1. PROJECT DESCRIPTION

The current Vacuum Waste Disposal System (VWDS) installed in SATS Inflight catering Centre since 2001, have many components that are beyond its product life cycle.

Namely the PLC and software products, these are no longer being supported by the individual manufacturer/suppliers, and therefore no longer providing technical and software expertise to resolve breakdown issues. Currently the PLCs are no longer in working condition and the VWDS is not running.

In order for the VWDS to be operationally ready, SATS is embarking on an exercise to upgrade, overhaul and improve the existing system, ensuring its efficient running and business continuity.

SATS CATERING PTE LTD ("SATSCAT" OR "Owner") is planning to engage the vendor to upgrade/enhance the existing VACUUM WASTE DISPOSAL SYSTEM at SATS In-flight Catering Centre 1.

The overall objectives of the upgrading exercise are as follow:

- 1. Increase Equipment Runtime reliability
- 2. Reduce Service time requirement for Equipment
- 3. Improve overall Energy Efficiency
- 4. Provide an operator friendly interface for control and monitoring

Potential vendors are to submit proposal for the following:

- 1. Dismantling and removal of existing and obsolete equipment(s)
- 2. Replacement of the Control & Monitoring System which includes
 - a. PLC / PLC Programming
 - b. Control panel
 - c. Control Monitoring System (SCADA)
 - d. Network and other IT Peripherals that is required
- 2) Assessment of the existing main mechanical components, make-good and/or replace the exhausters, containers, diverters & waste separators and valves and necessary pipe-works to ensure the proper transport of the waste from the ware-wash area to the bin centre.
- 3) To cater for contingencies to ensure minimal or no downtime during operations. This includes the changing of the containers/compactors to manage capacity and efficiency
- 4) To replace existing containers with compactors to minimise disruption and maximise the efficiencies in haulage.
- 5) Make-good the existing setup of the Tray-Stripper / trash-chute
- 6) Installation, testing and re-commissioning of the upgraded and improved system.
- 7) Project Management, which includes the submission of engineering drawings, approval from authorities (where necessary), detail timeline, testing and commissioning as well as user and technical training.
- 8) To provide 1 year warranty to the commissioned system

<Restricted>

Upgrading/Enhancement of Vacuum Waste Disposal System SATS IN-FLIGHT CATERING CENTRE 1

9) To provide Maintenance Services commencing from the end of warranty period with an option to extend it each year for at least next three (3) years.