

## **Case Study for AGO Data Challenge 2023**

### **(Preliminary Round)**

#### **Objective**

1. You have been given a fictitious dataset on procurement of facilities management services made by various government agencies over the period 2017 to 2022 (6 years).
2. Your task is to process and analyse the dataset to come up with interesting insights and potential recommendations for the government procurement entities.
3. Please submit your main report in a word document (font size 12) of up to 10 pages excluding cover page, with relevant charts inserted into the main report. You may include an additional 6 pages of annexes or appendices.
4. Please email your report to [AGO Data Challenge@ago.gov.sg](mailto:AGO_Data_Challenge@ago.gov.sg) by **Friday 15 September 2023, 10pm**.

#### **Background on Procurement**

5. The Singapore public sector adopts the fundamental principles of transparency, open and fair competition and value for money in its procurement. While each government agency does its own procurement, all procurement has to comply with procurement guidelines and rules issued by the Central Procurement agency in Government. Depending on the estimated procurement value, a government agency would adopt one of the following procurement methods. (Please note that the data/information below is only for the purpose of this Data Challenge.)

##### **Small value purchase (SVP)**

6. For goods or services with an estimated value of up to \$10,000<sup>1</sup>, the government agency may procure directly off-the-shelf or from known sources. This is the quickest and most efficient mode of procurement.

##### **Invitation to Quote (ITQ)**

7. For goods or services with an estimated value of up to \$100,000<sup>1</sup>, the government agency has to open an ITQ to the public. Suppliers are invited to respond to this ITQ and submit bids to win the contract. At least 2 officials from the government agency will be responsible for the purchase: one to invite, receive and evaluate the offers and make recommendations; and the second official is to approve the recommendation.

##### **Invitation to Tender (ITT)**

8. For good and services with an estimated value of above \$100,000<sup>1</sup>, the government agency has to open an ITT to the public. Suppliers are invited to respond to this ITT and may submit bids to win the contract. As compared to an ITQ, an ITT will require a more detailed evaluation process and a greater number of officers with higher seniority are required to approve the recommendation. There are 2 panels of officials involved: (1) an Evaluation Panel to evaluate the tender bids received and make a recommendation to the

---

<sup>1</sup> These financial limits are fictitious and are for use in this case study.

Approving Panel on which supplier to award to; and (2) a Tender Approving Panel to decide on which supplier to award the tender to. Government agencies typically incur more effort to raise an ITT, compared to an ITQ, given the higher value of the award.

### **Dataset**

9. Please see details on the dataset below.

Field Header	Description
Procurement Code	Unique code for each Government procurement.
Procurement Type	Procurement type refers to bids for ITQs and ITTs. <ul style="list-style-type: none"><li>• 'ITQ' refers to Invitation to Quote.</li><li>• 'ITT' refers to Invitation to Tender.</li></ul>
Agency	Name of Government Agency which made the procurement.
Procurement Description	Description of goods / services being procured by the Government Agency.
Date of Award	Date that the quotation or tender was awarded to the supplier.  Please note that the dataset covers awards made between the period 1 January 2017 to 31 December 2022.
Supplier	Supplier which successfully won that particular ITQ or ITT. Each ITQ or ITT is only awarded to one supplier.
Awarded Amount	Value of the contract awarded to the supplier.

### **Task**

10. Your task is to prepare and analyse the dataset with the following guiding points:

- What are the key statistics of the dataset (e.g. any errors, who are the top / bottom supplier, which agency made the most / least procurement, procurement trends, etc)?
- Are there any concentration risks (e.g. over reliance on a supplier / at the Whole of Government or agency level)?
- Are there any interesting insights / suspicious activities?
- What are your recommendations to improve the state of procurement at individual government agencies and also, for the Central Procurement agency in Government?

### **Judging Criteria**

11. You will be evaluated based on the following:

- Ability to understand and derive insights from data. [35%]
- Ability to identify interesting and/or suspicious data. [35%]
- Quality of recommendations to individual Agencies and to the Central Procurement agency in Government. [15%]
- Overall quality of report, including clarity of thinking, coherent flow of report and appropriate use of charts/diagrams. [15%]