# CPB NEWS



Central Procurement Board Newsletter

Issue 19 - September 2024



## Foreword from Chairperson CPB

Being ever so mindful of doing more and better within targeted budget and timeframe requires continuous innovation and re-invention. Business as usual is not an option at a time when so many technological tools are available to help humans do things faster, cheaper and more efficiently.

Recently, we benefitted from the visit of Dr Rustom Kanga, a global eminent Australian AI expert who since the 1980s have been inventing and patenting tens of IA related inventions that have facilitated so many innovations, bringing about a paradigm change in ways of doing business.

An example is in security service sector, where huge amounts of money are spent yearly by our various ministries, institutions and para-statal bodies for guarding government premises, controlling traffic, dealing with illegal parking of vehicles, surveillance of specific areas and even for crowd control. These jobs can be done better and at a cheaper cost using AI and IQ.

Furthermore, innovations using AI with IQ can save lives too by drastically reducing response time, in cases of emergencies.

AI driven security systems can provide much better oversight on security matters 24/7 with real time recording of events, facial recognition of intruders/offenders, raising alarms, informing authorities etc. Hence in the country, with an ageing population where there is an acute shortage of manpower, should we not be looking at proven technologies to improve the level of required services at a lesser cost?

Meeting the KPI for vetting and evaluation is proving to be very challenging as some bidding documents still require many amendments before they can be cleared by the CPB for floating purposes, even though the CPB engages with the public bodies through joint meetings followed by written exchanges from the moment the bidding document is first submitted.

Recently, a Bid Evaluation Report had to be reviewed four times taking an unduly long time, instead of the targeted 15 days for doing so.

Furthermore, the Board is scrutinizing the reasons why bids received are either abnormally low or high leading to either negotiations or cancellation. In some cases, prejudice is caused to the Nation as many valuable resources are used for vetting and evaluation. Additionally, when the same project is floated anew, experience shows that bid prices go up by 15 to 20% because of a very dynamic market where there are huge price fluctuations including freight, labour cost and material etc.

It is about time, for a complete overhaul and to re-invent the procurement landscape where cost estimate does truly reflect market prices and cancellation of bids are eliminated; where bid documents can be vetted and evaluated within the set timeframe without any constraints such as having to issue clarification/addenda.

Raj H Prayag GOSK. PDSM. C.Eng. P.Eng. FIEM. FAeSM Chairperson, CPB

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## THE FUTURE IS HERE WITH AI USING MULTI SENSORY AUTONOMOUS ANALYTICS

How many times have we heard these above phrases and what have we done in response. Should we not have a closer look at the possibilities of using AI, if it can be more efficient, more reliable, more productive and save money.

If you agree, read on!

Well, last week we had the visit of Dr. Rustom Kanga of Australia, an AI expert since the 1980's. He presented at the University of Mauritius on multi-sensory autonomous AI where he demonstrated that AI can do a better job at a lower cost than humans in many areas.

He explained how in China, AI ensures the safety of the ultra -rapid "bullet" trains travelling at 300 km/hour. The driver can usually see about 700m ahead, but the train can require 5kms to come to a stop. The system has cameras along the track which detect if there is a significant intrusion on the track and advise the driver of the same, long before he can see it himself, giving him sufficient time to stop.

Multisensory AI uses video, sound and smell analytics to understand the environment and help solve problems even in complex and crowded situations. Numerous applications are available from simple intrusion and counting systems to detection of complex behaviours, Anonymized tracking of people of interest (which protects the privacy of ordinary citizens and the ability not just to recognize number plates but also the make and model of vehicles. The system can also recognize sounds such as people shouting in a fight and gunshots and smells which is useful in detecting gas leaks and also for quality assurance in food processing.

In an emergency, the AI system can automatically find the nearest responder with information on where to go and what to do. This can reduce response times significantly, which is important for Mission Critical Applications.

In Singapore such systems have been able to reduce the time required for ambulances to reach accident sites by 80% which is critical for reducing congestion as well as for saving lives.

And importantly such systems can now be designed to reduce the infrastructure required such that it can be less expensive to implement a smart system than to leave it dumb.



Even for surveillance, an AI system can do a better job than a human by recording evidence of an intruder, noting the time of the incident, recognizing him with facial recognition, and alerting the nearest police station or policemen. The AI can alert other surveillance cameras to track the movement of the identified intruder and can reduce time taken to respond to the incident and resolve it.

The same technology is being used to look after patients in the geriatric department in health centres to raise an alarm if a patient falls off the bed or collapses in the bathroom or in the toilet or where Alzheimer patients might wander off and may subject themselves to harm.

In the construction industry, AI can record work progress, ensure people are operating safely and wearing their safety gear, capture data on quality of material being used, data on test on material, provides data on volume of excavation, reinforcement used in structures, compares progress against planned target and more.

In at least two universities in Australia, they are currently using virtual laboratories for civil and structural engineering graduate programs. This provides the students with all the facilities and logistics and at the same time, it saves millions as one does not have to invest in costly buildings and even more costly laboratory equipment.

Unlike humans, AI systems work 24/7 without getting tired.

**Reference: Omniscient** 

Raj H Prayag GOSK. PDSM. C.Eng. P.Eng. FIEM.

### PRINCIPLES OF SUCCESSFUL PROCUREMENT

Effective Public Procurement is the life blood of sound and citizen centric Public Service Delivery. Yet, many take this key function of Government machinery to the back burner. This is not only regretful, but deprives our people of what they are legitimately entitled when a lax procurement framework prevails in Public Bodies

As Deputy Chairperson of the Central Procurement Board, I consider that there is more to be done to ensure value for money Procurement, improved efficiency in the procurement process and more importantly, goods, services and works procured by Government contribute positively to the welfare and well being of our population.

I therefore wish to reiterate the basic, albeit, non exhaustive principles that need to be adopted for sound management of procurement activities carried out by Public Bodies. These are:

#### 1. Prepare and submit an effective and implementable procurement plan in line with budget allocation:

More often it is observed that the preparation and submission of an annual procurement plan is carried out as a 'formality' to comply to statutory provisions. However, this activity is not only crucial for public bodies for planning purposes, but it provides valuable insights to suppliers so that in times of procurement, the items or services sought are available at competitive market rates.

#### 2. Define clearly the objectives of the project or the problem to be solved that will warrant a procurement exercise.

Once more, it is observed that many procurement exercises fail or do not meet its intended objectives because of serious flaws in defining terms of reference, inability to determine correct cost estimates or the changing nature of a project while a procurement exercise is underway.

#### 3. Know the statutory procurement provisions and procedures

Staff of Public Bodies including top Management needs to grasp and have a sound knowledge of the Public Procurement Act including regulations, directives, guidelines and guides issued by the Procurement Policy Office, the Central Procurement Board or other Government authorities. Moreover, Public Bodies should use the correct Standard Bidding Document and ensure that the final document is clear and complete containing information such as relevant dates for closing of tenders, opening of bids, any site visits, complete set of evaluation criteria, payment terms, penalty clause, delivery schedule, itemised financial summary sheets and other relevant data that will enable prospective bidders participate in a Bidding Exercise on an equal playing field. Public Bodies should also ensure queries raised are promptly responded to within a set deadline.

#### 4. Effective Evaluation

Public Officers should ensure that members of a Bid Evaluation Committee and Departments Bid Committee are knowledgeable, trustworthy and committed to ensure that the Evaluation of Bids are carried out in a fair and transparent manner which is free from any bias. Once recommendations for award is made, Public Bodies should respond swiftly but diligently and give an opportunity for unsuccessful Bidders to. appeal against the award pursuant to the relevant provisions of the Public Procurement Act.

#### 5. Management of Contracts

Public Bodies should ensure that, once a contract is awarded, the contractor(s) fulfil(s) its obligations as per the conditions spelt out in the contract. Furthermore, Public Bodies should endure

timely payment to the contractor as per the terms and conditions.

Finally, Public Bodies should assess as to whether, once a contract has been completed, the intended objectives have been met and identify areas of improvement for future procurement exercises.

Swaminathan RAGEN Vice Chairperson



## The Importance of AI in Procurement Proceedings



Procurement has always been a vital function in both private enterprises and government institutions. Traditionally, procurement was a labour-intensive, time-consuming pro- 5. cess that depended heavily on human expertise, intuition, Fraud in procurement is a serious concern for organizations, tive edge.

#### **Automating Repetitive Tasks**

voices. AI-driven automation tools can now handle these financial losses and reputational risks. tasks with striking efficiency, freeing up procurement professionals to focus on more strategic activities.

#### **Enhanced Data Analysis and Insights**

cessing large amounts of data quickly and accurately, mak- and more strategic. By embracing AI, organizations in procan analyse historical purchasing data, supplier perfor- by reducing costs, improving supplier relationships, and mance metrics, market trends, and pricing information to mitigating risks in the supply chain. identify patterns and generate actionable insights which can help procurement professionals make more informed decisions when selecting suppliers, negotiating contracts, or WHEN WILL MAURITIUS JOIN THE LEAGUE OF AI optimizing sourcing strategies.

#### **Supplier Management and Risk Mitigation**

Managing supplier relationships and mitigating risks in the supply chain are critical aspects of procurement. AI can significantly enhance supplier management by continuously monitoring supplier performance and assessing risk factors such as financial instability, supply chain disruptions or geopolitical issues. By leveraging AI-driven algorithms, procurement professionals can quickly assess the reliability of

suppliers and identify potential risks before they become major issues. Moreover, AI can assist in assessing the sustainability and ethical practices of suppliers. Many organizations are now prioritizing corporate social responsibility (CSR) in their procurement processes, and AI can help track supplier compliance with environmental, social, and governance (ESG) criteria.

#### **Improved Forecasting and Demand Planning**

Accurate demand forecasting is essential for effective procurement. As we know, demand planning relies on historical data, market research, and human judgement, all of which could be prone to errors. AI can improve significantly demand forecasting by using advanced machine learning algorithms to analyse vast data, including real-time market information, customer behaviour, and macroeconomic factors. AI-powered demand forecasting systems can predict future demand with high degree of accuracy, helping procurement teams to align their sourcing strategies with actual

#### Fraud Detection and Compliance

and manual processes. However, with the rise of artificial particularly in large, decentralized operations. Procurement intelligence (AI), the landscape of procurement has under- fraud can take various forms, including bid rigging, kickgone a radical transformation This article explores how AI backs, market sharing or collusions. AI can play a critical is revolutionizing procurement proceedings and why it is role in detecting and preventing procurement fraud by anaindispensable for organizations seeking to gain a competi- lysing patterns in transaction data and drawing attention to suspicious activities. AI-powered fraud detection systems can analyse large volumes of procurement data to identify anomalies or inconsistencies that may indicate fraudulent The huge impacts of AI in procurement is its ability to auto- behaviour. For example, AI can detect unusual spikes in mate routine and repetitive tasks. Usually, procurement of- supplier payments, duplicate invoices, or unusually high ficers spend considerable time on tasks such as processing contract values. Thus, an early detection can help organizapurchase orders, managing supplier data, and analysing in- tions in preventing fraud and protecting themselves from

#### Conclusion

By automating repetitive tasks, improving data analysis, enhancing supplier management, and bolstering fraud de-Procurement is a data-driven function. AI excels at pro- tection, AI is making procurement faster, more efficient, ing it an invaluable tool for procurement departments. AI curement can achieve a significant competitive advantage

NATIONS?

**Swaminathan RAGEN** Vice Chairperson

## **Ensuring Reasonable Cost Estimates in Public Procurement: A Critical Need**

Over the past three years, a number of public bids have been inconclusive due to price quoted exceeding cost estimates by more than 25%. As stipulated in the Public Procurement Act (Section 25B), this significant disparity renders the bids unacceptable, leading to delays in the implementation of essential projects. Such occurrences highlight the need for public bodies to re-evaluate their approach to preparing cost estimates.

One fundamental way to ensure the reasonableness of cost estimates is through **comprehensive desk studies**. These involve gathering data on current market trends, material costs, labour wages, and other critical inputs. This data is readily available and provides a solid foundation for initial estimates. However, it should not be solely relied upon as; more in-depth methods are equally necessary.

Collection and analysis of statistical data over time offer another key insight into market fluctuations. By examining trends in costs and pricing structures over the past several years, public bodies can create more informed estimates that account for variations in the economy, such as inflation or supply chain disruptions.

Furthermore, **understanding the market** is crucial. Engaging with key industry stakeholders, contractors, and suppliers offers a first-hand perspective on current price points and emerging trends. This dialogue can ensure that cost estimates reflect the realities of what is available and affordable in the market at any given time.

**Learning from past experiences** also plays a pivotal role. Historical data from previous tenders, both successful and unsuccessful, provide valuable lessons. Reviewing which bids were deemed acceptable and which were not, along-side their respective cost estimates, can help in refining future estimates.

Another approach is utilizing a **scientific and structured method** of estimating. Modern procurement bodies need to adopt increasing standardized costing models, which involve clear methodologies, risk allowances, and adjustments for unforeseen events. These methods ensure that estimates are not based on subjective judgment but instead are grounded in objective, quantifiable data.

Lastly, it is essential for public bodies to **continuously update their estimation processes**. The construction market and other sectors are highly dynamic, with prices fluctuating due to global supply chain issues, technological advancements, and changing labour markets. Therefore, it is not enough to rely on outmoded methods; estimates must be regularly reviewed and revised based on the latest available data.

By employing these strategies, Public Bodies can ensure that their cost estimates are realistic, minimizing the risk of inconclusive tenders and fostering more efficient and effective procurement processes.

Chittaman JUGROO Vice-Chairperson



### ISO STANDARDS IN PUBLIC PROCUREMENT

#### Introduction

ISO standards are a set of guidelines and requirements The Mauritius Standards are a set of guidelines and reinteroperability of products, services, and systems across developing and promoting standards in Mauritius. various industries.

For example, ISO 9001 is a widely recognized standard For public procurement and governance, the MSB may for quality management systems. ISO standards help reference or adapt international standards such as those organizations improve their processes, ensure complifrom ISO to local contexts, ensuring that Mauritius's

#### **Public Procurement**

There is an ISO standard specifically for public procurement: ISO 20400:2017. "Sustainable procurement – Guidance".

ISO 20400 helps organizations incorporate environmental, social and economic considerations into their procurement decisions, aiming to promote more sustainable and responsible purchasing practices. It covers aspects like developing procurement policies, managing supply chains, and assessing the sustainability performance of suppliers.

Several countries and organizations incorporate ISO standard into their public procurement processes to improve efficiency, transparency, and sustainability.

- 1. United Kingdom: For instance, the UK's Public Procurement Policy encourages the use of ISO 20400 for sustainable procurement, aiming to integrate environmental, social and economic considerations into procurement decisions.
- 2. Canada: Canadian government and various provincial and municipal entities may use IAO standards like ISO 20400 to guide sustainable procurement and ensure compliance with international best practices.
- 3. European Union: The European Union often aligns its procurement guidelines with ISO standards, including ISO 20400 for sustainable procurement. This alignment helps ensure that EU member states adhere to high standards of transparency and sustainability.

The adoption of ISO standards helps ensure that procurement processes are efficient, transparent, and aligned with international best practices.

#### **Mauritius Standards**

developed by the International Organisation for Stand- quirements established by the Mauritius Standards Buardization (ISO) to ensure quality, safety, efficiency, and reau (MSB), which is the national body responsible for

ance with regulations, and enhance customer satisfaction. practices align with global best practices while addressing local needs.

#### **Central Procurement Board**

This standard is titled The ISO 9001 Certification will bring an added value to the high standard of Procurement Services provided by the CPB.

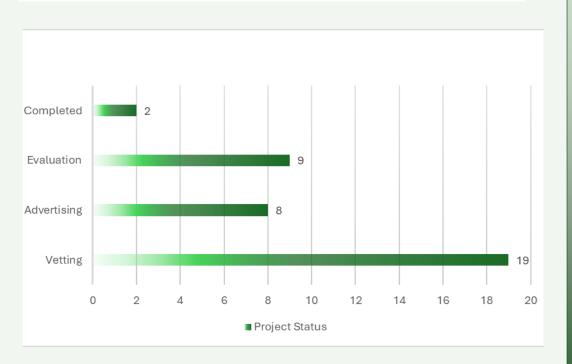
> D. Ramdhony **Board Member**

#### Statistics Snapshot (01 January 2024 - 30 September 2024)

No. of New Projects Received	42
No. of Bidding Documents vetted (completed)	35
No. of Public Openings	34
No. of Evaluations Completed	27
No. of Approvals of Award	30

## PROJECT STATUS

As at 30 September 2024, the CPB was handling 35 procurement projects falling under the category of major contracts. Out of which, 19 were at vetting stage, 8 at advertising stage, 9 at evaluation stage and 2 have been completed. (graph below).



#### Vision

To be the model for efficient and effective public procurement in Mauritius

#### **Mission**

To ensure value for money in public procurement and timely acquisition through a fair and transparent process

#### **Core Values**

Transparency - Integrity - Ethical Practice - Equality/ Fairness - Accountability

#### **Contact Us**

Give us a call for more information and visit out website for additional information

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