

Briefing for Intelligent Web Crawler

Outcome-based Procurement

20 Jan 2019



Important Notes

- Register Attendance
- Drop your name card
- No photography & video recording



- Briefing Slides will be published in Gov-PACT portal*
- Please provide your name and company name before asking questions.

*<https://gov-pact.ipi-singapore.org/grant-call/enterprise-singapore-innovation-call-see-solutions-intelligent-web-crawler>

Tender Key Dates

Activities	Dates
Tender Open Date	8 January 2020
Tender Close Date	28 February 2020
Tender Briefing	20 January 2020
Clarifications Close Date	21 February 2020

* Submission strictly by **Gov-PACT portal** online. No hardcopy will be accepted

Introduction to StartupSG Network

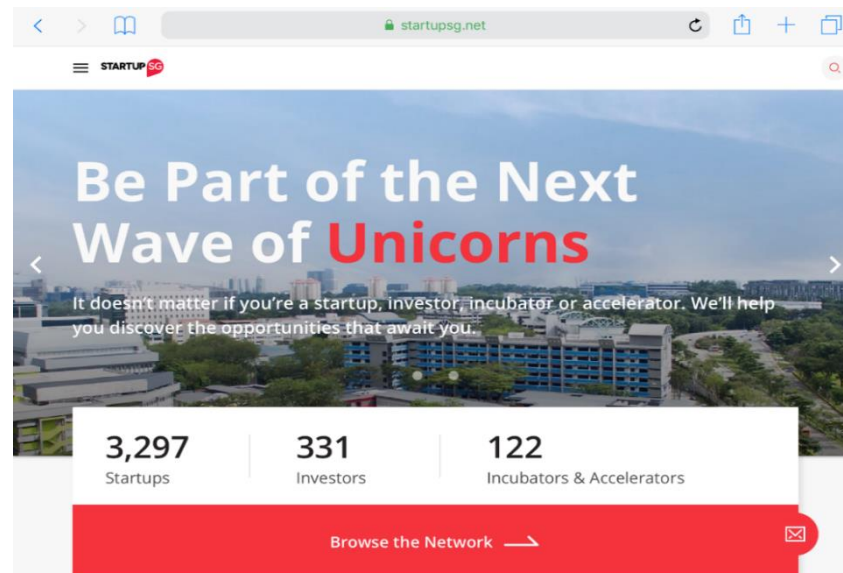


AN INITIATIVE OF
ENTERPRISE
SINGAPORE

Startup SG Network (SSN) is an online local tech startup network

The intent is to:

- ① Strengthen linkages among the players within the tech startup ecosystem; and
- ② Become a one-stop portal for information and data for startups, investors and accelerators
- ③ Be a key source of data to draw insights and monitor growth of the SG startup ecosystem



Link to www.Startupsg.net

To date, there are 3,200 tech startups & 400 investors and accelerators on the network

The screenshot displays the Startup SG Network interface with four panels showing different categories:

- Startups (2350 results):**
 - Saleswhale
 - StaffAny: Streamlining HR to help managers save time
 - RedDoorz: Hospitality services provider
 - DocDoc: Platform for medical patients to seek physicians
 - FOOD FOR REAL PTE. LTD.: Nutrition, Food Analysis, Food trends
 - Trax Retail: Computer Vision Solutions for Retail
 - SOCASH PTE. LTD.: soCash is the most convenient way to get cash
- Incubators & Accelerators (122 results):**
 - Techstars
 - PHILLIP CAPITAL PTE LTD: Type: Independent Accelerators, Corporate, VC-backed
 - AngelHack: Type: Independent Accelerators
 - Allen & Overy: Type: Independent Accelerators
 - Quest Ventures: Type: VC-backed
 - Asia Pacific Internet Group: Type: VC-backed
 - 123JS: Type: Government Linked
- Investors (188 results):**
 - Wavemaker Partners: VC
 - Singtel Innov8: Corporate VC
 - TRIVE: VC
 - Pix Vine Capital: VC
 - Expara: VC
 - Vickers Venture Partners: VC
 - Jungle Ventures: VC
- People (825 results):**
 - Speac.co Pte Ltd: Co founder at Speac.co, Angel
 - Rahul Thadani: Managing Director RSR Global Pte Ltd, Angel
 - Wing Hon Tsui: Founder, Angel
 - Jason Ng kean Seng: Project engineer, Angel
 - Kih Ling: Mr, Angel
 - Martin Berry: Investor, Angel

SSN Startup Profile

Data Points to be produced

General Information

1. Logo
2. Official website
3. Sector
4. Market presence (e.g. Singapore)
5. Funding stage
6. Social media
7. Date incorporated
8. Company email
9. Contact number
10. Employee Range
11. Company Description

Team

1. Founder and key management (name, designation, email)

Rounds Raised (multiple rounds, including acquisitions)

1. Date
2. Amount raised
3. Funding stage
4. Investor name
5. Source

Pitch details

1. Latest valuation (date, valuation amount, source)
2. Revenue
3. Business model (B2B, B2C etc)
4. Key partners & customers for R&D collaborations
5. Intellectual property & patents (number of patents obtained)
6. News

The screenshot shows the STARTUP.SG profile for Alchemy Foodtech. The profile is divided into several sections:

- General Information:**
 - Alchemy Foodtech** (UEN 201536021K) - Developer of Pro-Health Food Ingredients
 - Date Incorporated: 29 September 2015
 - Sector: Food Science and Technology, Complementary Health Products, Food Manufacturing & Processing
 - Funding Stage: Seed
 - Employee Range: 1 - 10 employees
 - Tags: Functional/Novel Ingredient
 - Description: Our patent pending glycemic lowering technology, SibrePlus™, is designed to lower the GI of traditionally high GI refined carbohydrates, such as white rice, bread and noodles, without changing the taste, texture and colour of
 - Video Links: A video thumbnail showing a group of people in a kitchen setting.
- Contact Details:**
 - Address: GOLDEN HILL ESTATE, 53 LIHWAN TERRACE, Singapore 556981
 - Email: alchemyfoodtech.com, hello@alchemyfoodtech.com
 - Social Media: Facebook, LinkedIn
- Team:**
 - Founders: Verleen Goh (Founder)
- Funding Overview:**
 - Overview: Funding Stage (Seed), Total Funding (USD 1.8M), Funding Rounds (1)
- Rounds Raised:**

ANNOUNCED DATE	AMOUNT RAISED	FUNDING TYPE	INVESTORS	SOURCE
26 Sep 2018	SGD 2.5M	Seed	Heritas Capital Management, ...	(4) News
- Pitch Details:**
 - Pitch Deck: Download button
 - Pitch Highlights: Provider of an e-commerce fashion marketplace intended to sell fashion and lifestyle products. The company's e-commerce fashion marketplace encourages small sellers to turn into successful entrepreneurs by giving them access to buyers, free-of-cost access to analytics, speedy logistics and secure payments, enabling customers to get the
 - More Details:
 - Product Stage: Live Production with Multiple Clients
 - Business Stage: Revenue-Generating
 - IP and Patents Pending: No Patents Pending
 - IP and Patents Obtained: No Patents Obtained
 - Deal Target: Fundraising Target (SGD >10M), Deal structure (Equity)

SSN Investor Profile (e.g. Venture Capital, Private Equity, IHLs, Government-linked, Crowdfunding Platforms, Corporate VCs, Angels, Family Offices)

Data Points to be produced

1. **General Information**

2. Logo
3. Official website
4. Company email
5. Contact number
6. Social media
7. Date incorporated
8. Year established
9. Employee range
10. Market presence (e.g. Singapore)
11. Investor type
12. Company Description

Team

1. Founder and key management (name, designation, email)

Investment overview

1. Portfolio size
2. Focus investment stage (e.g. Seed)
3. Notable investees (logo, UEN or ACRA registered name)

Rounds Made (multiple)

1. Date
2. Company invested
3. Amount raised
4. Funding stage
5. Investor name
6. Source

Fund Overview

1. Fund name
2. Fund size
3. Investment range & currency
4. Sector focus
5. Market focus

The screenshot displays the Startup SG profile for Wavemaker Partners. The profile includes the following sections:

- General Information:**
 - Logo: wavemaker PARTNERS
 - UEN: 201402949K • WAVEMAKER PACIFIC PARTNERS PTE. LTD.
 - Early-Stage Venture Capital Firm
 - Date Incorporated: 29 January 2014
 - Year Established: 2003
 - Investor Type: VC
 - Employee Range: 11 - 50 employees
 - Tags: Robotics, Advanced Manufacturing, Engineering, Digital Economy
 - Description: Wavemaker Partners is an Early Stage Venture Capital Firm that is looking to invest in startups involved in high-impact Automation, Analytics & Intelligence.
- Contact Details:**
 - INTERCON SPORE, ROBERTSON QUAY, 1 NANSON ROAD #03-00, Singapore 238909
 - 12400 Wilshire Blvd, Suite 995, Los Angeles, CA 90025, US
 - Website: wavemaker.vc
 - Social media: Facebook, Twitter
- Team:**
 - Key Management: Paul Santos, Managing Partner
- Investment Overview:**
 - Portfolio Size: 274
 - Investment Stage: Seed, Pre-series A, Series A
 - Notable Investees: Ack3 Bionetics, Ackcio, Adatos, Breaker, CashShield
- Rounds Made:**

ANNOUNCED DATE	COMPANY	AMOUNT RAISED	FUNDING TYPE	INVESTORS	SOURCE
12 Jul 2019	IGLOOHOME PTE. LTD.	USD 15.0M	Series B	Insignia Ventures Partner... (10)	News
9 Jul 2019	SMARTKARMA INNOVATIONS	Undisclosed	Series B	Singapore Exchange Limit... (3)	News
7 Feb 2018	lumpr.ai	Undisclosed	Seed	Wavemaker Partners... (1)	

SSN Incubator & Accelerator Profile

Data Points to be produced

General Information

1. Logo
2. Official website
3. Incubator type (e.g. Institutes of higher Learning)
4. Company email
5. Contact number
6. Social media
7. Date incorporated
8. Year established
9. Incubation Model (e.g. Early stage acceleration)
10. Countries Present (e.g. China)
11. Employee Range
12. Company Description

Team

1. Founder and key management (name, designation, email)

Incubation Activities

1. Cohort size
2. Investment (Y/N) (If Y, give range and currency)
3. May take equity (Y/N)
4. Incubator involvement (Direct/Indirect)
5. Notable incubates (logo, UEN or ACRA registered name)
6. Global presence (Y/N)(if Y, list countries)

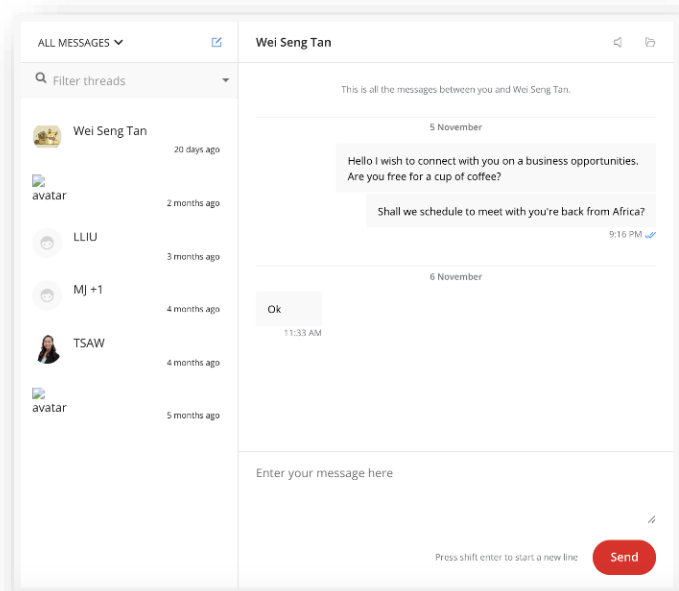
Programme (multiple)

1. Programme name
2. Description
3. Sector focus (list sectors)
4. Investment stage focus (e.g. Seed)

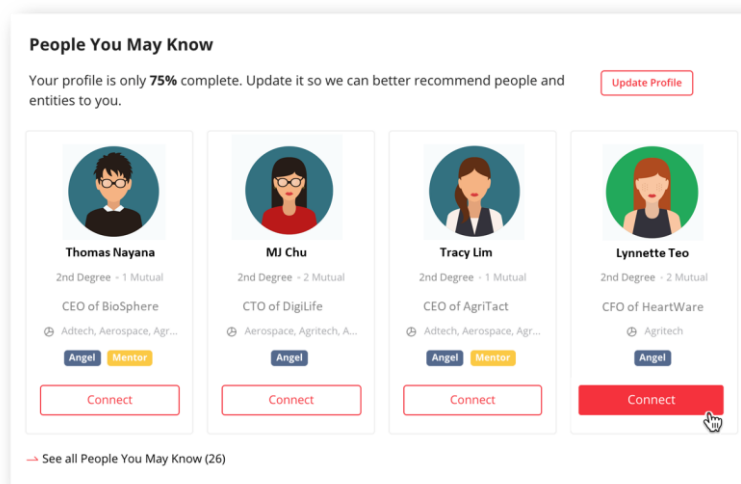
The screenshot displays the profile page for German Entrepreneurship Asia Pte. Ltd. The page is organized into several sections:

- General Information:**
 - Logo:** GERMAN ENTREPRENEURSHIP ASIA
 - UEN:** 201734553W
 - Company Name:** GERMAN ENTREPRENEURSHIP ASIA PTE. LTD.
 - Accelerator for:** Singapore and German startups
 - Date Incorporated:** 30 November 2017
 - Year Established:** 2017
 - Incubator Type:** Government Linked
 - Incubation Model:** Go-To-Market Acceleration, Others
 - Countries Present:** Germany
 - Employee Range:** 11 - 50 employees
 - Looking at:** Finding Mentors, Partnerships with Corporates, Partnerships with Startups
 - Tags:** FinTech, Smart Cities, Industry 4.0, MedTech, Digital Health, Cleantech, Insurtech, FoodTech, Cyber Security, automotive
 - Description:** German Entrepreneurship Asia connects the innovation ecosystems of Asia and Europe to advance cross-border synergies between startups, investors and corporates. We run three key innovation programs - the flagship
 - Video Links:** A video thumbnail titled "Program Experience..." is shown with a "More Details" link below it.
- Contact Details:**
 - Address:** JTC Launchpad, 75 Ayer Rajah Crescent #02-16-18, S139953
 - Website:** german-entrepreneurship.asia
 - Email:** marketing@german-entrepreneurship.asia
 - Phone:** +65 31592880
 - Social Media:** LinkedIn, Facebook, Twitter icons.
- Team:**
 - Key Management:**
 - Claus Karthe:** Chief Executive Officer (CEO)
 - Petrina Seah:** Chief Operations Officer (COO)
 - Theresa Evanoff:** (Role not specified)
- Incubator Activities:**
 - Overview:**
 - Cohort Size:** 1 - 10
 - Incubator Involvement:** Direct
 - Possible Equity Stake:** No
- Scaler8:**
 - Summary:** As a trusted partner of Enterprise Singapore's Global Innovation Alliance network, Scaler8 is a comprehensive, equity-free, 3-stage growth acceleration programme enabling Singapore startups and SMEs to unlock business opportunities in Europe's largest digital economy - Germany.
 - Focus:**
 - Sector:** No preference
 - Investment Stage:** Pre-series A - Series E

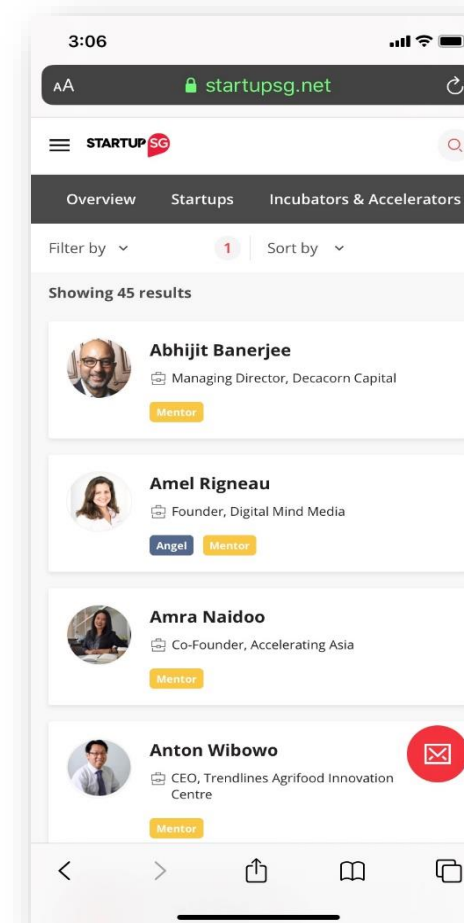
Other functionalities



Connect & Messaging to facilitate interaction amongst players



Recommendation Engine to help users grow their network



Founders, Angels & Mentors ^{BETA}

To establish SSN as a trusted source of startup information, we need to ensure data is timely, accurate and complete

- The innovation call provides an opportunity to automate data collection and curation by tapping on technologies.
- When done well, the solution should be able to...
 - 1) Increase accuracy and objectivity of data by crawling numerous trusted sources within short time frame for validation.
 - 2) Improve timeliness of data by extracting information and updating SSN profiles.
 - 3) Improve and maintain consistency in quality of data even as the SSN community continues to grow.
 - 4) Produce insights from data.

Tender Information

Tender Scope

- ❑ The IWC should be able to increase the accuracy, timeliness and consistency in quality of data on SSN through the following scope:
 - Extract and provide continual updates to the data points defined by ESG for all entities on SSN from trusted online structured or unstructured sources using, but not limited to, Natural Language Processing (NLP) technology.
 - Conduct data exchange and integrate with, but not limited to, SSN.
 - Achieve 80% accuracy rate upon production deployment, and improve accuracy of the data points updates based on user feedback via machine learning.

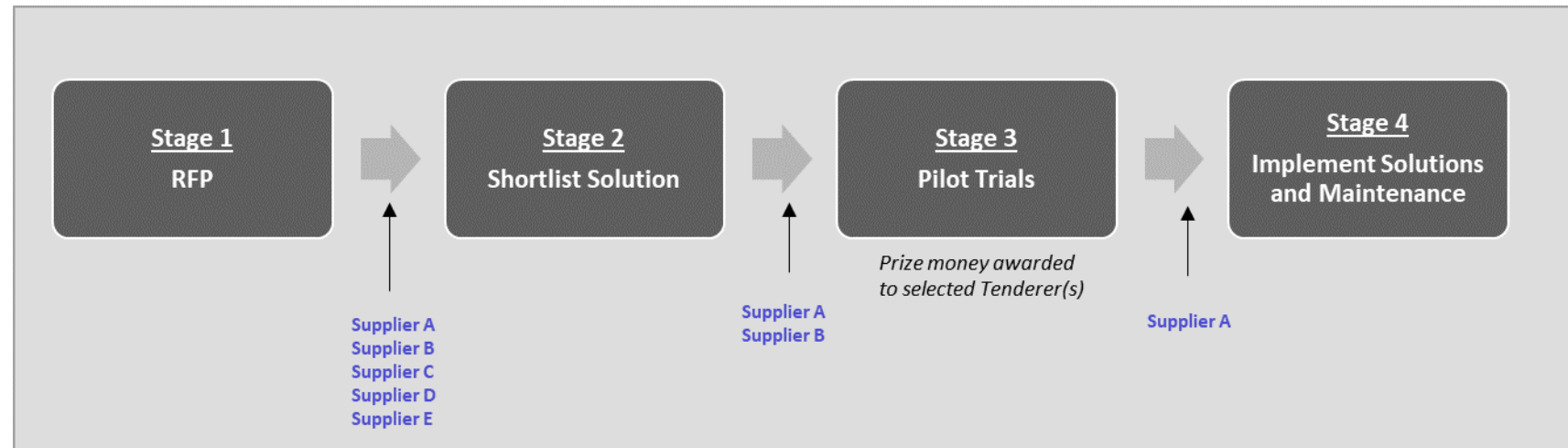
Tender Scope (Cont'd)

- ❑ The solution shall also be able to produce curation of insights:
 - Alert on new entities (such as startup/investor/incubator & accelerator) relevant to the local tech startup ecosystem that are not yet on the Startup SG Network (SSN).
 - Alert on entities that have ceased operations.
 - Relationship insights derived from the crawled data.
 - Verify claims made in SSN profile for the following categories of the claims. (e.g. Solution needs to identify claims related to categories identified below from SSN profiles, then validate against online sources that are related to the claim but are not yet defined for the crawler.
- ❑ Allow dynamic addition of extra Data Points to crawl. Such addition shall be self-helped by ESG officer without the need for additional development effort.
- ❑ Recommend new credible sources to crawl from for ESG admin to review.
- ❑ Provide a set of Application Programming Interfaces (APIs) for integration with SSN for sending the produced Data Points and Curation of Insights to SSN & User Interface (UI) for SSN user to provide the following feedback back to the Solution so that Data Points updates accuracy can be improved over time.

What is an Outcome-Based Procurement Approach?

- In the OBP process, agencies state their problem statements, desired capabilities and performance results to be achieved without specifying the technologies or solutions.
- Agency can co-develop/co-innovate with potential supplier.
- This process can also be used to refine prototypes and requirements.
- Using this process, agencies would be able to exercise the option to proceed to deployment after successful proof-of-concept/ trials without a separate tender/ quotation.

OBP Process:



Tender process (Outcome-Based Procurement)

Stage	Remarks
<p>1. Pilot</p> <ul style="list-style-type: none"> • Baseline scope • Co-Innovation 	<ul style="list-style-type: none"> • Up to 2 shortlisted tenderers with potential disbursement of prize money of \$50k* each • Selected Tenderer(s) will receive Letter of Award to commence the Pilot Trial <p>*30% of \$50k to be disbursed upon receipt of Letter of Award for Pilot Trial, and 70% of \$50k to be disbursed upon completion of the Pilot Trial.</p> <p>*<u>Tenderer is encouraged to prepare a demo</u> to demonstrate the capabilities relevant to, but not limited to, web crawling and text mining of unstructured text.</p>
<p>2. Implementation & System Maintenance for 5 Years</p> <ul style="list-style-type: none"> • Main scope • Co-Innovation • Integration with SSN 	<ul style="list-style-type: none"> • Procurement to onboard the final solution • Suppliers to quote for this stage as part of RFP submission • Suppliers can revise the quote if there is further refinement to the requirements and scope

Tender Evaluation Criteria*

No	Criteria	Weights
1	Ability & expertise to undertake and deliver the project Relevant technical expertise, team composition and team strength, in implementing projects of similar nature and is able to articulate and demonstrate capabilities.	15%
2	Ability to meet business outcome Demonstrate proposed solution and clearly articulates how the KPIs & Success Criteria can be met and how baseline can be determined to measure the success of the KPIs.	25%
3	Innovation, Value Creation & Sustainability The proposed Solution shall have a strong element of “innovation” that allows the proposed Solution to meet the project objectives and business outcome. The proposed Solution shall also have a reasonable and sustainable proposed business model.	30%
4	Price Competitiveness The price quoted for each of the milestones as stated by the Tenderer in Part 3 Guidelines for OBP Submission shall be quoted clearly in the format indicated in the schedule.	30%

*Same evaluation criteria will be applied to both **Pilot Trial** and **Full Implementation** stages

Tender Critical Criteria

Non-compliance with any of the following critical criteria shall preclude the Tender Proposal from further evaluation.

- Compliance with Terms and Conditions of Part 1.
- Compliance with schedule and timeline for Pilot and Full Implementation.
- Tenderers that are debarred shall not be allowed to participate in the tender and shall not be considered for award of tender.
- Compliance with Requirement Specifications of Part 2 - OBP Specifications.
- Compliance with Submission Requirements
 - The Tender Proposal shall strictly follow the layout stated in Part 3 Guidelines for OBP Submission. Non-compliance to this format may render the proposal liable to rejection.

Submission Format

Section 1 - Form of OBP Proposal

Section 2 - Management Summary

Section 3 - Prices and Charges

Section 4 - Statement of Compliance

Section 5 - Tenderer Information

Section 6 - Information on Proposal for OBP Stages

Section 7 - Information on Tenderer's Personnel

Section 8 - Information on Documentation

Section 9 - Information on Software Support and Maintenance

Section 10 - Information on Training

Section 11 - Information on Site Preparation

Section 12 - User References

Section 13 - Any Other Information

Tender Clarifications

- Tender clarifications should contain the following information:
 - Company name
 - Reference to Tender Clause
 - Tenderer's Clarifications
- All clarifications will be compiled and published in **Gov-PACT portal**.
- Last set of clarification should reach us **by 21 February 2020**.
- Please send clarifications to [Adeline GUI@enterprisesg.gov.sg](mailto:Adeline_GUI@enterprisesg.gov.sg)