Workshop on Obtaining Value in Public Procurement

Brasilia, Brazil

Scope and Goals of Public Procurement

(with Perspectives from the World Bank)

December 2017

Steven L. Schooner
Nash & Cibinic Professor of Government Procurement Law

Today is:

A. Monday
B. Tuesday
C. Wednesday

I know (understand) how to use this technology.

A. True
B. False

I have worked in procurement…

A. Less than one year
B. Between one and three years
C. Between three and five years
D. Between five and ten years
E. More than ten years
F. I do not work in procurement

What's the Goal?

- ***Not a simple question!*** (More on this later.)
- As a starting point:
  - Obtain – from the private sector – the goods, services, construction (or public works) necessary for the government to perform its mission (govern, defend, support the public)
    - Function/survive/thrive in an environment of scarce resources (limited budgets, funds)
    - Govern effectively (or as effectively as possible) within the means available
- *This suggests a focus on obtaining value for money in public procurement spending.*

Increasing harmonization of international procurement norms

- WTO GPA
- EU
- UN-UNCITRAL Model Law
- World Bank, etc.
  - Modernization Efforts
  - Country Procurement Systems
  - Blacklisting [Debarment, Suspension]
- OECD
- Bilateral, regional agreements

Procurement Must Embrace the Reality of Globalization

- Multinational markets
- Multinational firms
- Global supply chain
- Free flow of
  - Capital
  - Information
  - Technology
  - Personnel

The best public procurement systems focus on

A. Corruption control
B. Maximizing Competition
C. Transparency
D. Administrative Efficiency (reducing transaction costs)
E. Creating opportunities for domestic firms and SME's
F. Value for Money
G. Ensuring End User Customer Satisfaction
H. All of the above
I. Some of the above

Aspirations, Goals & Constraints

- ***Transparency***
- ***Integrity*** ***(Compliance, Corruption Control)***
- ***Competition***
- ***Uniformity***
- **Risk Avoidance**
- **Wealth Distribution**
- **Value for Money**
- **Administrative Efficiency**
- **Customer Satisfaction**

Procurement Policy - Stakeholders

- Government (buyers)
  - End Users
  - Program Managers, Heads of agencies/ministries
  - Source of funds (appropriators, legislators/executive)
- Business/ private sector (sellers)
  - Domestic & foreign
  - Large, medium & small
  - Commercial and government-specialized
- Public (taxpayers)
- Civil society (public interest groups)
- Varying perspectives: e.g, economics (makes business sense) and public policy (good government)

When I spend my own money – whether buying a home, an automobile, clothing, food, transportation, or entertainment – I understand that, ***as long as I pay the lowest price, I will be satisfied with my purchase.***

A. True

B. False

Returning to the Critical Question(s)

- Why does a focus on "value for money" (or "best value" procurement) rather than "low price" (or lowest, responsive, responsible offer … or least expensive qualified offer) lead to better results?
- How can we design better procurement systems – and enjoy superior results – by focusing on value for money?

Terminology: U.S.

"Best value": Often used for tradeoff, but note that the FAR defines "best value" as ANY award criteria (even low-price)

Cost/technical tradeoff: Alternative term for tradeoff, but note that the "technical" side may be past performance or other non-technical element

Terminology: EU

"Economically most advantageous tender": **Term used for tradeoff under the prior Procurement Directive**

"Best price/quality ratio"**: Term used for tradeoff in the revised Procurement Directive**

(New)World Bank **Procurement Framework**

- Effective July 1, 2016
- Follows consultations in nearly 100 countries with 5,000 stakeholders
- ***Greater focus on value for money (VfM),*** more ways bidders can differentiate bids, and more opportunities for dialogue and discussion;
- Focus on the **end to end procurement cycle**, including **strategic planning, appropriate procurement approaches/selections, evaluation criteria and contract award** (e.g. fit for purpose approach design, ***life-cycle costs***, incentive mechanisms, safety requirements) and **contract management** (e.g. enforcement of standards, long-term performance and relationship management.

New World Bank Procurement Framework

"The new Framework has VfM [Value for Money] as a core principle and outlines different methods to achieve it, including lowest evaluated substantially responsive bid/proposal and weighted assessment for quality, cost, and other factors to determine the most advantageous bid/proposal."

(New) World Bank **Procurement Framework**
Additional Features

- Sustainable Procurement - Borrower may include additional sustainable procurement requirements in the Procurement Process
- Standard Procurement Documents
  - New suite of documents developed for Projects after July 1, 2016
  - Borrower required to use the Bank's SPD's for international competitive procurement
- Evaluation Criteria
  - Rated criteria used to select the best Value for Money bid
  - Proportionate to complexity, risk, value and type of objectives
- Abnormally Low Bids - Method to identify and resolve very low priced bids

Important Topics Not Widely Addressed in the Major International Instruments

- **Growing recognition of the need to focus on acquisition planning and contract management – including in the fight against corruption and the promotion of results**
  - **Key international instruments treat the** *procurement process as ending with award of the contract*: **WTO GPA, UNCITRAL Model Procurement Law, and EU Procurement Directive**
- **Heightened awareness of the importance of the acquisition workforce and their training**

Rethinking Conventional Procurement Metrics

- **Conventional U.S. Procurement Metrics**
  - **Volume of Transactions**
  - **Contract price**
    - ***(Low) Purchase Prices***
  - **Delivery Date**
  - **Original performance specification**
  - **Redistribution - reallocation**
- **Market-Based Metrics**
  - **Value (received) for money (expended)**
    - **Life Cycle Cost (or Total Ownership Cost)**
  - ***Customer Satisfaction***

Distinguishing Low Price From **Value**

- **Low purchase price may lead to a "false economy"**
- ***Life Cycle Cost*** is a more meaningful measure (and a major theme here)
  - Purchase Price
  - Transaction Costs
  - Operating Costs
  - Maintenance (Sustainment) Costs
  - Disposition Costs (+/-)

Achieving Value For Money

Must be part of the procurement process "cradle to grave"

- Regulation (Rule/Policy Drafting); Training
- Acquisition Planning
- Designing Competitions
- Determining Evaluation Factors
- Selecting Contractors
- Post-Award Contract Administration
  - Ensuring Quality Assurance
- Evaluating Contractors ("past performance")
- Selecting, Hiring, Maintaining Acquisition Personnel

First choice: I am ***most*** interested in learning more about…

A. E-procurement & electronic reverse auctions
B. Price evaluation & use of non-price factors
C. Framework agreements
D. Complaints/protests
E. Exclusion/debarment
F. Negotiation w/ vendors
G. Domestic preferences & SMEs
H. Acquisition planning
I. Contract management
J. Training & professional development

Second choice: I am ***also*** very interested in learning more about…

A. E-procurement & electronic reverse auctions
B. Price evaluation & use of non-price factors
C. Framework agreements
D. Complaints/protests
E. Exclusion/debarment
F. Negotiation w/ vendors
G. Domestic preferences & SMEs
H. Acquisition planning
I. Contract management
J. Training & professional development

Conclusion

Professor
Steven L. Schooner

@ProfSchooner (Twitter)

GW | LAW

Workshop on Obtaining Value in Public Procurement

Brasilia, Brazil

Acquisition Planning

December 2017

GW LAW

Steven L. Schooner
Nash & Cibinic Professor of Government Procurement Law

Experience suggests that ***most disappointing outcomes in public procurement can be traced back to easily avoidable errors during the acquisition planning stage***.

A. True

B. False

Acquisition Planning Disciplines

- Advance Preparation – planning takes time
  - Lack of planning adversely impacts results
  - Time is critical to buyers ***and*** sellers
- Requirements
  - Communication – Understanding the Customer's Needs/Mission
  - Market Research !!!
  - Budget, Estimating
- Drafting specifications to facilitate competition
- Choosing a Solicitation/Competition Methodology
  - Weighing alternative strategies, Determining an evaluation scheme/priorities
- Selecting a Contract Type/Vehicle

Acquisition Planning

Many failures of acquisition planning can be traced to shortage of time

- Time pressures may be genuine or the result of incompetence or lack of coordination
- Result is often failure to do adequate market research
- Poorly crafted specifications may be unclear, too demanding, or not specific enough
- Contractors require time to
  - Understand government requirements
  - Identify and coordinate with subcontractors, vendors, suppliers
  - Prepare solicitations/tenders

Acquisition Planning

Understanding Requirements and Exhaustive Market Research can help overcome common practices that limit competition:

- Inertia – buy what you have/know
- "Expert" preferences – customer knows what they want
- Corruption – buy from friends, donors, or relatives
- Tension between contracting office and others

Acquisition Planning

Challenges in defining the government's needs:

- Balancing openness to industry against the risk of loss of independence, or even a conflict of interest
- Balancing specificity (design specifications) against flexibility (performance specifications)
  - Think "how" to do job versus "what" the customer needs/wants
  - ***Avoid unintended limits on competition!***
- Need for clarity
  - Ask: Have we written clearly enough and in enough detail that an intelligent, informed company will know what the government is looking for?

Consider Alternative Strategies

- Outsourcing, privatization – the evolving nature of services, public works
  - BOT's and BOOT's – build-*own*-operate-transfer
- Lease/rent versus buy
- Aggregating/centralizing purchases
  - Framework contracts
  - Electronic catalogs
  - * ***More on this later***
- Consider transaction costs
  - Particularly for low cost/high volume transactions (such as office supplies)

Experienced and well-trained government officials should be expected to ***understand private sector markets and capacity and effectively estimate prices*** without communicating with the private sector.

A. True

B. False

Market Research is Critical

- Markets Evolve Rapidly
- Explosion of information sources
- Evolution includes
  - Contractors/firms
  - Technologies and Methodologies
  - Personnel
  - Prices, pricing structures
- **Global best practices**
  - **Draft solicitations/tenders**
  - **Draft specification/requirements descriptions**

Creativity, common sense, communication, cooperation, and curiosity all contribute to productive market research efforts.

A. True

B. False

Market Research Techniques (1)

- Contacting knowledgeable individuals in Government ***and private industry*** regarding market capabilities to meet requirements.
- Reviewing the results of recent market research undertaken to meet similar or identical requirements.
  - Share knowledge with colleagues, departments, ministries.

Market Research Techniques (2)

- Publishing formal requests for information (RFI's) on web sites, appropriate technical or scientific journals, or business and publications.
- Actively communicating – in person, via telephone, over the internet – with industry, acquisition personnel, and customers.

Market Research Techniques (3)

- Obtaining source lists of similar items from other contracting departments, ministries, agencies, trade associations, or other sources.
- Reviewing catalogs – on the Internet, in libraries, etc. – and other generally available product literature published by manufacturers, distributors, and dealers.

Market Research A Techniques (4)

- Hosting open forums, meetings, or pre-solicitation (or pre-tender) conferences to involve potential offerors early in the acquisition process.
- Asking anyone and everyone for suggestions … and being willing to experiment.
- Making your needs clear to the private sector.

Challenges in Government Cost Estimating

- Government officials are often ill-suited/prepared to estimate private sector/market prices
- Estimates based upon prior government purchases rarely reflect current private sector market conditions

Impacts:

- Unrealistically low estimate: Government may misevaluate bids with realistic prices
- Unrealistically high estimate: Gov't may agree to too high (above market) prices

In order to ensure that the marketplace (or private sector) has the best opportunity to meet the government's needs at the lowest price, the technical specifications should describe the preferred provider's brand name, model number, or unique features.

A. True

B. False

Global Best Practice:

Write Specifications to Maximize Potential Competition

Avoid drafting technical specifications or requirements that limit competition or – intentionally or unintentionally – favor an individual contractor or supplier (or a group/class of contractors/suppliers).

WTO GPA (Article X)

Guidance on Specifications

- **Avoid unnecessary obstacles to trade;**
- **Use performance or functional requirements *rather than* design or descriptive characteristics;**
- **Use "or equivalent" whenever possible;**
- **Avoid particular trademarks, patents, brands, etc.; and**
- **Avoid technical specifications that preclude competition.**

U.S. Policy Guidance on Specifications

Specify needs in a manner designed to—

- Promote competition, and
- Only use restrictive language when necessary.

To the maximum extent practicable, state requirements in terms of—

- Functions to be performed;
- Performance required; or
- Essential physical characteristics.

EU Procurement Directives Guidance on Specifications

- Avoid requirements that favor key characteristics of the supplies, services or works habitually offered by a specific economic operator.
- Use "functional and performance requirements"
- Permit flexibility in proving "equivalence"

Describe

- Outcomes;
- Requirements (or needs);
- Functions to be performed;
- Performance specifications (such as speed, strength, weight, dimensions, durability, etc.)
- *Examples* are fine, so long as "equivalent" or compatible solutions/products are encouraged (but not mandated)

Contracts allocate risk. But there is a balance. For example, ***increasing the contractor's performance risk typically requires the government to pay a higher contract price***.

A. True

B. False

Contract Types and Incentives

Consider incentives and disincentives

- Profit – fixed or dependent upon performance
  - Incentivize
    - Timely delivery
    - Cost control and/or Savings
    - Quality/compliance with contractual specifications
    - Customer Satisfaction
- Well Crafted Bonuses, Benchmark-based incentives Work
- Disincentives
  - Penalties
  - Liquidated Damages

- ***Incentivize the Behavior That Matters!***

Conclusion

Professor
Steven L. Schooner

@ProfSchooner (Twitter)

GW | LAW

Green Powered Technology

Using Non-Price Factors

Bob Kwartin
Green Powered Technology
December 11, 2017

Agenda for this Session

- Trends in the use of non-price factors
- What are non-price factors?
- Why use them?
- How can they be used?
- Best practices

In procurements that I am familiar with…

A. I think that these procurements are too focused on low price.
B. I think that we do a good job of balancing price and quality.
C. I think that we tend to focus on quality too much.

Trends in the Use of Non-Price Evaluation Factors

- The trend around the world is to move away from award based solely on price
- Cost/price remains, though, (almost) always an award factor
- We will talk tomorrow about improving the evaluation of cost/price

Former World Bank Procurement Guidelines

Award of Contract

2.59 The Borrower shall award the contract, within the period of the validity of bids, to the bidder who meets the appropriate standards of capability and resources and whose bid has been determined (i) to be substantially responsive to the bidding documents and (ii) to offer the lowest evaluated cost.

New World Bank Procurement Framework

"The new Framework has VfM [Value for Money] as a core principle and outlines different methods to achieve it, including

- lowest evaluated substantially responsive bid/proposal and
- weighted assessment for quality, cost, and other factors

to determine the most advantageous bid/proposal."

- (Emphasis added)

"VFM represents the optimum combination of total cost of ownership and quality (or fitness for purpose) to meet the buyer's requirements."

Terminology

- Specifications describe the characteristics of what you want to buy and the requirements you're trying to fulfill
- Eligibility criteria are used to circumscribe the pool of bidders on the basis of legal status, legal record, domestic status, conflict of interest, etc.
- Evaluation criteria describe how you'll choose which eligible bidder to buy it from
  - Price
  - Non-price factors
- In reality, there is some overlap between these three elements of the tender, discussed later

The Two Ends of the Procurement Spectrum

- Lowest Price Technically Acceptable (LPTA) – appropriate when best value is expected to result from selection of the **technically acceptable proposal with the lowest evaluated price**.
  - Same concept as World Bank's "lowest evaluated substantially responsive bid/proposal"
- Trade-off Process – appropriate when it may be in the best interest of the buyer to **award to other than the lowest priced offeror or other than the highest technically rated offeror**.
  - Same concept as World Bank's "weighted assessment for quality, cost, and other factors"
- Note that both processes yield "best value" within their own analytical framework

Traditional Procurement vs. Trade-off

- For traditional lowest-price technically acceptable (LPTA) procurement
  - Does the bid meet the specification?
  - Is the bidder eligible?
  - Among eligible bidders that met the specification, which had the lowest price?
  - The specification effectively becomes the quality floor and the quality ceiling
  - Bidders win no extra evaluation points for exceeding the specification
- For Trade-off procurement
  - The specification is a quality floor – but not necessarily a ceiling
  - Better-than-specification quality can be awarded additional points
  - Potential to trade value across different criteria (quality, price, risk)
  - Evaluation more complex
  - Lowest price doesn't automatically win
  - Highest quality doesn't automatically win either

Comparing LPTA and Trade-off

	LPTA	Trade-off
Specification	Y	Y
Bidder eligibility criteria	Y	Y
Price evaluation factor	Y	Y
Non-price evaluation factors	N	Y

Two Key Reasons to Use Non-price Factors

- Better-than-specification solutions may provide superior value
  - Bidders have little incentive to exceed specification if they win no additional points for doing so
  - Even if a superior solution costs more (not always true), the buyer may judge that the extra cost is worth paying
  - The tender process needs to explicitly encourage and give evaluation credit to better-than-specification solutions
- An LPTA tender may not adequately control for project risks
  - Competence of the bidder to complete the work satisfactorily within the schedule and budget
  - Quality of the team assigned to the work
  - Quality of the management team
  - Coherence of the team (general contractor, subcontractors)
  - Transition risks, if applicable
  - Social and environmental impacts

When Does it Make Sense to Use the Trade-Off Method?

- LPTA is best…
  - For commercial off-the-shelf goods (laptop computers, for example)
  - For goods and services where better-than-specification quality will yield little or no incremental value (writing paper, trash removal)
  - Where project risks are a much less important concern than price
- Trade-off analysis is best…
  - For non-standard goods and services where it is difficult to precisely specify the quality sought and/or where better-than-specification quality will yield desirable incremental value (productivity, effectiveness, efficiency) for the buyer (e.g., econometric forecasting, military aircraft)
  - Where project risks are significant (e.g., building a new airport, large-scale IT implementation)
  - Typically complex, long-lived acquisitions with significant quality concerns and with real risk of failure carrying significant consequences

Examples of Non-Price Factors

- Quality of the technical solution
  - Potential for superior service
  - Potential for lower lifecycle costs
  - Innovative technology, methodology or outcome
- Demonstrated past performance of the offeror
- Quality of proposed staff
- Quality control plan
- Warranty (if not part of the specification) or better-than-specification warranty
- Quality of the transition plan
- Commitment to hire staff from or make purchases from socially-disadvantaged groups, service-disabled veterans, or other designated groups
- Plan (if not part of the specification) or better-than-specification plan to mitigate social and environmental harm from the project
- Quality of the management and communication plan

Options for Assessing Non-Price Factors

- **Binary**: Yes/No, Present/Absent, Pass/Fail, Acceptable/Unacceptable
  - Examples: Does the offer include a warranty that complies with the specification? Has the offeror ever been suspended from government contracting for poor performance?
  - Consequence: The binary approach has the practical effect of converting non-price factors into elements of the specification or eligibility criteria and can be used to eliminate offerors from further technical or price evaluation
- **Scored**: 1-10; Poor-Acceptable-Good; Low-Medium-High Risk
  - Examples: To what extent does the offeror's product or service exceed the performance specification? How well does the offeror's transition plan mitigate the government's risk of changing suppliers?
  - Consequence: Buyer is able to evaluate the offer with greater precision. But more scope for argument.

Green Powered Technology

Objective vs. Judgement-Based Factors

- Objective factors – measureable with little or no scope for argument
- Judgement-based factors – requires exercise of professional judgement by members of the technical evaluation panel and the contracting officer
  - Evaluators should evaluate proposals against uniform objectives rather than against other proposals
- Examples:

	Objective	Judgement
Binary	Warranty present?	Is the social-impact mitigation plan acceptable?
Scored	Length of warranty	How confident are we that this will be a high-quality project?

- Most systems allow use of objective non-price factors only (U.S. is unusual in allowing judgmentally-rated factors)

Green Powered Technology

Weighting the Evaluation Factors

- What are the most important technical considerations for the technical team responsible for the project and for the government (and society) as a whole?
- What is the relative importance of technical quality versus price?
  - And, how important is "ticket price" compared with lifecycle cost? More on this tomorrow.
- Within the technical evaluation, what are the most important factors and sub-factors?
- Publish the weightings in the tender documents, for example:
  - "70% of the evaluation points will be awarded for technical merit, 30% on price"
  - "The quality of the offeror's technical solution is somewhat more important than the past performance rating, which is in turn significantly more important than the social impact mitigation plan. Taken together, the three technical factors are approximately equal in importance to the price factor"
    - 25-20-5/50 is a good guess at the percentage equivalent

Green Powered Technology

Past Performance is a Common Non-Price Factor

- Tender documents require offerors to submit relevant and recent past performance information: project summary, names and contact information for previous customers
- 3 examples common, could be many more where large teams of important subcontractors involved
- Buyer solicits references from previous customers
- Referenced projects should be:
  - Relevant (comparable in scope, scale and complexity)
  - Recent (less than 3 years old)
  - Accurate (consider the source)
- Review information in government contractor rating database, if available
- Experience isn't past performance
- What if firm has no past performance information?

Green Powered Technology

Past Performance - continued

- Past performance questions should address:
  - Conformance to contract requirements and standards of good workmanship
  - Adherence to budget and schedule
  - Management of risk
  - Record of reasonable and cooperative behavior
  - Commitment to customer satisfaction
  - General business-like concern for customer
- Past performance is a judgement-based factor
- Past performance can be used as an evaluation factor in the first (pre-qualification) or second (request for proposals) step of a 2-step procurement and the first and/or second steps of a framework contract.

Technical Evaluation – U.S. Method

- Evaluators must assess and document the merits and the risks associated with an offeror's proposed approach for accomplishing the solicitation requirements.
- The non-cost factors and sub-factors of the proposal and the associated proposal and performance risks are evaluated using rating scales.
- Note that reliance on the evaluators' professional judgement

Technical Evaluation Rating Scales: Methodology 1

Table 1. Combined Technical Risks/Ratings		
Color	Rating	Description
Blue	Outstanding	Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is very low.
Purple	Good	Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains strengths which outweigh any weaknesses. Risk of unsuccessful performance is low.
Green	Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is no worse than moderate.
Yellow	Marginal	Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements. The proposal has one or more weaknesses which are not offset by strengths. Risk of unsuccessful performance is high.
Red	Unacceptable	Proposal does not meet requirements and contains one or more deficiencies.

The combined technical/risk rating includes consideration of risk in conjunction with the strengths, weaknesses, and deficiencies in determining technical ratings.

Technical Evaluation Rating Scales: Methodology 2

Table 2. Technical Ratings		
Color	Rating	Description
Blue	Outstanding	Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. The proposal contains multiple strengths and no deficiencies.
Purple	Good	Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains at least one strength and no deficiencies.
Green	Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Proposal has no strengths or deficiencies.
Yellow	Marginal	Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements.
Red	Unacceptable	Proposal does not meet requirements and contains one or more deficiencies and is unawardable.

Table 3. Technical Risk Ratings	
Rating	Description
Low	Has little potential to cause disruption of schedule, increased cost or degradation of performance. Normal contractor effort and normal Government monitoring will likely be able to overcome any difficulties.
Moderate	Can potentially cause disruption of schedule, increased cost of degradation of performance. Special contractor emphasis and close Government monitoring will likely be able to overcome difficulties.
High	Is likely to cause significant disruption of schedule, increased cost or degradation of performance. Is unlikely to overcome any difficulties, even with special contractor emphasis and close Government monitoring.

The offeror's technical solution will be rated separately from the risk associated with its technical approach in meeting the requirement.

Case Study: Substation EPC Project in Malawi

- Build two 400/132 kV substations in conformance with the design specifications issued by the Buyer
  - The specifications included the General Project Description (88 pages), General Technical Requirements (129 pages) and Particular Technical Requirements (197 pages), along with 49 data sheets and 24 pages of technical diagrams.
- Alternative bids not permitted
- Procure necessary components and systems and deliver to the project sites
- Build the substations, including civil engineering, interconnection and commissioning
- Factory acceptance testing and field testing
- Limited spare parts and tools
- Training for buyer staff
- Guarantee availability and performance during the 1-year warranty period
- Turn the substations over to the government-owned electric company

Substation Project: Evaluation Factors

- Total Score = (Technical Score x 0.7) + (Price Score x 0.3)
- Price evaluation: Fixed price bid for construction
- Bidder must score at least 70 out of 100 technical points in order to be considered responsive to the technical requirements

Technical Score – 70% of final evaluation

- Non-price sub-factors
  - Technical Approach (45%)
    - Substation Project Management Process (6%)
    - Substation Engineering (6%)
    - Substation Material Procurement (6%)
    - Substation Environmental, social/gender, health and safety requirements (5%)
    - Substation Construction (6%)
    - Substation Commissioning and Testing (6%)
    - Schedule of Requirements – Work Plan (10%)
  - Experience and Capability of the Bidder (20%)
  - Project Organization and Experience and Qualifications of Key Staff (35%)
    - Project Organization (5%)
    - Key Personnel's Experience and Knowledge of Pertinent Subject Matter (20%)
      - Points allocated for 10 defined positions based on total years of work experience and years of directly-relevant experience
    - Education/ Training (10%)

Note that the quality of the proposed substation compared with the specification forms no part of the Technical Score

Green Powered Technology

Which statement about the substation procurement is true?

A. This is a lowest-price technically acceptable tender.

B. The evaluation considered both the price and technical capability of the bidder.

C. A proposal that offered a better-than-specification substation was awarded additional points.

D. All long-term costs were considered in the price evaluation.

Discuss with your neighbors for 5 minutes before answering

Green Powered Technology

Discussion

- The procurement structure is a hybrid
  - Specification based, with no mechanisms to gain more points with a superior solution and no alternatives permitted
  - But in addition to meeting the specification, the technical score was based on team composition, personnel and past performance – use non-price factors to limit risk
  - Price was only 30% of the final score
  - Price incorporated some (but not all) long term cost elements
    - Included 1-year warranty
    - Included some spare parts and training
    - A substation with lower losses would cost less to operate, but no ability to get credit for offering such a solution
    - Other life cycle costs (longer term operation, maintenance, repair, rebuilds) not included

Best Practices in the Use of Non-Price Factors

- Use non-price factors if they will meaningfully improve the chances of a successful project
- Do your market research to understand how industry can materially enhance the value of your project and/or reduce your risks
- Select non-price factors that will address your most important quality and risk concerns and that can be addressed by industry in their offers
- Limit the number of factors and sub-factors to those that will meaningfully improve the tender outcome
- Publish all of your evaluation criteria in the tender document, and state how they will be weighted in the evaluation of tenders
- Train your technical evaluators in the proper use of non-price factors
- Only evaluate information submitted within the acquisition process
- Evaluate tenders in conformance with the published evaluation criteria: only those evaluation factors, exactly those weights
- Evaluate (score) each proposal on its own. Do not evaluate one offer against another
- Document the evaluation, with additional detail if judgmental criteria are being used
- Debrief all offerors (winner and losers) – transparency increases confidence that the process was conducted intelligently and impartially
- Capture lessons learned – before and after award -- and apply to the next tender

Conclusion

- Questions?
- Thank you.

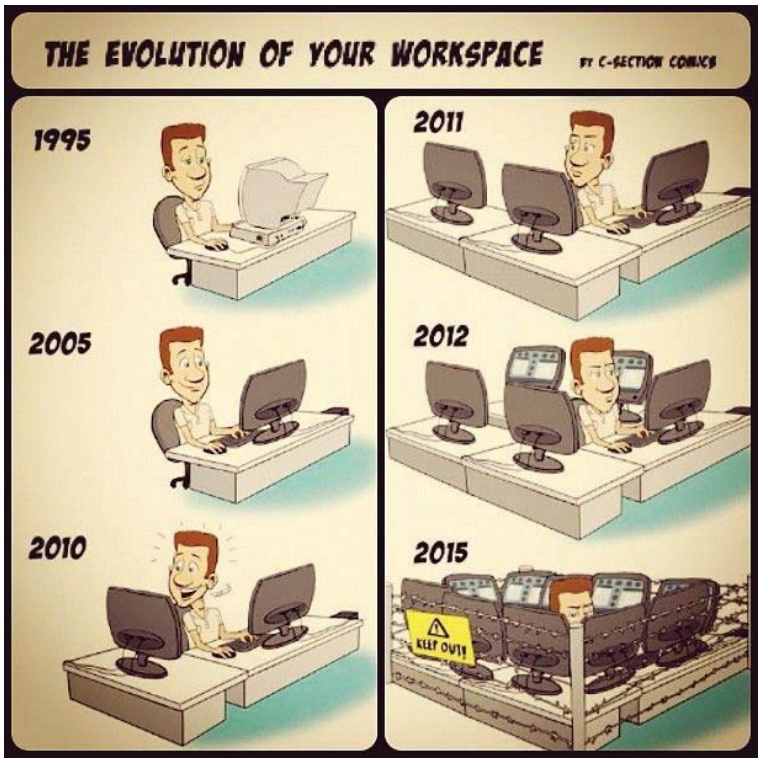
Workshop on Obtaining Value in Public Procurement

Brasilia, Brazil

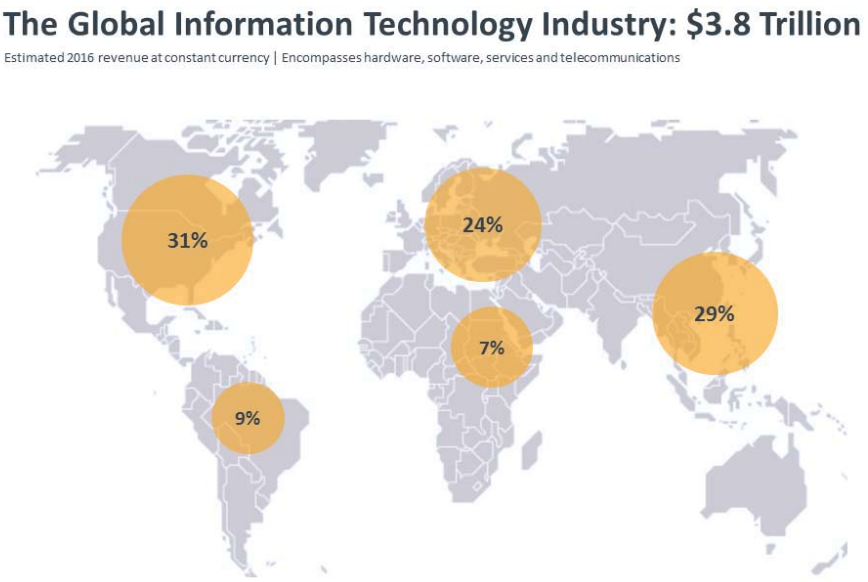
December 2017

Best Practices in IT Procurement

Gregory L. Giddens
Principal Executive Director (retired)
Department of Veterans Affairs
Washington, DC



IT Procurement is a big business



What is IT?

- Any equipment or service related to the processing, storage, transmission, manipulation, management or analysis of information (voice, video, data). Can include:
  - hardware
  - software
  - equipment
  - direct services and support services,
  - design, development, testing, or maintenance

What is IT?

- IT can be acquired as a standalone product or service or it can be acquired as embedded IT, such as part of a larger system, service or product. Some examples of embedded IT:
  - healthcare technology
  - weather systems
  - manufacturing systems
  - building maintenance
  - financial systems
- The Internet of Things means that IT will be part of many more products and systems in the future.

IT?

A. Yes
B. No

IT?

A. Yes
B. No

IT?

A. Yes
B. No

IT?

A. Yes
B. No

IT?

A. Yes
B. No

What is most important IT procurement factor to understand?

A. Business Requirement
B. Industry Market
C. Procurement strategy
D. Post award performance metrics

#1 worst practice

IT Procurement - 3 main phases

1. Acquisition planning
   - Define requirements/market research
   - Decide on acquisition strategy
   - Develop tender request
2. Selection and award
   - Issue solicitation/tender request
   - Evaluate tenders
   - Award contract
3. Contract performance
   - Agree on meaning of performance metrics
   - Monitor/report on metrics

IT Procurement Best Practice
Phase 1 – Planning

1. Understand your requirement and what success looks like

IT Procurement Best Practice
Phase 1 – Planning

1. Understand your requirement and what success looks like

IT Procurement Best Practice
Phase 1 – Planning

1. Understand your requirement and what success looks like

Or

IT Procurement Best Practices
Phase 1 – Planning

1. Understand your requirement and what success looks like
   - Do so in early discussions with industry (market research)
   - Release draft documents for comment
   - Defining your requirement well will get a better solution
   - Think about the future when finalizing the requirement
2. Select an acquisition strategy appropriate for your requirement and the market based risk
3. Set qualitative and quantitative criteria
4. Have someone that does not know about your requirement read your tender request
   - Does it conflict?
   - Can they tell what success looks like?
   - Can they tell what is important?

IT Procurement Best Practices
Phase 2 – Solicitation and Award

1. Establish team to evaluate the tenders once received
   - Team must read the tender request and be trained on the evaluation process – involve the business owner
   - Share the results of market research so they fully understand the requirement
2. Follow your process and the criteria you developed! This is a procurement integrity issue
3. Announce award publicly – transparency creates trust and trust can improve competition
4. Conduct debriefs – global best practice
   - Companies invested to provide their tender, feedback to them about it is appropriate
   - Helps them develop a better tender for future efforts

IT Procurement Best Practices
Phase 3 – Contract Performance

1. Hold kick-off meeting within 2 weeks of award
   - Include business owner, procurement office, and tenderer
   - Achieve mutual understanding of performance metrics
   - Set business rhythm for reviewing metrics together
2. Establish escalation process for both sides
   - If you are doing something difficult, it will not always go well – you need a process to raise and resolve issues
3. Work to stay connected – you want your industry counterpart to wake up at 6am worrying about the same things you do
4. Do not assume things will get better without intervention

IT Procurement Best Practices

QUESTIONS?


SPONSORED BY THE U.S. TRADE AND DEVELOPMENT AGENCY
Global Procurement Initiative: Brazil
DECEMBER 11–13, 2017 | BRASILIA, BRAZIL
THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC
Enap
MINISTÉRIO DO PLANEJAMENTO, DESENVOLVIMENTO E GESTÃO
BRASIL
GPI
GLOBAL PROCUREMENT INITIATIVE
UNDERSTANDING BEST VALUE
ORGANIZED BY THE BUSINESS COUNCIL FOR INTERNATIONAL UNDERSTANDING (BCIU)

Workshop on Obtaining Value in Public Procurement

Brasilia, Brazil

Contract Oversight, Suspension and Debarment, and Handling Procurement Complaints

December 2017

GW LAW

Steven L. Schooner

Nash & Cibinic Professor of Government Procurement Law

The Government has conducted and concluded a successful procurement when it has determined its requirements, conducted market research, properly advertised and solicited private sector participation and encouraged competition, received competitively prices tenders/proposals, selected the best offeror, and awarded/executed/signed the contract.

A. True

B. False

Contract Oversight

Oversight – which includes contract management or administration of the contract (after it has been awarded) – is imperative to ensure that the government customer receives value for the money it spends on its contracts.

Results (or outcome) focused oversight also reduces the potential for corruption and waste in contracting expenditures.

In procurements that I have been involved with, I believe that we generally…

A. do a very good job of contract management.
B. do a good job of contract management.
C. do only an acceptable job of contract management.
D. do a poor job of contract management.

Evolving Attention on Post-Award Contract Management

- Problem: Global discussion of "public procurement" ends with contract award
- Reality: enforcing and policing the agreement (or the bargain) is challenging (and critical to obtaining value for money)
- Better results derive from
  - Certainty (typically as a matter of regulation, transparency)
  - Reasonable expectations regarding contract interpretation
  - Appropriate, qualified personnel staffing the contract management (or administration) function
  - Accessible, consistent fora for dispute resolution

What is the Purpose/Goal of Contract Administration (or Contract Management)?

A. Ensure the Contractor Complies With the Written Agreement and Fulfills Its Contractual Promises

B. Ensure that the Government Customer (Ministry) Obtains the Good, Services, Works Necessary to Accomplish Its Governance Mission

C. Both of these

D. Neither of these

The nature of a contract is such that there are numerous stakeholders in any procurement (or contracting action). Accordingly, ***in addition to*** ensuring that the contractor delivers the good or service that it promised, **the government must ensure that it fulfills its promises to the contractor**.

A. True

B. False

Risk: Anticipating risk
Managing risk, and
Allocating risks of…

Late delivery, Complete failure to deliver, Defective or inadequate quality (goods or services), cost overruns, natural disasters, unknown-unknowns, etc….

The U.S. Model: Reliance on Standard "Remedy Granting" Contract Clauses

- **Risk allocation/contingency management:**
  - **Changes**
  - **Differing Site Conditions**
  - **Delays (Default Termination)**
  - **Inspection/Quality Control**
  - **Termination: for default, for convenience**
  - **Disputes**
- ***Alternative:*** **commercial items – reliance on common contractor terms & conditions**

Government contracts are heavily regulated. Government contracts may also specify a high degree of compliance with numerous specifications and requirements. **As a result, it is in the government's best interest for all government contracts to be *inflexible*, and government procurement officials should *not* enjoy any discretion to alter the parties' agreement – in any way – during performance of the contract.**

A. True

B. False

REVIEW: **Key aspects:**

- Ensuring that the contractor makes progress and ultimately delivers on time, at price agreed, and with quality promised
- Addressing problems and need for changes promptly and fairly
- Meeting the Customer's needs

Key challenges:

- Communication between the government and the contractor should be prompt, complete, and accurate
- ***Human Capital*** – it's all about people!

Is Contract Management Part of *Procurement*?

- "Public procurement" often *ends with contract award*
  - Contract management is not addressed in international instruments
  - Enforcing & policing the contract ("the bargain") is challenging AND critical to obtaining value for money
  - Corruption risk continues throughout performance
- Understanding the procurement and contracting lifecycle – "cradle to grave"
- Pressure to "move contracts forward" causes resource shift away from post-award contract management
- Function must be staffed:
  - Liaison role – the "contracting officer's representative" – helps, but the people in that role are often overworked and undertrained
  - Some countries use civic organizations as performance monitors

Suspension and Debarment (Blacklisting)

In my experience, our procurement system…

A. excludes too many bidders.
B. does not exclude enough bidders.
C. excludes about the right number of bidders.
D. I do not have an opinion on this.

Present Responsibility: Suspension & Debarment

- A contractor's ability to responsibly contract with the Federal Government (currently and in the future)
- An SDO will look to a contractor's ethics & compliance programs, integrity, compliance with relevant laws and ability to perform and comply with contract requirements.
- A responsibility determination is not limited to a particular act or omission—the overall responsibility is considered.

Statutory Debarment

- **Designed to provide additional inducement for contractors' compliance with the statutes. Generally mandatory for violations of the laws.**
- **Applicable Statutes:**
  - Buy American Act
  - Clean Air/Water Acts
  - Davis-Bacon Act
  - Drug-Free Workplace Act
  - EEO/Affirmative Action Requirements
  - Prohibiting Military Recruiting on Campus
  - Service Contract Act
  - Walsh-Healey Act
  - Sudan Accountability & Divestment Act

Discretionary Suspension & Debarment

A Set of tools (not just S/D) used to protect the Government from doing business with non-responsible contractors.

- **S&D may NOT be used to punish contractors for past misconduct.**
  - **"**The existence of a cause for debarment, however, does not necessarily require that the contractor be debarred**"**

The protection/punishment distinction is the most frequently misunderstood aspect of the S&D regime.

Breadth of Exclusion

- Market Exclusion
  - Within agency or ministry
  - Across Entire Government/State
  - Across Region (e.g., EU)
  - Global (Cross-Debarment)
- Institutional (Scalpel, not Sledge Hammer)
  - Individuals
  - Facilities, Plants, Divisions, Locations
  - Entire Corporate Entities

Handling Procurement Complaints

Domestic Review Mechanisms: permit (both domestic and foreign) potential offerors (such as bidders) and disappointed offerors (contractors that compete unsuccessfully for the award of a contract) the opportunity to seek correction of anomalies or inequities in the contractor selection process.

Nomenclature/Vocabulary

- ***Domestic review procedures*** (WTO)
- ***Challenges*** (UN Commission on Int'l Trade Law, UNCITRAL)
- ***Remedies*** (EU Directive)
- ***Protests*** (or bid protests or disappointed offeror litigation) (US)
- ***Complaints*** (generic)
- ***Distinguish from*** Contract *(versus procurement)* Claims and Disputes

In my opinion, the number of complaints filed by losing bidders is…

A. is too high – the complaints are mostly frivolous.

B. is acceptable – it suggests the system is working.

C. What you would expect; some losers will always complain.

D. is surprisingly low. I wonder if they perhaps don't trust or value the complaint process.

Rationale for a Challenge Regime (1)

- **Enhance compliance**
  - **Deter, prevent, and correct rule violations**
- **Increase the public's and the private-sector's trust in procurement system (and the government, generally)**
  - **increase competition**
- **Improve state's image in international community**
  - **meet minimum standards for GPA**

Rationale for a Challenge Regime (2)

- Partial delegation of the oversight regime, by the government to contractor community (private sector)
  - Contractors, Vendors, Prospective Suppliers
    - are "interested parties"
      - pre-condition to action, but also
    - best situated to detect violations
    - have the greatest incentives to act

Aspirations for a Challenge Regime

- Provide a forum to hear complaints by, and grant relief to, interested parties
- Enhance accountability of procurement officials and government agencies
- Promote transparency into how the procurement system works
- Protect integrity of procurement system
- Avoid unnecessary cost and delay & disruption of procurements

Challenge Forum Decisions

- Where (within the government) to locate the forum?
- Breadth of the forum's jurisdiction?
- Who may bring a challenge?
- Strict or flexible time limits to commence a challenge?
- Type & source of evidence available to forum?
- Whether to stay (hold) procurements during challenges?
- How difficult is it for a disappointed offeror to win?
- Breadth (and enforcement) of meaningful relief?

What do protests challenge?

- Pre-award
  - Lack of notice of solicitation
  - Overly restrictive solicitation
  - Ambiguous specifications
  - Exclusion from competition (interim)
- Post-award
  - Did not receive contract
  - Improper application of evaluation criteria
  - Anything learned during debriefing(***)

Remedies

- **Procedural remedies:**
  - award stay or suspension (standstill, freeze)
  - Terminate (cancel) awarded contract
  - re-solicit, re-compete (new solicitation), re-open negotiations; re-evaluate offers
  - direct award
  - refrain from exercising option
- **Monetary remedies:**
  - bid and proposal (B&P) costs
  - attorney's fees
  - lost profits?

Impediments: Culture & Capacity

Risks: Domestic Review

- Disruption to procurement process
  - Cost to government (including from litigation)
  - Vexatious (or frivolous) complaints
  - Settlement of complaints by promises of future contracts
- "Over-compliance":
  - Government officials become more concerned with complying with technical rules than value for money
    - Discretion (business judgment) not exercised
    - Procedures become unnecessarily

People, Culture, Norms

- **Perception, Knowledge of Law**
  - Supplier/Contractor ignorance of
    - Review mechanism
    - Government action (transparency issue)
  - Commitment to due process
- **Respect for Courts, Judges, Administrative Tribunals**
- **Willingness to Litigate**
  - avoid "bite the hand…" instinct
    - difficult hurdle (public confidence)

Capacity: Expertise and Independence

- The decision-makers must be knowledgeable, credible, respected, and, (most importantly) independent
- This is true regardless of whether adjudicators are judges, attorneys, experts, or laymen
- Government representatives must be cooperative, knowledgeable, and credible
  - Government must respect the challenger (protestor) and the challenger's rights

Supplemental Slides

Country Experience: The United States

Post-Award Contract Management

- Remedy granting clauses - Allocate risk
  - Typically
    - Specify an contingency (or an event)
      - milestone
      - Unexpected event
      - Failure (by one or both parties)
    - Articulate a notice requirement
    - Lay out a process
    - Identify a remedy
      - Might identify a process for calculating the remedy
      - Might identify another clause for dealing with the remedy
- Many other risk allocation schemes/rules

Managing Changes (and other issues) During Contract Performance

In order for a contractor to obtain extra compensation, the government official who allegedly ordered additional work must have ***authority*** to modify (or change or adjust) the contract

– typically only ***contracting officers*** have that authority.

Changes (or Modifications) During Contract Performance

- Changes (Modifications) are common
  - Especially in construction (or public works), when unforeseen problems are common
  - Even in contracts for simple goods and services, *the government's (customer's) needs may change (and markets may evolve)*

Changes (Modifications)
(Sovereign Flexibility)

- Bilateral or Unilateral
  - –Change order (CO – authority issue)
- *Within the scope of the contract*
- Contractor duty to proceed
- Equitable adjustment
- *Constructive change (legal fiction?)*

Differing Site Condition

- Construction (Public Works)
- Latent or Subsurface Conditions
  - –Not described
  - –Unusual and unexpected
- Equitable Adjustment

Delays

- Allocation of risk correlates with responsibility
  - Contractor
  - Government
  - Mutual or shared
- Remedies
  - Time
  - Money
  - Both

Quality Control: Inspection and Acceptance

- Government *right* to Inspection
- Government delegation of inspection *duty* to Contractor
- Acceptance (by government) is final
  - Exceptions
    - Latent defects
    - Fraud (or gross mistake amounting to fraud
    - Warranties and guarantees

Ensuring Prompt Payment

- In many countries, public authorities are often late in paying contractors

- In the U.S., such problems led to the enactment of the Prompt Payment Act in 1982 (subsequently amended)
- Today, the *government must automatically pay a penalty if*
  - the contractor has submitted a proper invoice
  - the government acknowledges that the contractor delivered what was required under the contract; and
  - the government fails to pay by the due date (typically 30 days after receipt of invoice)

Termination for the Convenience of the Government (Sovereign Flexibility)

- Total or partial
- In the government's best interest
- Formal written notice
- Compensate contractor
  - All allowable costs incurred
  - Allowance for profit

Termination for Default (Termination "for cause")

- Late delivery
- Failure to make progress (or any other failure)
  - Cure notice (show cause notice)
- Remedies
  - Excess costs of reprocurement
  - Liquidated damages
  - Other remedies -- "make the government whole"
- If improper – termination for convenience

Contract Disputes

- Waiver of sovereign immunity
- Specialized fora result in consistency (predictability)
  - Transparency (publication) leads to institutionalized sharing of lessons learned
- Unique procedures in U.S.
  - Government claims and Contractor Claims
    - Demand, in writing, for a sum certain
    - Certification of claim (good faith, etc.)
    - Contracting officer decision
  - Administrative and judicial option
  - Judicial appeal
  - Pre-judgment interest

Award Challenges, Protests, or Domestic Review Mechanisms

The U.S. Experience

- Imperfect regime, but informative:
  - Large, developed, complicated procurement regime
  - Broad industrial base
  - Generally open to foreign contractors
  - Fully evolved
    - Bureaucracy
    - Judicial regime
  - (Relatively) litigious culture

U.S. Challenge Regime

- no exhaustion requirement
- no entry fee (or nominal fee)
- Election/Choice of Forum
  - Three (3) options
    - too many?
    - inefficient use of resources?

U.S. Agency (Ministry) Protests

- Long, unimpressive history
  - Constant efforts to reform
  - Generally ineffective
- Most "efficient" (inexpensive) forum
- Obvious problem = objectivity
- Particularly useful for
  - Error Correction & Ambiguity Resolution
  - Formalism & formality avoids appearance of ex parte communication, favoritism

Judicial Option: U.S. Court of Federal Claims

- Expensive
- Difficult to stop procurement
  - High burden for temporary restraining order (TRO) or preliminary injunction (PI) versus automatic stay
  - Litigant must prove "likelihood of success on merits"
- Court dynamics
  - Semi-specialized (NOT a court of general jurisdiction)
  - Periodically inconsistent (and, thus, unpredictable)
- Very low volume - Not a forum of choice
  - Flexible filing deadline
  - GAO-Court strategy (for large, important cases)
- General information: http://www.uscfc.uscourts.gov/bid-protest-info

U.S. Administrative Protests:

Government Accountability Office (GAO)

- Unique forum, legislative instrumentality
  - quasi judicial
- Resolution mandate:
  - independent, expeditious, inexpensive
- Decisions establish a uniform body of law
  - relied on by Legislature, Courts (generally), contracting agencies public
- Familiar (public) rules
- Highly transparent - http://www.gao.gov/legal/
  - Introductory podcast (7 minutes)

GAO - Administrative Tribunal Traits, features

- Automatic Stay
  - cost = postage stamp (but …)
- Expertise
  - talented, respected career legal staff
- Agency Report
- Sufficient, but limited, process
  - discovery
  - hearings (live witnesses)
  - counsel = optional (but typical)

GAO – Recent Changes & Legislative Pressures

- Steady uptick in activity
  - But still below 1993 peak
- New filing fee
  - Legislative funding limitations
  - Needed to underwrite electronic filing regime
- Proposal: reduce review period
- Proposal: loser pays (in certain circumstances)

Additional Resources

World Trade Organization (WTO) Government Procurement Agreement (GPA) – Domestic Challenge Mechanism Coverage

Reference: GPA Article XVIII

- Challenge Procedures
  - non-discriminatory
  - timely (rapid)
  - transparent
  - effective
- Judicial or Administrative Review
  - impartial
- Remedies:
  - Interim measures: Stay or stand-still
  - Compensation: bid and proposal costs

Distinguish from WTO dispute settlement

GPA XVIII(1)
Fundamental Requirement:

provide a timely, effective, transparent, and non-discriminatory administrative or judicial review procedure

GPA XVIII
Additional Requirements:

(1) pre-challenge consultation encouraged

(2) review complaints without future prejudice

(3) reasonable time (10+ days) to prepare/submit challenges

(4), (5) impartial administrative or judicial review

GPA XVIII
Additional Requirements (cont.):

(6) basic administrative/judicial practices

- written response
- right to be heard
- right to be represented
- access to proceedings
- witnesses (upon request)
- timely results, explanation of outcome

(7)(a) standstill provision

(7)(b) remedy

GPA Permits Significant Flexibility

- Institutional
  - Judicial or administrative
- Procedural
  - Amount of due process
  - Legal representation
  - Time
- Substantive
  - Remedies

Conclusion

Professor
Steven L. Schooner

GW | LAW

@ProfSchooner (Twitter)

Life Cycle Cost Analysis

Bob Kwartin
Green Powered Technology
December 12, 2017

Introduction

- Welcome
- My background and perspective
  - Been both a buyer and a seller, both public and private sectors
    - Seller - Large renewable and energy efficiency projects, recent focus on governmental buyers
    - Seller - electricity and natural gas in competitive markets
    - Buyer and seller - Consulting services
    - Buyer - Web development services
- Please stop me to ask questions or request clarification

Agenda for this Session

- What is LCCA?
- Calculating LCCAs
- LCCA Exercises
- Challenges in implementing LCCA

Acronyms

- LCCA = Life Cycle Cost Analysis (or Assessment)
- LPTA = Lowest Price Technically Acceptable
- O&M = Operations and Maintenance
- IRR = Internal Rate of Return
- NPV = Net Present Value
- PPP = Public-private Partnership
- RFP = Request for Proposals

Do You Use Life Cycle Cost Analysis (LCCA) In Your Job?

A. I never use LCCA.
B. I have been trained to use LCCA, but use it rarely or never.
C. I use LCCA on some of my procurement projects.
D. I use LCCA on most or all of my procurement projects.

Green Powered Technology

A Closer Look at LCCA

The Role of Life Cycle Cost Analysis (LCCA)

- LCCA is an analytical tool to estimate the total costs and benefits experienced during a project's lifetime, adjusted for the time value of money
- Supports a longer term view of costs and benefits
- Requires more data and more analysis than lowest price technically acceptable (LPTA) procurement
- LCCA is more often found in best value procurements than LPTA, but there are other possibilities:

	Best Value	LPTA
LCCA	Our topic	Possible
Ticket Price	Possible	Traditional Method

LCCA in the Broader Best Value Context

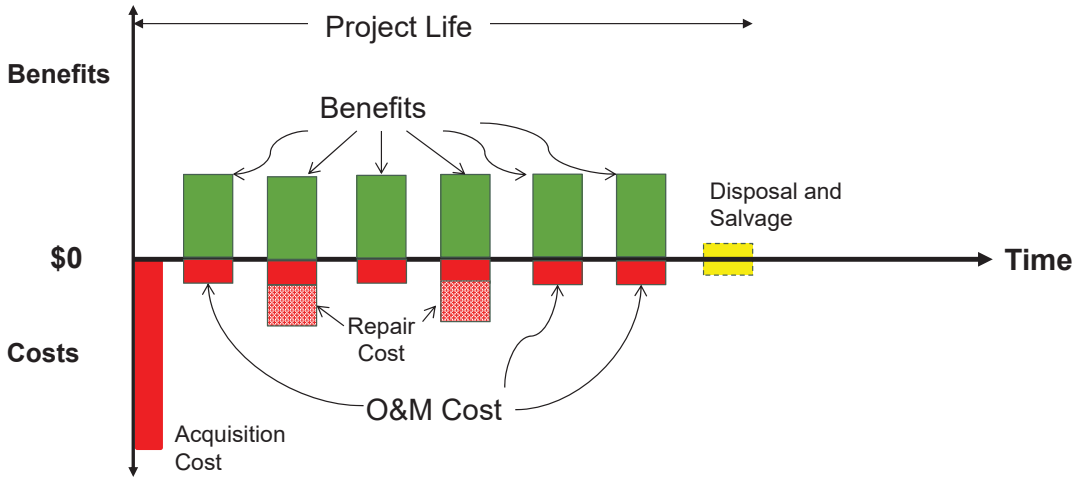
- "Best value" procurement should consider multiple factors:
  - Quantity of output/service
  - Quality of output/service
  - Life cycle cost
  - Risks (and risk mitigation)
    - Project execution (experience and coherence of team; surety)
    - Project performance (warranty)
    - Price risks (enforceable supply and offtake contracts with creditworthy counterparties)
    - Other risks (supply chain, public policy, technology obsolescence, changing needs, intellectual property, resiliency, etc.)
  - Externalities
    - Environmental costs and benefits
    - Social impacts
    - Economic impacts

Life Cycle Costs and Benefits for a Power Plant

Development Cost	Engineering, Procurement and Construction Costs	Commissioning & Start Up Costs	Operating and Maintenance Costs	Fuel Costs	Revenue	End of Life Costs or Benefits
Development	Engineering	Labor	Labor and Supervision	Quantity	Quantity (peak, offpeak)	Waste Disposal
Permits	Procurement	Supervision	Repair parts	Quality	Price (peak, offpeak)	Demolition
Management & Administration	Construction	Management & Engineering	Management & Engineering	Price	Startup time	Land Restoration
Licensing Fees	Equipment	Subcontractors	Subcontractors	Combustion efficiency through time		Salvage Value of Parts
Administration	Bulk materials	Consumables	Utilities	Part load efficiency curve		
Consultants	Interest During Construction	Hydrocarbon fluids	Royalties and Taxes			
		Spare Parts	Administration			
		Fuel Reserves	Waste Disposal			
		Working Capital	Infrastructure			
			Risk Management			

Life Cycle Cost Analysis – Conceptual

Cash Flows: spending (negative flow) and receiving (positive flow)



How much will you pay me for this promissory note?

Why are Future Cash Flows Discounted?

Money promised in the future is worth less than money today due to:

- inflation
- the opportunity cost of committing money to a specific investment
- uncertainty about the future and investment risk

You "erode" the value of money in the future using a "discount rate".

A real in hand today is worth more than a real promised at some point in the future

How are Future Cash Flows Discounted?

Present Value (PV) of R$1.00 at "n" years in the future = R$1.00 / $(1+i)^n$

- i = discount rate, n = number of years into the future
- Example: Assume that the discount rate is 6%. One real in Year Five is worth how much today?
  - R$1.00/$(1+.06)^5$
  - **Calculation by hand** (starting with the denominator):
    - (1.06) x (1.06) x (1.06) x (1.06) x (1.06) = 1.338226
    - 1 / (1.338226) = 0.75
  - **Using a calculator (y^x function),** press:
    - 1 / (1+.06) y^x 5 = 0.75
  - **Excel**, enter:
    - +1/(1.06)^5 = 0.75

Green Powered Technology

The Discount Rate

- Selecting the discount rate is based on several considerations
  - Inflation expectations (if the analysis will be done in "real" money rather than nominal money)
  - The cost of capital (e.g., the interest rate on government debt of similar length to the project; the cost of private borrowing)
  - The potential alternative return if the capital is invested elsewhere
  - Risks of comparable investments
- No perfect answer
  - A company may have a standard rate or formula
  - For government, the discount rate may be determined by the Finance Ministry
- Be clear – is inflation included in or excluded from the discount rate?

Green Powered Technology

Life Cycle Cost Analytical Methods

- Desirable attributes of an LCCA method
  - All alternatives analyzed using the same method applied the same way
  - Full time horizon of the project is considered
  - Consider all important cost and benefit streams for which reliable data is available or can be estimated
  - Future cash flows are discounted to present-day money values
- Several methods available to analyze life cycle costs
  - Simple payback
  - Discounted payback
  - Net Present Value
  - Internal Rate of Return
  - Others

Economic Evaluation Methods for LCCA

Method	What does it calculate	Advantage	Disadvantage	Uses	Example
Simple payback	▪ The time to recover the cost of an investment.	▪ Quick, easy calculation. ▪ Easy to interpret results.	▪ Does not account for inflation, interest or cash flow. ▪ Does not account for project scale	▪ Rough estimation on investment's profitability. ▪ Best used as a screening device, not as a decision tool.	▪ Investment = R$50,000 ▪ Net Revenue = R$10,000/yr for 7 years ▪ Payback = 5 years
Discount payback method (DPP)	▪ Similar to the simple payback method but takes the time value of money into account	▪ Takes the time value of money into account.	▪ Ignores all cash flow outside the payback period. ▪ Does not account for project scale	▪ Best used as a screening device; not as a decision tool.	▪ Investment = R$50,000 ▪ Net Revenue = R$10,000/yr for 7 years ▪ Discount rate = 5.5% ▪ Payback = 6 years

Economic Evaluation Methods for LCCA

Method	What does it calculate	Advantage	Disadvantage	Uses
Net present value (NPV)	▪ Difference between present value of cash inflows and outflows.	▪ Takes the time value of money into account. ▪ Uses all available data.	▪ Not usable when the alternatives have different useful life lengths.	▪ Used in most LCC models where the alternatives have same useful life length.
Internal rate of return (IRR)	▪ The discount rate that makes the NPV of all cash flows from a particular project equal to zero.	▪ Results are presented as a rate of return, which shows a clear winner.	▪ Can only be calculated if the investments will generate an income.	▪ Used where investments will generate an income.

Green Powered Technology

How Does LCCA Result in Better Use of Funds?

A. Using LCCA results in better use of funds because it focuses on first costs, which are the largest costs over a project's life.

B. Using LCCA results in better use of funds because it ignores the time value of money, which is unimportant.

C. Using LCCA results in better use of funds because LCCA does not consider future costs, which will be someone else's responsibility, drawn from a future budget.

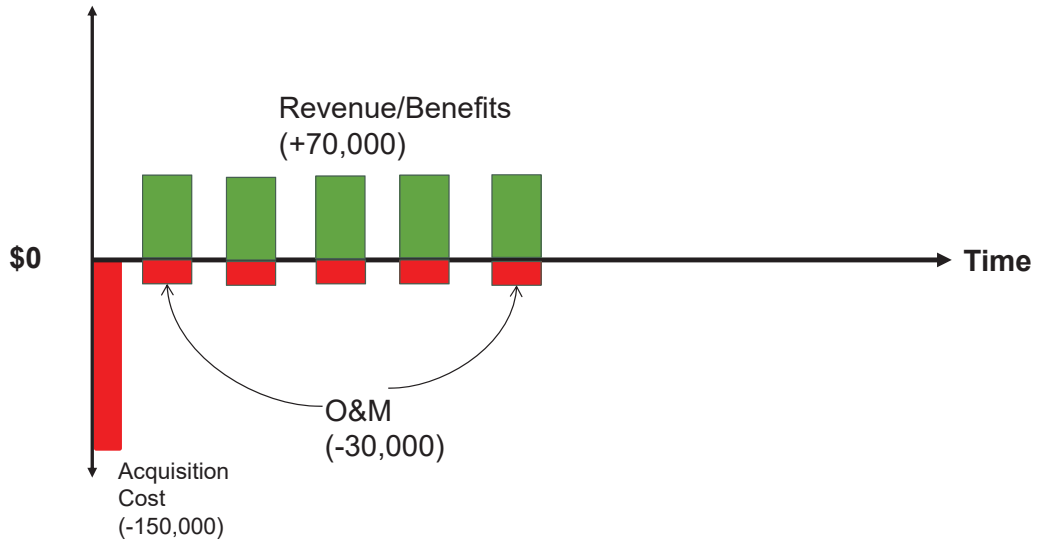
D. Using LCCA results in better use of funds because it examines the total present-value cost and benefit of ownership throughout the life of an acquisition, not just the initial construction cost and benefit.

Calculating LCCAs
Exercise #1

Simple Example – Pencil and Paper Exercise

- Invest 150,000 in Year 0
- Annual operating cost = -30,000
- Annual revenue = 70,000
- Net annual revenue = 40,000
- No salvage value or disposal cost at the end of the project
- Analyze for 5 years
- Discount rate = 5%

Keep the Cash Flow Model in Mind



Problem Setup – Pencil and Paper

Year (n)	Undiscounted Cash Flow (x)	Discount Factor $(1+.05)^n$	Present Value of Cash Flow $= x/(1+.05)^n$
0	-150,000		
1	40,000		
2	40,000		
3	40,000		
4	40,000		
5	40,000		
Net Present Value			???

Problem Solved – Pencil and Paper

Year (n)	Undiscounted Cash Flow (x)	Discount Factor $(1+.05)^n$	Present Value of Cash Flow $= x/(1+.05)^n$
0	-150,000	1	-150,000
1	40,000	1.05	38,095
2	40,000	1.1025	36,281
3	40,000	1.1576	34,554
4	40,000	1.2155	32,908
5	40,000	1.2763	31,341
Net Present Value			23,179

Open Spreadsheet 1

	Discount Rate		5%
			Discounted
Year	Cash Flow	Discount Factor	Cash Flow
0	-150000	1.0000	(150,000)
1	40000	1.0500	38,095
2	40000	1.1025	36,281
3	40000	1.1576	34,554
4	40000	1.2155	32,908
5	40000	1.2763	31,341
	Present value of costs		(150,000)
	Present value of benefits		173,179
		Net Present Value	23,179
		IRR	10.4%
Net Present Value using the Excel Formula			**=B9+NPV(D4,B10:B14)**
Note that the Excel NPV formula assumes that the first cash flow			
is for Year 1 and is discounted by the discount rate. As a result			
of this Excel logic, the user must apply the NPV formula to			
the cash flows to Years 1, 2, 3…n, and then add the Year 0			
amount to that quantity.			
		NPV =	$ 23,179

Do You Use Excel (or Another Spreadsheet Program) In Your Job?

A. I never use Excel.
B. I have been trained to use Excel, but use it rarely or never.
C. I use Excel frequently.
D. I am an Excel “power user”.

Green Powered Technology

Calculating LCCAs Exercise #2

Comparing Competing Bids Using LCCA

- Bidder One
  - Project Life: 13 years
  - Acquisition Cost: R$100,000
  - Revenue: R$20,000/year
  - O&M: R$5000/year
  - Overhauls: R$0,000 in years 4 and 8
  - Disposal cost: R$5000
- Bidder Two
  - Project Life: 13 years
  - Acquisition Cost: R$250,000
  - Revenue: R$70,000/year in years 1-5; R$41,000/year in years 6-13.
  - O&M: R$12,000/year
  - Overhauls: Included in O&M.
  - Disposal cost: R$14,000

Difficult to identify the more advantageous offer at a glance

Laborious to analyze by hand or on a calculator

Use the Excel “Net Present Value” function

Open “Example 2 – First DCF Analysis – To Be Filled In”

				Year												
	Discount Rate	6%		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Bidder One																	
		Costs															
1		Acquisition															
2		O&M															
3		Overhauls															
4		Disposal															
5 = (1+2+3+4)	Sum of costs			-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		**Revenue**															
7=6+5	Undiscounted net cash flow			-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Net Present value		-														
9	Internal rate of return		#NUM!														
Bidder Two																	
		Costs															
10		Acquisition															
11		O&M															
12		Overhauls															
13		Disposal															
14 = (10+11+12+13)	Sum of costs			-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		**Revenue**															
16=15+14	Undiscounted net cash flow			-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Net Present value		-														
18	Internal rate of return		#NUM!														

Example 2: Complete

	Discount Rate	6%								Year						
			0	1	2	3	4	5	6	7	8	9	10	11	12	13
Bidder One																
		Costs														
1		Acquisition	(100,000)													
2		O&M		(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
3		Overhauls					(10,000)				(10,000)					
4		Disposal														(5,000)
5 = (1+2+3+4)	Sum of costs		(100,000)	(5,000)	(5,000)	(5,000)	(15,000)	(5,000)	(5,000)	(5,000)	(15,000)	(5,000)	(5,000)	(5,000)	(5,000)	(10,000)
6		**Revenue**		20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
7=6+5	Undiscounted net cash flow		(100,000)	15,000	15,000	15,000	5,000	15,000	15,000	15,000	5,000	15,000	15,000	15,000	15,000	10,000
8	Net Present value		16,251													
9	Internal rate of return		8.7%													
Bidder Two																
		Costs														
10		Acquisition	(250,000)													
11		O&M		(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)
12		Overhauls														
13		Disposal														(14,000)
14 = (10+11+12+13)	Sum of costs		(250,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(12,000)	(26,000)
15		**Revenue**		70,000	70,000	70,000	70,000	70,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000	41,000
16=15+14	Undiscounted net cash flow		(250,000)	58,000	58,000	58,000	58,000	58,000	29,000	29,000	29,000	29,000	29,000	29,000	29,000	15,000
17	Net Present value		122,323													
18	Internal rate of return		15.8%													

You Can Also Focus on the Incremental Investment

What about the incremental investment?																
			0	1	2	3	4	5	6	7	8	9	10	11	12	13
	Increment from Bidder 1 to 2		(150,000)	43,000	43,000	43,000	53,000	43,000	14,000	14,000	24,000	14,000	14,000	14,000	14,000	5,000
	Net Present value		106,072													
	Internal rate of return		21.5%													

- Bidder 2's solution costs an extra R$150,000
- The incremental investment yields an IRR of 21.5%
- What do you do?

Green Powered Technology

Calculating LCCAs
Exercise #3

Case Study #3

- Your regional airport runway is in poor condition:

- Your Airport Engineer gives you three options:
  - Selective patch repairs
  - Mill/overlay
  - Full depth repair by replacement
- Let's use LCCA to help decide…

Inputs to the LCCA

Opt	Title	Cost (R$K)	Useful Life (Yrs)	Maint/Repair Cost (R$K/Yr)
1	Patch/Repair	500	4	60
2	Mill/Overlay	1,450	10	35
3	Full Depth Replacement	3,500	20	15

- Note that the “solutions” have different useful lives

Open “Example 3 – Airfield Repair – To Be Filled In”

Example 3

All figures ($000)

Discount rate 5%

Year

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Patch/Repair (4 yr life)																					
NPV																					
Mill/Overlay (10 yr life)																					
NPV																					
Full Depth Replacement (20 yr life)																					
NPV																					

Example 3: Complete

Example 3

All figures ($000)

Discount rate 5%

		Year																				
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Patch/Repair (4 yr life)		500	60	60	60	60	500	60	60	60	60	500	60	60	60	60	500	60	60	60	60	500
NPV	$ 2,240																					
Mill/Overlay (10 yr life)		1450	35	35	35	35	35	35	35	35	35	35	1450	35	35	35	35	35	35	35	35	35
NPV	$ 2,713																					
Full Depth Replacement (20 yr life)		3500	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
NPV	$ 3,687																					

Discussion questions

- Which option is the most cost-effective on a life-cycle basis?
- Is there a different discount rate that changes the answer?
- Do all 3 options produce the same “service”?
- How confident are you regarding the lifetime estimates?
- How confident are you regarding the annual maintenance costs?
- How could you limit the risk of bad estimates?

Challenges in Implementing LCCA

Policy and Organizational Barriers to LCCA

- Procedural Barriers
  - Lack of training to carry out LCCA
  - Scarcity of credible data undermines confidence in out-year cost and benefit data
- Risk Issues
  - Legal uncertainty regarding the use of LCCA
  - Risk of awarding contract to a vendor with a higher initial acquisition cost
  - Risk of bid disputes and delay
- Structural Barriers
  - Decentralized purchasing systems
  - Problems with comparable data from OEMs

Data Barriers to LCCA

- Accurate, comparable data can be hard to acquire or estimate
  - Operating costs over many years
  - Repair costs
  - Efficiency benefits over time
  - Fuel costs over time
- Some costs and benefits are “soft”
  - Enhanced reputation
  - Better customer service
- Which costs and benefits are within/outside the analysis?
  - Integration with other systems
  - Enhanced corporate efficiency
  - Reduced environmental impacts

Green Powered Technology

Main Sources of Data for LCCA Purposes

Costs can be estimated with varying degrees of confidence from the following sources:

- Manufacturers, suppliers, contractors and testing specialists;
  - Conduct market research
  - Require the supplier to warrant the data if possible
  - Verify with independent testing
- Historical data
  - Evaluate comparable completed projects
  - Adjust for cost inflation/deflation, changing standards
- Data from modelling techniques

Green Powered Technology

Managing the Risk of Deliberate Misinformation

- Planning phase
  - Market research on performance of similar products/projects, Bidder claims and actual performance
  - Choose a contract structure to mitigate the risk (e.g., Design-Build-Operate-Maintain, Software as a Service, output-based contracting)
  - Clear Statement of Work and specifications
- Procurement phase
  - Bidder's statement of compliance
  - Bidder's product literature
  - Independent testing results submitted by the Bidder
  - Pre-award testing sponsored by the acquiring organization
  - Owner's Engineer or other expert review and evaluation of bid documents

Managing the Risk of Deliberate Misinformation (Continued)

- Implementation phase
  - Diligent technical and contractual monitoring
  - Retainage
  - Warranty
  - Performance bond or other guarantee
  - Contractor performance rating system (deterrence function)

Conclusion

- Questions?
- Thank you.

Competition and Award of Contracts

Scott K. Borges, PE
Senior Program Manager
Kimley-Horn

How would you describe your level of experience in pre-qualifying Bidders/Tenderers?

a. No experience
b. One or two projects or procurements
c. Three or more projects procurements

When is the best time to look at Bidder's qualifications?

a. Before the tender is prepared
b. After the tender is written, but before it is released
c. After receipt of all bids

How to qualify bidders

- With respect to procurement-specific decisions, many (perhaps most, including the EU) systems screen out unqualified companies before bids are requested; others (including the U.S.) do it as the last step before award
  - Note that the U.S. does allow prequalification at an early stage, but that is usually focused on technical capabilities
- Screening out unqualified companies before requesting bids serves efficiency
- Screening them out as the last step preserves competition

Challenges in qualifying bidders

- In systems where qualification happens before bids are submitted, benefits of screening need to be balanced against the loss of competition
- Also, the screening process (whenever it happens) opens up the risk of undue influence or even corruption
- The qualification process needs to be fair, be seen to be fair, and be open to challenge as a form of accountability (this is also true for suspension/debarment)

When is the best time to modify the selection factors in a Tender?

a. Before release of the Tender
b. When it becomes apparent no bidders will qualify
c. Never
d. None of the above

Evaluating Tenders

- It is critical that the public authority follows whatever rules are set out in the tender documents
- If the tender documents provide for weighting of the various factors, that must be followed
- No factors in the tender documents may be ignored, nor may new factors be added

The Challenge of Tradeoffs

- There is always the challenge of how to “trade off” price against non-price factors, to reach what the EU calls the “best price/quality ratio”
- Transparency and the fight against corruption would call for the use of a formula that is known to bidders

The Challenge of Tradeoffs
(cont'd)

- Using a formula for the tradeoff may be so mechanical as to be unhelpful
- Yet the more subjective the tradeoff, the less transparent the process

The Alternative to Tradeoffs

- The alternative is to use technical considerations to set the minimum requirements very high, and then have price be the only award criterion
- This has the advantage of simplicity and apparent transparency – but it requires the government to do a good job in writing the requirements

Meeting the Challenge of Transparency & Accountability

- Whether in deciding that a tender is unacceptable or in doing a tradeoff, it is important to maximize transparency
- Keeping documentation to explain the decisions, in case of audit or legal challenge, is important

Meeting the Challenge of Transparency & Accountability

Even in situations where discretion and subjectivity are permitted, documenting the decisions increases transparency and thus increases accountability

Competition & Award of the Contract

With respect to the decision to award:

- In systems where concluded contracts cannot be overturned, a “standstill” period may be required between announcement of the winner and conclusion of the contract
- Losing bidders must be provided enough information to prepare a challenge, and the information must be provided during the “standstill,” if there is one

Workshop on Obtaining Value in Public Procurement

Brasilia, Brazil

Training the Procurement Workforce

December 2017

Steven L. Schooner
Nash & Cibinic Professor of
Government Procurement Law

GW | LAW

In our country, we are staffed with sufficient numbers of trained and experienced procurement professionals, and I am confident that we are investing in their successors (the next generation) as well.

A. True

B. False

- Citizens/public
  - Taxpayers
  - Recipients of government services
- **Government officials:**
  - **End users of goods & services**
  - **Legislature (appropriators)**
  - **Government ministers/bureaucracy**
  - **Accountability organizations (courts/auditors)**
- Civil Society
  - Press/Media
  - Interest groups (for example, small businesses)
- **Private Sector (Companies/Contractors)**
  - **Domestic v. Foreign**
  - **Firms/Companies dependent on sales to Government (as opposed to purely commercial firms)**

Whose Priorities?
[Stakeholders]
…
everyone cares!

Strengthening the Acquisition Workforce: *The Challenges*

- **Having – recruiting, retaining enough people**
- **Training them adequately:**
  - **Basic knowledge**
  - **Skills & experiential learning**
- **Incentives & Disincentives: Paying them enough & rewarding good behavior (and punishing the bad)**
- **Protecting them institutionally from improper pressure**

Recruiting and Qualification

- Common (but sub-optimal) background(s)
  - Graduates of university-based public policy, public administration programs
  - Familiarity with governance and bureaucracy
  - Lacking in business and economics training; underexposed to private sector
  - Classic trap: Non-specialized (marginal) public administrators
- Uniquely valuable – private sector business experience, married with public administration training/experience

In our country, we have clear ***standards for qualifications*** for procurement professionals as well as a clear vision of the ***skills and disciplines*** that these individuals need to develop, practice, and maintain.

A. True

B. False

Procurement Training: A Challenge For All States: Key Issues

- Deciding whom to train
  - Counting heads: census/data
  - Who should be trained *within* the acquisition workforce?
  - Who is *outside that workforce*, but should also be trained?
- How to pay for training?
- What subjects to teach?
- How to train?
- How to measure progress?

Collecting Accurate And Up-to-date Information

- Recruiting, tracking vacancies, anticipating needs
- Identify members of the acquisition workforce
- Basic training for entry-level personnel
- Career development, rotation, relocation
- Track individuals' training needs and certification levels
- Updates & continuous learning

Acquisition Workforce Information: The U.S. Experience

- Never-ending struggle - many difficulties maintaining accurate and up-to-date databases
  - Staffing (sufficient numbers)
  - Training (matching skills to needs)
  - Not a static universe – retirement, relocation (including with spouses), career progression (movement to management, alternative responsibilities), movement to private sector, etc.
- Centralized training bodies gather data
  - the Federal Acquisition Institute (FAI) – civilian agencies
  - the Defense Acquisition University (DAU) – defense agencies

Whom To Train? *(Acquisition Team?)*

- Government officials:
  - Acquisition personnel
    - *Contracting personnel/specialists (CO, COR)*
    - Support personnel
      - Auditors, quality assurance personnel
      - Requirements generators
  - Other government personnel
    - Program staff, Agency leaders
    - Attorneys & others
    - Legislative, regulatory staff
- Non-government personnel
  - Contractor personnel, especially in small businesses

In our country, we understand the importance of a well trained procurement workforce, and so we consistently ***invest sufficient resources (money)*** to ensure adequate training and constantly refresh and expand the workforce's learning and professional growth.

A. True

B. False

Paying For, Investing In, Training

- **Major challenge in every state**
- **When budgets are tight, training budgets get cut**
- **Recent U.S. approach:**
  - **By law, a percentage of contract spending goes into a training fund**
  - **This has been a major achievement -- it works reasonably well**

What Subjects To Teach?

- **Contracting rules**
- **Procurement policy**
- **Business, Accounting (and Economics)**
- **Management**
- **Agency mission (including technologies)**
- **Communication (writing, speaking)**
- **Negotiation, Law (and litigation support)**
- **Leadership, Professional Development**

One Approach: Body of Knowledge

BODY OF KNOWLEDGE (or "core competencies") approach

- Define universe
- Monumental Undertaking, Involves Stakeholder Engagement
- Requires Constant Review and Evolution

- Example: **National Contract Management Association (NCMA, US):**
  - 5 ***knowledge areas***
    - pre-award competencies
    - acquisition planning and strategy competencies
    - post-award competencies
    - specialized knowledge area competencies
    - business competencies.
  - Knowledge areas are broken down further
- *CIPS - Chartered Institute of Procurement & Supply (Similar)*

Limits to the Body of Knowledge Approach

Rules Training/Mastery is Insufficient

- Experiential Learning and Professional Development are Key
- Non-Procurement Professional Skills and Development
- Unlimited Options, including "soft skills"
  - Critical Reading
  - Professional, persuasive writing
  - Interpersonal skills, team building, management
  - Negotiation, dispute resolution
  - Professional Development, executive coaching
  - Stress, Time Management
  - Legal awareness, risk aversion

Knowledge in highly specialized areas can be a challenge

- **In particular, procuring *information technology (IT)* can require specialized knowledge**
  - **U.S. is experimenting with "specialized IT acquisition cadres"**
  - http://www.whitehouse.gov/sites/default/files/omb/procurement/memo/guidance-for-specialized-acquisition-cadres.pdf
- In **technology** (major systems) procurement (e.g., defense, space, medicine, utilities (power generation), etc.), ***systems engineering*** (i.e., managing technology integration) is a critical (and value) skill

How To Train?

- Classroom modes:
  - Face-to-face lectures
  - Interactive classes
  - Online training – distance education
- Text learning/reading
  - Books, Periodicals, Policy Guidance, Circulars
- On-the-job training
  - Mentoring
  - People "look up and around"
- *Rotational assignments (including private sector)*
- Unlimited options
  - Larger-scale investment: intern and professional development programs

METRICS: Measuring Progress

A major challenge in every system

- Strategic plans – either government-wide or agency/ministry-focused – are critical
- Formal credentials (such as certifications) can help
  - Options: public or private sector certification
- Organizations perform in response to the measurement (thus, correlate measurement to goal)
  - Number of course attendees
  - Money spent on (or days consumed in) training
  - Number of certifications
  - Student (or supervisor) satisfaction
  - Learning outcomes

Recognition (Awards, Prizes): *Cost Effective (Inexpensive) Incentives*

Identify, recognize, celebrate:

- Successful actions:
  - Innovative Strategies
  - Solicitations
  - Collaborations (teams)
  - Outcomes (results)
  - Customer Service
  - Interaction with (respect for) private sector
- Others achievements/disciplines
  - Collaborations
  - Mentoring
  - Professional Development
    - Rising stars (young professionals)
    - Career achievement (legacy awards)
  - Research (published studies, papers, books)

Take Advantage of *International Capacity Building* Resources

- World Trade Organization (WTO) - https://www.wto.org/english/tratop_e/devel_e/build_tr_capa_e.htm
- World Bank
- Organization for Economic Cooperation and Development (OECD)
- European Bank for Reconstruction and Development (EBRD) - http://www.ebrd.com/work-with-us/procurement/capacity-building-assessment.html
- United States Trade and Development Agency – Global Procurement Initiative
  - https://www.ustda.gov/program/global-procurement-initiative-0 -- (and check out the GW Law Team in the video!)
- Royal Society-DFID Africa Capacity Building Initiative (historical example)

The U.S. experience:

- DAU has a large budget, good facilities, and many professional staff
  - Much teaching is by DAU staff
  - More and more online classes being developed
- FAI (civilian): limited budget, small staff
  - Heavy reliance on contractors & DAU courses
  - Growing reliance on online courses
- Veteran's Administration Acquisition Academy (VAAA) – heavy investment, holistic approach
- Funded private sector (self-directed) degrees
  - Nice perk for best candidates
  - Question of cost effectiveness

U.S. Resources

- U.S. Government Accountability Office (GAO) reports on workforce training:
  http://gao.gov/assets/660/653437.pdf
- DAU: www.dau.mil
- FAI: www.fai.gov
- Veterans Affairs Acquisition Academy (VAAA) - https://www.acquisitionacademy.va.gov/
- Office of Federal Procurement Policy:

http://www.whitehouse.gov/omb/procurement_index_workforce/ *(*** temporarily unavailable – a transparency teaching example)*

- *NCMA (membership organization) - https://www.ncmahq.org/*

Stimulate, Embrace Change

- Experiment
  - try things
  - run pilots
- Anticipate, Learn from Mistakes
  - Grow, Evolve
  - Strive for Excellence
- Celebrate Incremental Improvement!

Conclusion

Professor
Steven L. Schooner

GW | LAW

@ProfSchooner (Twitter)


SPONSORED BY THE U.S. TRADE AND DEVELOPMENT AGENCY
Global Procurement Initiative: Brazil
DECEMBER 11–13, 2017 | BRASILIA, BRAZIL
THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC
Enap
MINISTÉRIO DO PLANEJAMENTO, DESENVOLVIMENTO E GESTÃO
BRASIL
GPI
GLOBAL PROCUREMENT INITIATIVE
UNDERSTANDING BEST VALUE
ORGANIZED BY THE BUSINESS COUNCIL FOR INTERNATIONAL UNDERSTANDING (BCIU)

Framework Agreements

Scott K. Borges, PE
Senior Program Manager
Kimley-Horn

My level of familiarity with framework agreements/contracts:

A. Extensive personal experience
B. Some personal experience
C. Some familiarity, but little personal experience
D. Little or no familiarity

Background: Balancing Competing Goals

As everyone in this room knows, every procurement system wants to meet multiple goals, some of which are mutually inconsistent:

– Speed vs. Competition + Accountability
– Transparency vs. Customer Focus
– Cost savings vs. High Quality

Framework Agreements: Setting

- Hot topic across the world
- Now represent between 30 and 50 percent of all U.S. federal procurement dollars
- Rules are not always clear
- Driven primarily by demand for speed
- Information technology (IT) a particularly common use
- Connection to aggregation of demand and use of centralized purchasing entities makes them more appealing

Framework Agreements: Basics

Two parts – in separate phases:

- Phase one: "Umbrella" contracts

  Typically more than 1 contractor

  Note that these are called "agreements," rather than "contracts" in some systems, including the EU

- Phase two: Individual orders

  Typically only 1 contractor

  Note that these are called "call-outs" in the U.K., "contracts" in the EU Directive, and "task orders" or "delivery-orders" in the U.S.

Umbrella Contract Issues

- Who can compete?
- How many winners?
- How broad should the scope be?
- How long should the contracts last?
- Can additional firms be awarded contracts over time?
- How specific should the terms be?
- Are they treated as contracts?
- How much of a commitment do they represent?

Issues Related to Orders

- How is the winner of orders decided?
- How large are the orders?
- Can anyone protest the award of orders?
  - If so, is a stay put in place during resolution of the protest?

How They Work in the U.S.

- Very widely used, for goods and services
- Two subsets:
  - Federal Supply Schedules (FSS)
  - Many other contracts called “indefinite-delivery/indefinite-quantity” (ID/IQ) contracts

How They Work in the U.S.
(continued)

- Umbrella contracts:
  - Full & open competition
  - Multiple contracts awarded
  - Broad “statements of work” are common
  - Typically last 5 years
  - Include a very low guaranteed minimum

How They Work in the U.S.
(continued)

- Individual orders – not usually seen as contracts:
  - Task orders = services
  - Delivery orders = goods
  - Not at all clear from umbrella contracts who will win individual orders – that’s the key step
  - Competition rules are developing:
    - Pressure for more competition from Congress
    - Rules less strict than for free-standing procurements
    - Since 2008, more competition requirements for orders over $5 million

How They Work in the U.S.
(continued)

- Companies that don't hold umbrella contracts are generally excluded from award of orders
- Right of companies to protest is controversial
  - Since May 2008, umbrella contract holders can protest to challenge the award of an award valued above $10 million – protest allowed to GAO only (not to court)

Background to the Use of Frameworks in the EU – An American Perspective

- EU procurement directives are becoming more detailed
- Framework agreements are one of the new procurement tools now permitted
- Frameworks can be useful in connection with the increased EU focus on aggregation of demand (including, potentially, across member state borders) and use of centralized purchasing entities

How Frameworks Work in the EU:
An American Perspective

- Framework agreements were introduced in the 2004 Procurement Directives
  - Length generally limited to 4 years
- Some uncertainty about whether umbrella agreements are contracts or "mere" frameworks; individual orders are seen as contracts
- Some uncertainty about whether competition is to happen at the level of the umbrella agreements, the orders, or both
- Application of 'standstill' & Remedies Directive to orders may be problematic

Frameworks in Other International Documents

- Discussed at length in the UNCITRAL Model Law and its Guide to Enactment (very helpful)

- Not mentioned in the revised WTO GPA – perhaps because revision of that document was largely completed before use of frameworks had become so widespread

A framework agreement…

A. …is the first phase of a two-phase procurement process.

B. …requires that all work will go to the framework contractor.

C. …can only be used for services.

Workshop on Obtaining Value in Public Procurement
Brasilia, Brazil

December 2017

E-Procurement and Electronic Reverse Auctions

Gregory L. Giddens
Principal Executive Director (retired)
Department of Veterans Affairs
Washington, DC

E-Procurement

A generic term that refers to use of the Internet to assist in managing a procurement

- **Government may share information on the Internet (tender documents, for example)**
- **Bidders may communicate with the government (emailing questions, submitting tenders)**

E-Procurement

- E-Procurement can increase efficiency and transparency which can build trust
- Dependent on connectivity – industry cannot take the chance that their internet will go down when they need it most….which is when it would go down!
- SMEs or businesses in remote areas may face especially difficult challenges in this regard

E-procurement: A Process

E-procurement can be implemented gradually – for example:

- Posting of government information on the internet
- Forum for questions and answers
- Requests for tenders
- Accepting submission of tender information

Can lead to much more than conducting current processes electronically – can lead to process improvement & new processes

How much experience do you have with E-Procurement?

A. A lot
B. Some
C. Limited
D. None

If you use E-Procurement, how useful is it?

A. A lot
B. Some
C. Limited
D. None

Electronic Reverse Auctions

A price competition conducted on the Internet, with bidders bidding the price down (unlike a normal auction, where prices are bid up – hence the name "reverse auction")

This is a key innovation in procurement

Electronic reverse auctions are very popular in many countries around the world, often used in the second stage of framework procurements

E-procurement & Framework Agreements

E-procurement and framework agreements can work together particularly well

Multiple-contractor framework agreements can be used as a kind of online catalogue, so that public-sector users can do "e-shopping" online and quickly select the low-cost or best-value solution to their needs in a simplified way (depending on the national laws and regulations – may be limited to low-value purchases)

Electronic Reverse Auctions

Credited with bringing significant savings, especially for commodity goods

At least in some countries, credited with increasing SME contracting – sometimes barriers to entry for traditional procurement methods prevent SMEs from engaging in public sector business

How much experience do you have with Reverse Auctions?

A. A lot
B. Some
C. Limited
D. None

If you use Reverse Auctions, how useful is it?

A. A lot
B. Some
C. Limited
D. None

If you use Reverse Auctions, where is it most beneficial?

A. Price
B. Quality
C. Timeliness

Difficulties with Electronic Reverse Auctions

- Deciding what to buy using electronic reverse auctions
- Deciding whether to use any non-price award criteria – and, if so, when
- Role of private companies running auctions for the government (fees, conflicts of interest)
- Risks of collusive bidding
- Erosion of strategic relationship with suppliers
- Understanding total cost when things like quality, delivery, and best fit are considered

Mitigation Actions for Electronic Reverse Auctions

- Ensure what you are buying is appropriate for reverse auction
- Establish a pre-auction phase so companies can understand the requirement and clarify any issues
- Use reverse auction as a screening for focused negotiation with vendors that includes factors other than price
- Let reverse auction be a periodic wake-up call to incumbents to keep them from getting too complacent

Which would be the *best* procurement to use an e-reverse auction?

A. Medical equipment
B. Office furniture
C. Computer repair services
D. On the shelf Product

Which would be the *best* procurement to use an e-reverse auction?

A. Medical equipment
B. Office furniture
C. Computer repair services
D. On the shelf Product

15

Electronic Reverse Auctions

Best for:

- **well defined commodity items**
- **no long term investment needed from industry**
- **no continued relationship after delivery**

Should be a tool in your procurement tool bag but not the only one – procurement is not that simple

If all you have is a hammer, every problem will start to look like a nail…have a variety of tools

E-Procurement and Electronic Reverse Auctions

QUESTIONS?

Public Private Partnerships (PPP)

Scott K. Borges, P.E.
Senior Program Manager
Kimley-Horn

Overview

- What is PPP?
- Why do it?
- Latin American PPP examples
- Different types of PPPs
- How they work
- Key components for success
- PPPs in Brazil
- Case studies
- Resources

What is your experience with Public Private Partnerships?

a) I'm not familiar with the concept
b) I've heard about PPPs, but never participated in one
c) I've been on a team using PPP
d) I've led a PPP procurement effort

What is PPP?

Definition

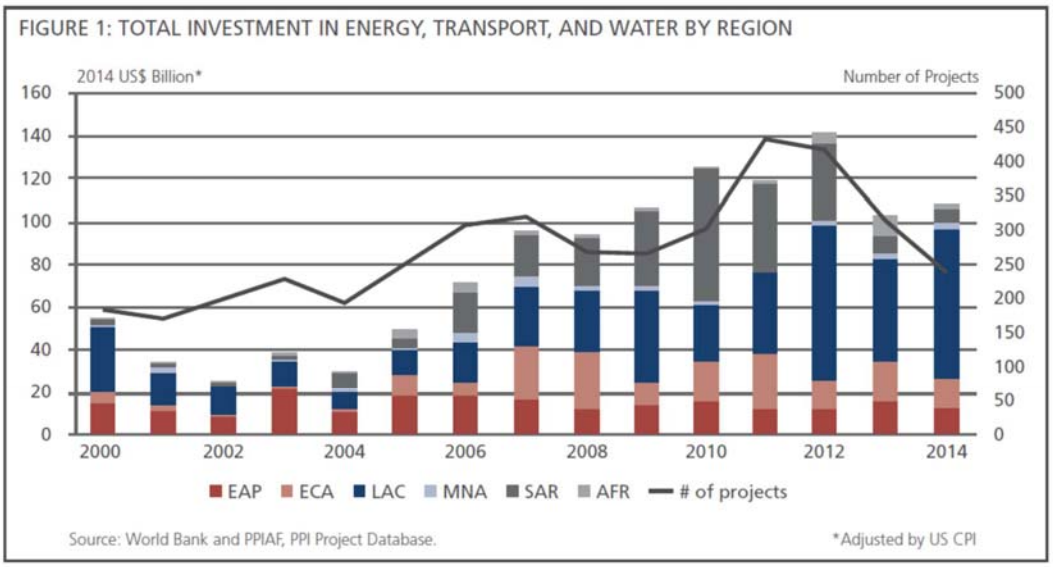
- Public = Government agency or other entity
- Private = Developer, financier, operator, etc
- Partnership = Agreement to accomplish a mutually shared goal

Public + Private ➡ Partnership = Shared Goal!

Why Do It?
Reasons

- Win-win for both sides
- Access to private money for public services
- Shared risk
- Shared reward
- Project speed
- Lower project cost
- Efficiency
- Private sector innovation
- Capacity development

PPP Trends by Region



Latin American Examples

- Toluca and Tlalnepantla Hospitals — Mexico
- Daniel Oduber Quirós International Airport— Costa Rica
- Corredor Turístico — Honduras
- Puerto Cortés Container and Cargo Terminal — Honduras
- Ruta del Sol — Colombia
- Electrolima — Peru
- Galeão and Confins Airports — Brazil

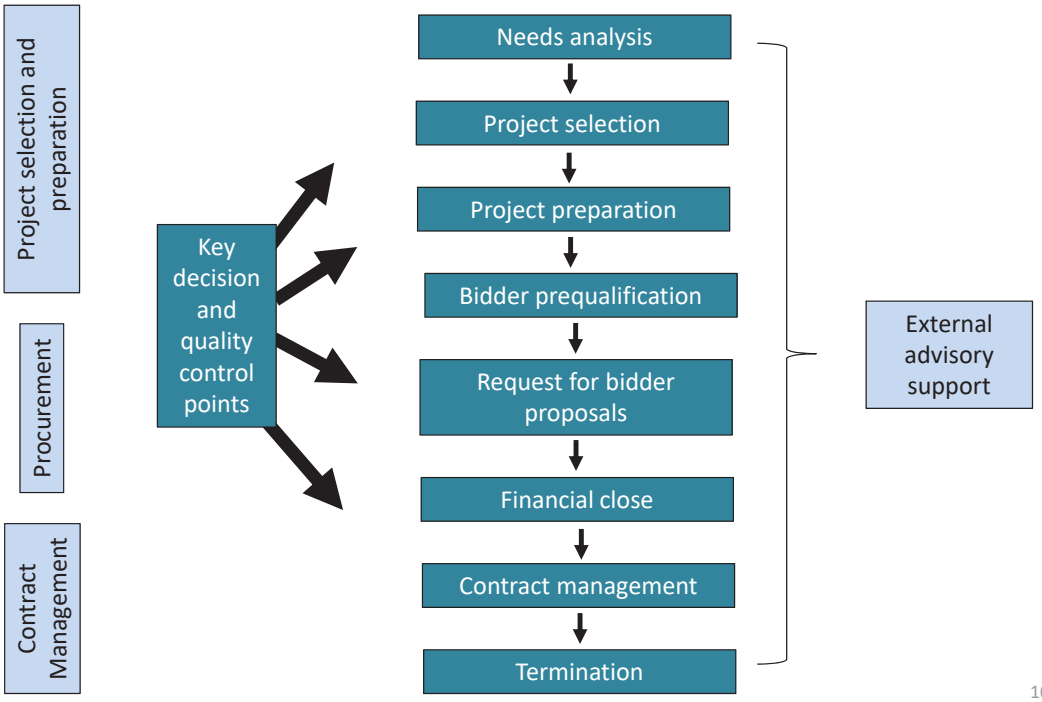
Different Types of PPPs

- Buy-Build-Operate (BBO)
- Buy-Own-Operate (BOO)
- Build-Own-Operate-Transfer (BOOT)
- Build-Operate-Transfer (BOT)
- Build-Lease-Operate-Transfer (BLOT)
- Finance-Only
- Operate and Maintain (O&M)
- Design-Build (DB)
- Operation License

Which is the best type of Public Private Partnership?

a) Design-Build-Operate
b) Build-Operate Transfer
c) Finance only
d) It depends on the project circumstances

How PPP Works



Key Components of Success

- Solid legal framework
- Suitable investment climate
- Clear policy
- Strategic investment plan
- Transparency
- Accountability
- Stability and Predictability
- Specificity
- Flexibility
- Ongoing skill training
- Empowerment

Three Stages of PPP Development

Stage One	Stage Two	Stage Three
• Define policy framework • Test legal viability • Develop foundation concepts (PSCs etc.) • Apply lessons from earliest deals to other sectors • Start to build marketplace	• Introduce legislative reform • Publish policy and practice guidelines • Establish dedicated PPP units • Refine PPP delivery models • Continue to foster marketplace • Expand project pipeline and extend to new sectors • Leverage new sources of funds	• Fully defined comprehensive "system" established • Legal impediments removed • PPP models refined and reproduced • Sophisticated risk allocation • Committed deal flow • Long-term political consensus • Use of full-range of funding sources • Thriving infrastructure investment market involving pension funds and private equity funds • Well-trained civil service utilizes PPP experiences

Which stage of development is Brazil for Public Private Partnerships?

a) Stage One: just getting started
b) Stage Two: good legal climate and some PPP experience
c) Stage Three: fully defined, good experience, project successes

PPPs in Brazil

- **751** = # of active PPP projects currently under construction or operation
- **$325,515** = total investment in active PPPs (US$ M)
- PPP legal framework:
  - PPP Law of 2004 (Law 11.079/2004), which complements the concessions laws (Laws 8.987/95 and 9.074/95) and the procurement law (Law 8.666/93)
- Types of PPP projects:
  - Roads
  - Urban mobility
  - Airports
  - Water and waste
  - Schools
  - Hospitals

Main Characteristics of Brazilian PPPs

- The project value is estimated at 20 million Brazilian reais or more
- The project term shall range from 5 to 35 years
- Government powers or immunities cannot be delegated to the private partner
- The project scope cannot be limited to the supply of equipment, labor force, or public works
- The private party has to incorporate a special purpose company (SPC) to operate the PPP project
- Risk allocation has to be clear and objective
- The economic-financial structure of the project has to be defined in the bid documents and the PPP agreement and shall be sustainable and advantageous from socioeconomic perspectives
- Economic gains owing to reduction of financing credit risk shall be shared with the public partner

Galeão and Confins Airports

Rio de Janeiro and Belo Horizonte

- **Scope:** Improvements to two major airports
- **Cost:** $7.9 billion (Galeão); $750 million (Confins)
- **Financier:** IFC & Estruturadora Brasileira de Projetos (EBP)
- **Team:** Aeroportos do Futuro (Odebrecht & Changi Airport Group); Aerobrasil (CCR/SA & Flughafen Zurich AG)
- Results/Lessons Learned:
  - Largest PPP in the world (Galeão)

Hospital do Subúrbio

Salvador, Bahia

- **Scope:** New, 298-bed hospital
- **Cost:** $32 million
- **Team:** Promedica & Dalkia
- **Financier:** Government of Bahia
- Results/Lessons Learned:
  - First health PPP in Brazil—6 other Brazilian states now developing PPPs in the sector
  - Included by KPMG in its “Infrastructure 100: World Cities Edition” report

Belo Horizonte Schools

Belo Horizonte

- **Scope:** 32 new preschools and five primary schools
- **Cost:** $95 million
- **Team:** Educar Consortium (Construtora Norberto Odebrecht & Odebrecht Participações e Investimentos)
- **Financier:** Municipality of Belo Horizonte
- Results/Lessons Learned:
  - Brazil's first education PPP
  - 18,000 children from low-income areas in school

Summary

- Public-Private Partnerships (PPPs) are a viable development alternative
- PPP can facilitate accelerated completion public service projects
- Must be approached as a "win-win"
- PPP requires training and experience to be successful
- The best PPPs are undertaken as team efforts of government, private sector, and consultancies
- There are lots of resources to help governments and investors grow in PPP capability

Resources/References

- *"A landmark public-private partnership in Brazil"* (https://www.weforum.org/agenda/2015/08/a-landmark-public-private-partnership-in-brazil/)
- *Brazil Public Private Partnerships – Getting The Deal Through* (https://gettingthedealthrough.com/area/71/jurisdiction/6/public-private-partnerships-2017-brazil/)
- *Navigating Public-Private Partnerships in Brazil* (https://www.worldfinance.com/infrastructure-investment/project-finance/navigating-public-private-partnerships-in-brazil)
- *Portal Brazil - Parceria Público-Privada (PPP)* (http://www.brasil.gov.br/economia-e-emprego/2012/04/parceria-publico-privada-ppp)
- *PPP Knowledge Lab: Brazil* (https://pppknowledgelab.org/countries/brazil)
- *PPP and Concession Project Finance in Brazil* (https://library.pppknowledgelab.org/documents/2860?ref_site=kl)

Workshop on Obtaining Value in Public Procurement

TRANSITIONING TO BEST VALUE

SMALL GROUP DISCUSSION

Wednesday, December 13, 2017

During this 90-minute session, you will spend 45 minutes in a small group discussing the questions below. We will then reconvene as a large group and discuss the points raised in the small groups. The small groups will not be asked to reach any kind of consensus or to report any conclusions. Instead, the small group discussion is intended to help you brainstorm so that you can prepare to participate in the large group discussion on an individual basis.

Please discuss the following questions:

1. Do you believe that your organization is using Best Value (BV) procurement as frequently and as effectively as it should?
2. If not, what are some barriers that have prevented your organization from adopting Best Value procurement at an optimal level? Possibilities might include:
    a. Staff needs training
    b. Insufficient staff
    c. Leadership support is needed
    d. Our procurement guidance materials need to be updated
    e. Necessary data to support Best Value is scarce
    f. Analytical tools to support Best Value analysis are unavailable
    g. We're constrained by corruption concerns
    h. Our vendor community doesn't understand Best Value
    i. Best Value procurement will probably lead to more vendor complaints, and our complaint mechanism would need to be strengthened.
    j. The public won't understand if we don't choose the lowest-price option.
    k. Other barriers?

3. What are the 2-3 most important things that should be done in your organization to facilitate the transition to a Best Value procurement model?
4. Are there things that should be done government-wide to facilitate the transition to Best Value? Possibilities might include:
    a. Change the procurement laws and regulations.
    b. Conduct a demonstration project.
    c. Develop a Contracting Officer certification system.
    d. Develop a contractor performance rating system.
    e. Train vendors and other external stakeholders.
    f. Develop a collaboration/experience exchange platform for governmental procurement professionals in Brazil.
    g. Monitor the impact that the transition to Best Value has on the efficiency, fairness and quality of future procurements.
    h. Other ideas?