when an item reaches reorder point. Preventative action can then be taken against stock-outs, ensuring constant availability of items, sourced at an optimum price.

• Cost and efficiency savings
Automated tender solicitations dramatically cut paperwork, and as most day-to-day functions are carried out by the e-procurement system, the costs of Indian Railways procurement function have been reduced by an estimated US $1 million per year (one percent of total procurement value). The system also reduces the timeframe of the procurement cycle, resulting in improved efficiency and logistics savings. The 300,000 electronic tenders carried out so far have been more secure and ethical than was previously possible.

LESSONS LEARNED
Inevitably in such a comprehensive process, valuable lessons emerged which could have made procedures smoother. Several will be useful as ongoing refinements to the system are made.

• Assess stakeholders' attitudes to change
It's worth taking time before such a process begins to understand stakeholders' responses to the prospect of change. Levels of consultation, awareness-raising and training can then be tailored to meet stakeholder needs. With an exciting new system to implement, it's easy to underestimate reservations among staff and suppliers using existing local systems. This can extend to other departments such as finance and mechanics.

The increased flexibility and reduced crisis management brought about by the system also generate ongoing cost reductions across the whole organization, as items are procured in a timely manner which allows for price negotiation and thorough quality control.

• New stakeholder adaptability
With help through training and consultation, members from every stakeholder group have overcome their resistance to change. This process fosters a new adaptability which has the potential to extend beyond the procurement function and benefit the wider organization. People are more open to new approaches, and readier to question whether ways of working could be made more efficient. “Electronic procurement has enhanced transparency and competitiveness in the tendering process,” reports one supplier. “This will be one of the best websites for e-procurement in India.”
and even to senior management. Familiarization with inefficient but long-established systems, and a reluctance to make the efforts required to learn a new system, can pose real barriers to implementation across a large, decentralized organization. But through a real understanding of stakeholders’ feelings, combined with strong interaction and persistence, resistance can be overcome effectively.

- **Retain top leadership support**
  Implementation of the new system was delayed by frequent changes in leadership during the process, and the absence of a sufficiently strong mandate from Indian Railways’ top management. Successive new leaders didn’t fully appreciate the benefits of the electronic system, and so were risk-averse. As a result, non-cooperation among stakeholders emerged, there was no time-bound implementation plan and the project sometimes lacked adequate resources. The phased implementation process revealed starkly the importance of strong leadership support: early successes were seen in units where individual leaders took the initiative to ensure smooth implementation.

- **Adapt to available resources**
  Budgetary shortfalls held the process up. Some of these could have been avoided by better engagement with senior management, others by better planning. For example, in future, instead of an individual server at each procurement office, a central server should be used with proxy server capabilities. This would have reduced the cost of implementation, enabling the whole system to be developed once and replicated across all organizational processes in a single platform.

Despite these lessons, the benefits to Indian Railways of switching to electronic procurement will continue to be felt by Indian rail passengers – and taxpayers – for many years to come.

**RESOURCES:**

Indian Railways e-procurement portal: http://www.ireps.gov.in

The new system enables procurement officers to prioritize needs and react to market changes, resolving difficulties in ensuring essential items are constantly available.
Uruguay’s system for procuring high-cost medical treatment defines acceptable healthcare service levels, authorizes treatment for individual patients, enables negotiation with suppliers, and allows data analysis for effective policymaking.

‘The system has allowed new bidders to compete to supply treatments previously restricted to one or few competitors’
PROVIDING OPTIMAL HIGH-COST MEDICAL TREATMENT
Web-based solutions in Uruguay

Author: Mauro Labelle,
Public Accountant

Organization: National Resources Fund (Government)
Theme: Managing procurement systems
Country: Uruguay

SUMMARY
Uruguay’s former procurement system for high-cost medical treatments allowed inconsistencies that were making it impossible to manage. Different doctors used different criteria for prescribing treatment, and with ever-increasing numbers of patients and high-cost therapies, the system became too unpredictable to be sustainable. A more efficient, structured system was needed. Taking advantage of new web-based technology, Uruguay’s government high-cost treatment insurer, the National Resources Fund (FNR), created a new system based on cross-cutting agreements between patient-related stakeholders, forming a ‘social network’ among patients, the FNR, healthcare providers and medical suppliers. The system defines acceptable healthcare service levels, authorizes high-cost treatment for individual patients, enables effective negotiation with suppliers, and allows data analysis for effective policymaking. The results are significant cost reductions and better treatment for patients.
CHALLENGE

In 2005, the provision of high-cost medical treatment in Uruguay was consolidated for the first time under a national policy. The FNR took on ultimate responsibility for financing treatments for diseases such as certain cancers, rheumatoid arthritis and other immunological or chronic conditions. Such treatments pose not only a financial challenge to individuals and healthcare providers, but also a technical problem, given the different medical criteria for treatment used by physicians.

FNR pursued an overall goal of funding strictly cost-effective therapies, prescribed under consistent, specifically designed guidelines. It monitored the suitability of criteria for treatment used by physicians from different health providers, by obtaining second medical opinions and with reference to well-publicized guidelines and protocols. Logistically, the medical procurement system relied mainly on a price agreement with established pharmaceutical traders, with individual physicians determining when an approved treatment should be applied, including the patients' dosage.

However, this system allowed variations and inconsistencies that made it increasingly hard to manage. In light of ever-increasing costs, numbers of doctors and patients, and types of high-cost therapy available, the approach became too unpredictable to be sustainable. It was essential to implement a more efficient, structured system. With the potential of new web technology, such a system could go beyond simply centralizing procurement policies, to create a new electronic approach altogether.

INNOVATION

The new system needed to take advantage of every efficiency possible to provide optimum value for money for Uruguay's people. Its overarching aim was to build a better service for patients by improving data availability, consolidating FNR as a leading procurer of high-cost treatments, and improving logistical links between suppliers of high-cost medication and the patients needing treatment.

• Setting core objectives
  Before the system was designed, it was important to define key objectives. Any new system would need to increase vendors' access to the procurement process, reducing trade restrictions and entrance barriers (particularly in the distribution process). This would increase value for money for the state. It also needed to promote the use of generic medicines (i.e. those no longer patented, therefore less expensive) by compiling data about their availability and effectiveness. It should prevent duplication of resources by taking advantage of existing networks of pharmacies and hospital facilities. And it should drive further efficiencies by collecting high-quality clinical data online, and presenting it in widely accessible forms. If healthcare providers could share information about resources, they could reduce the risk of
stock shortages or breaks in the ‘cold chain’ (the temperature controlled supply chain, for treatments needing constant refrigeration). By making data and resources readily available to physicians and healthcare managers, the system could contribute to overall management capability, enabling reductions in waste through a centralized process of anticipating demand, based on patients from a broad sample of institutions.

The resulting system is a web-based ‘social network’ allowing cross-cutting collaboration between the FNR, healthcare providers, medical suppliers and patients themselves. The system defines the duties of every actor, from pharmacies to health providers, and has three steps:

- **Defining healthcare service levels**
  To agree definitions of appropriate levels of healthcare, a group of expert physicians within FNR analyzed mainstream evidence around high-cost medical treatment in relation to economic concepts around public health. They looked at how far it is appropriate for the state to fund high-cost interventions, and in what circumstances (such as a patient’s prognosis). They defined ruling guidelines and protocols for treatment, including the medications to be universally financed by this process, and for what symptoms.

- **Authorization process and individual prescription auditing**
  Through a web-based interface, FNR physicians authorize prescriptions written by the medical professional treating a patient. The process is initiated by the primary request for treatment financing by the medical professional. The FNR doctors can ultimately require a second opinion from a specialized council. Authorization by FNR physicians results in a cross-cutting electronic system entry, which identifies a patient and creates an electronic schedule including dosage, physician controls and any supplementary medical interventions associated with high-cost treatments.

- **Risk-sharing negotiation with suppliers**
  The growing demand for new and established treatments and their increasing cost make it vital to optimize negotiations with vendors, as well as to review treatments on an ongoing basis in light of new evidence and financial issues. The system allows for agreements with suppliers to link price and effectiveness. Some agreements have been established in such a way that only doses beyond a certain precisely defined stage of treatment are financed by the state. This way, the trader assumes the risk of treatments which do not reduce the progression of an illness in a short timeframe. For this approach to work, the availability of information is essential, so the system must be easily audited.
RESULTS

Even before it was fully deployed, the process quickly began to deliver results. It has allowed FNR to negotiate trade benefits with individual vendors and by individual pathology. These have meant significant cost reductions and better medical care.

- **Wider treatment options**
  The system has worked exceptionally well in tracking medical results from the use of generic drugs, to the extent that it has actually changed opinions in the medical community over the issue -- for example, the prescription of Beta Interferon for multiple sclerosis or Imatinib for leukemia. It has allowed new bidders to compete to supply treatments which were previously restricted to one or few competitors. The number of suppliers of new treatments has increased significantly and physicians now have more options for treatment, as well as online access to their own patients' laboratory test results or to consolidated data.

- **Better cooperation from suppliers**
  Through the electronic consolidation process, suppliers are now recognizing FNR as a significant channel to a relatively big market. The Fund's technical approval is highly valued when pharmaceutical suppliers are introducing new products to the medical community, and even more so when presenting audited medical results in the evaluation of several risk-sharing agreements between vendors and the government. Some aspects of the system required legal changes, which were dealt with by legal experts. However, the risk-sharing contract model can also be replicated beyond this context, as it has been seen as a useful way of addressing operational matters within the procurement process, rather than simply managing formal tenders.

- **Valuable data for treatment and cost evaluation**
  As well as centralizing procurement, the web-based process has a vital data-sharing role which empowers actors and stakeholders and facilitates business processes. Shared access to reliable data allows procurement staff and vendors to devise innovative deals and new ways of reaching goals together. It also allows FNR physicians to trace patients' progress, both individually and epidemiologically. This helps healthcare providers to give patients -- and wider society -- an optimal approach to high-cost treatments without destroying financial equilibrium in the state health system.

  Having appropriate data readily available is vital for informing highly sensitive decisions about what treatment is financed and what it is not. For example, Tacrolimus, an immunosuppressive drug mainly used after organ transplants, had chiefly been supplied by only one vendor. Able to meet all supply criteria, this company had a perfect market share before 2010, despite prices more than twice those of its competitors. Under the new system, this suppliers' market share is just 26 percent, despite reduced prices, as the system has made patients and doctors aware of strong clinical results from alternative drug options.
LESSONS LEARNED

Several useful lessons emerged from this process of creating a web-based network between high-cost healthcare stakeholders:

- **Cultural issues matter**
  Be prepared for the effort required for people used to working in a deeply paper-based culture to embrace web-based concepts and trust security measures such as electronic signatures. Users are now seeing the benefits, with time and with help from the cross-cutting structure of the new system, which provides a lively forum for sharing ideas and outcomes.

- **Invest in team building**
  Team-building and the integration of different professions are also necessary in such a major cross-cutting project. Winning the approval of the medical profession for a purely computer-based system took time and is still an important issue. The work of skilled ICT technicians has been crucial in the creation of a user-friendly range of interfaces that meet users' needs and address their concerns.

- **Be open to other opportunities**
  The implementation of new technologies in Uruguay's health sector has generated a dramatic awakening to the power of using web-based technology in a cross-cutting way. Measures such as interoperability standards and electronic signatures have allowed different stakeholders across the country's health service to be brought into one system, resulting in effective communication and leaps in efficiency. This approach could be used elsewhere in the health service.

Thanks to FNR's web-based initiative, Uruguay's state health system now has a tool to both promote and measure effectiveness and equitability. This is essential in a sector which absorbs a substantial amount of public resources.

RESOURCES:

www.fnr.gub.uy
Community monitors carried out an inventory of existing school chairs to ensure procurement was needs-based, then went on to inspect new chairs at a supplier's factory before delivery.

‘The volunteers’ presence compelled suppliers to deliver classroom chairs that met contract specifications’
SUMMARY

Although the Philippines' legislation supports citizen involvement in procurement monitoring, civil society's capacity to provide adequate oversight is constrained by a lack of resources to train enough staff and cover transport costs for on-site monitoring. In response, Procurement Watch, Inc. launched an innovative monitoring program called Bantay Eskuwela ('school watch'), which trained parents and staff at 39 schools across the Philippines to monitor the procurement of furniture for their school. Because monitors were local, travel costs were minimized and the monitors had a strong interest in holding suppliers accountable for delivering goods that met the quality specifications in their contracts. As a result, consistently high-quality furniture was delivered to schools for the first time, and local stakeholders have an ongoing direct interest in raising transparency and accountability in public procurement.
**CHALLENGE**

The Philippines’ Government Procurement Reform makes provision for civil society organizations to help ensure sound procurement practices and oversight mechanisms. However, civil society’s capacity to monitor government procurement remains severely limited, due to a lack of financial and human resources. In the absence of greater support from national and international donors, the potential of grassroots organizations to step up and expand the quality and coverage of procurement monitoring continues to be unrealized. The national civil society community has proved unable to cover the costs of training monitors and transporting them to places they need to reach for on-site monitoring.

**INNOVATION**

To overcome civil society’s lack of funds and trained staff, PWI devised a procurement oversight project based directly in individual schools. This would eliminate the need for monitors to spend time and money travelling long distances. The project’s name, *Bantay Eskuwela* (literally meaning ‘school watch’), was chosen by PWI staff to reflect the initiative’s focus on schools and their immediate stakeholders – students, parents and teachers. Instead of a top-down approach in monitoring, it took a bottom-up approach. Based on local monitors’ findings, school principals can refuse deliveries of goods that don’t meet agreed technical specifications in a supply contract. As well as increasing the quality of furniture delivered to schools, the project aimed to stimulate stakeholder interest in increasing overall transparency and accountability in public procurement.

This was a particular problem in the education sector, given its size and the national importance of good schooling. The Department of Education receives the largest annual budget allocation of all government agencies and has the most stakeholders – from officials to teachers, parents and children. When a 2008 Audit Commission report stated that US $800,000-worth of school furniture delivered to government schools was of substandard quality, Procurement Watch, Inc. (PWI) knew it had to take action.

PWI began by approaching the Philippines’ Department of Education, which has an official policy of collaboration with civil society organizations in procurement monitoring efforts. Once the two had signed a Memorandum of Understanding in 2009, their staff jointly planned the monitoring exercise, with four key stages:

- **Building effective monitoring teams**
  
  Education officials and PWI together chose 39 pilot schools in six areas nationwide and began recruiting volunteers for participatory monitoring of the Education Department’s procurement of school furniture. PWI approached local organizations such as Parent-Teacher Associations (PTAs) to involve them. Given their direct interest in whether children had a functioning chair to sit on while learning, members...
proved keen to be involved. More than 650 PTA volunteers were recruited to monitor critical stages of the procurement cycle at the Department of Education's regional offices.

The process began with capacity-building training for the volunteers. A PWI workshop outlined the principles in the Philippines' procurement reform legislation, giving volunteers the technical knowledge they needed to observe the procurement process effectively. Topics included the Procurement Act's rules and regulations, how to draft procurement monitoring reports, the use of monitoring tools, how to spot signs of malpractice, and the observers' code of conduct. Participants were keen to learn, and soon overcame initial wariness about their ability to use the monitoring tools correctly. They were given specially developed Bantay Eskuwela operational guidelines and ongoing mentoring by PWI staff after the workshops – important in developing their confidence.

- **Bidding oversight**
  Based on an Education Department schedule for the procurement of classroom chairs with writing tablets, community volunteers were invited to observe several stages of the procurement process – particularly the submission and opening of bids from potential suppliers. With support from PWI, they wrote procurement monitoring reports which were submitted to the national oversight bodies, including the Bids and Awards Committee and the Office of the Ombudsman.

- **Monitoring contract implementation**
  Once a contract was awarded, the volunteers monitored implementation, starting with a benchmarking inventory of old classroom chairs in each pilot school to ensure that the procurement was needs-based. Before delivery, volunteers and education officials carried out inspections at the manufacturer's factory to check whether the new chairs being produced matched the technical specifications of the contract. Volunteers found shortcomings such as rough surfaces, protruding nails, cracked wood, uneven writing tablets and patchy varnish. Based on their findings, education officials rejected chairs that failed to meet the required technical specifications. Contractors were given the chance to rectify the deficiencies before monitors returned. After the chairs had passed the factory inspection, monitors then counted and inspected them when they were delivered to the schools.

Although contractors initially resisted the factory inspections, they soon realized that immediate compliance would be less inconvenient and costly than compliance adjustments made after delivery. If they delivered rejected chairs, these would now be returned by school principals, increasing their freight handling costs.

- **Assessment of the procurement process**
  The final stage of the project measured procurement efficiency relative to market prices and the time required to complete the procurement cycle – from advertisement to payment of suppliers. PWI carried out a market survey to compare the unit cost of the procured chairs with the standard retail cost, then used evaluation tools to measure the actual cost and time allocated for procuring the items against set values, so it could measure changes in operating efficiency over time. Procurement and transaction
documents were examined to plot whether the Department of Education was meeting guidelines prescribed by Philippine procurement legislation.

RESULTS

The process showed the value of local monitoring. Chairs with a clear increase in quality were delivered to each school within the prescribed timelines. The volunteers' presence during the manufacturing and delivery stages compelled the contractors to deliver chairs that met the technical specifications stated in the contract.

- **Consistently good-quality furniture delivered**
  PTA monitors recommended that several batches of chairs be rejected by education officials, due to suppliers' failure to meet the technical specifications in their contract. As a result, quality improved. In one school, after effective factory monitoring, only four out of 500 delivered chairs were rejected. The damage had been caused during transport, and was repaired satisfactorily on the spot.

- **Cost and efficiency savings**
  With monitors overseeing the bidding process, suppliers became more competitive. "Contractors used to bid high," says PTA monitor Emmanuel Villegas. "Since we started monitoring, bid amounts went down by about a third." After the whole process, PWI carried out its assessment of procurement cost efficiency, highlighting further room for improvement. Procurement timelines were followed, but inflated cost estimates for the school furniture led to an aggregate procurement inefficiency in the six pilot areas of more than US $236,000.

  The assessment was presented to the Department of Education to help it enhance its systems before the next procurement cycle.

The process also uncovered irregularities such as missing signatures of accountable procurement officers in the transaction records.

- **Creation of a sustainable monitoring force**
  The use of volunteer monitors who live near a school proved effective and sustainable. This cuts transportation costs and increases monitors' stake in the process (compared to monitors from organizations based in the capital, Manila). "Even if I don't have money, I can give my time to Bantay Eskuwela. We can't count on the government to do everything. It doesn't have enough money or people," says Emmanuel. "We have to help – not just criticize." The process was so successful that two further Bantay Eskuwela organizations were independently formed by PTA members themselves.
LESSONS LEARNED

Although the Bantay Eskuwela procurement monitoring influenced contractors’ and government behavior favorably, the process revealed significant lessons for the future:

- **Keep politics separate**
  Grassroots monitoring activities may be used for political purposes, for example, if PTA officers are also politicians. They may use a project to further their political ambitions, which has a negative impact on how other stakeholders perceive it. In one area, the PTA Federation President was the deputy mayor. During the volunteer mobilization and orientation, he sent out a memorandum requiring most town-hall staff to attend. This resulted in Bantay Eskuwela becoming identified as a political project, rather than an objective and unbiased activity for the education sector. Although corrected eventually, this had a negative impact on volunteer retention compared to other pilot areas.

- **Secure early buy-in throughout a government agency**
  Support throughout a government agency is needed for the project to be sustainable. Although buy-in can be easily secured at the central office of a large bureaucracy, pockets of resistance can remain at the periphery. To overcome such resistance, PWI had to show copies of the agreement signed with the Department of Education. An important lesson was that efforts should be made to include regional staff early on, rather than when the project is rolling out. This enables them to realize they are stakeholders too.

PWJ has future plans to extend the local-volunteer monitoring approach to cover other government agencies, such as the Department of Public Works and Highways. It also encourages other organizations to adopt the Bantay Eskuwela approach. The model is easily adaptable and can be applied in many different contexts and locations.

RESOURCES:

For a video of the story, visit: http://ansa-global.net/movies/31

Stakeholders including parents, teachers and pupils took part in post-delivery inspections of the new classroom chairs. "In all these years, thanks to the volunteer monitors, this is the first time I have actually received good quality chairs," said one school principal. "The surfaces are not rough and there are no protruding nails."
KEY LESSONS FROM THE CHALLENGE WINNERS

Despite the rich diversity of all these winning solutions – both in terms of context, geography and innovative approach – several overarching lessons emerge. Each is of continuing importance in the ongoing drive to increase integrity and efficiency in procurement, and will help make future innovations easier to design and implement.

Harness the power of ICT
- As so many of these case stories show, tailor-made ICT programs offer endless flexibility and can be built or adapted to meet your exact needs.
- Be creative. Rather than asking what existing IT solutions can do, think what would be your best-case scenario – then tailor IT to deliver it for you.
- Make use of open-source technology – this keeps costs down and makes innovation affordable even when resources are limited. The stories from Lithuania and Nigeria (among others) are good examples.
- Even standard desktop packages are full of unexplored potential, as the Petrotrin case proves.
- Although IT offers many opportunities, there are accompanying challenges. The fast pace of change is exciting, but as Korea found when developing its fingerprint recognition system, it takes ongoing vigilance to keep up.

Win stakeholder buy-in from the start
- Several entries emphasized the importance of having stakeholder buy-in from the outset – or wished with hindsight that they had obtained it earlier in the process (e.g. Slovakia). As the Indian Railways example shows, stakeholders at all levels are important – from the very top management to system users. And the Philippines case highlights the importance of achieving buy-in not just at headquarters but at an organization's periphery too.
- Effective communication about the reasons for your innovation – as well as how it will work and impact stakeholders – is vital for its acceptance and sustainable success.
- Listening is as important as explaining. Consult with stakeholders to hear both their concerns and suggestions. This can affect a system's design and make the difference between failure and success. In Ecuador, suppliers requested reduced warranty requirements, which resulted in supportive vendors and lower prices.
- Allow enough time and resources for the cultural changes that can accompany new ways of working. This is especially so if new procedures are very different (e.g. from paper to electronic processes) or involve shifts in responsibility or perceived power (e.g. a centralizing process or one that empowers communities, such as the pump-sets procured by farmers in Assam).
- Be aware that some innovations might introduce a whole new set of stakeholders. In Nigeria, the drive for procurement monitoring by members of civil society creates a cadre of citizens with expert procurement knowledge. Improvements to the system are successful because they take this new group into account.
**Good procurement has a ripple effect**

- Investment in procurement often repays more than expected returns. Many winning entries show that good procurement has benefits that spread beyond the immediate procurement function. In Uruguay, for example, physicians are now far more accepting of more affordable generic drugs in high-cost medical treatments.

- Improvements in procurement often have unintended benefits. Thanks to the innovations in Slovakia, data-based investigative journalism has been given a boost and there is higher awareness of public rights to freedom of information. In Trinidad and Tobago, suppliers who embraced email in order to use Petrotrin’s electronic procurement system are now enjoying the wider benefits of the internet.

- Smart procurement can leave a lasting legacy. Although O trade helped communities enter the supply chain for a particular project, local people are now using their skills to serve other customers. Assam’s agricultural revolution – the result of changes in pump-set procurement – means the state is now a net exporter of rice. And by building its procurement function, Liberia is rebuilding its entire war-torn infrastructure.

**Keep innovating**

- All these entries show that both the procurement world itself and the wider business context are dynamic and will constantly keep changing. So it’s important that procurement adapts to these changes too and that you keep examining procurement operations to find new ways of improving.

- This doesn’t mean you need to reinvent the wheel. Paraguay was smart enough to draw on Brazil’s experience before it began creating its own electronic auction system.

- Even if things are working well, don’t stop looking for opportunities to improve. Ireland was a leader in e-procurement, but realized it could do even better if it found a way to analyze the procurement market.

- If something isn’t working, take a new approach. South Sudan only began to build procurement capacity when it switched from procurement agencies to on-the-job training for staff working with individual consultants.

**Transparency: The foundation-stone of strong procurement**

Underpinning all the stories and lessons from the Procurement Innovation Challenge is one vital factor: transparency. If systems are transparent, corruption or inefficiency cannot hide within them. So innovation in procurement should always be made with increased transparency as the ultimate goal.

As the winning entry from Nigeria shows, if you can challenge a culture of secrecy around procurement, train people in open contract monitoring and make their findings widely accessible, you can introduce transparency to situations where it has never previously existed. And if greater transparency is achieved, social justice and value for money will follow, both for organizations and the people and communities they serve.