

TENDER BRIEF AND CONTRACT TERMS

UPGRADING/ENHANCEMENT OF REFRIGERATION SYSTEM IN SATS IN-FLIGHT CATERING CENTRE 1

SATS CATERING PTE LTD.

Singapore

1. PROJECT DESCRIPTION

The current refrigeration system installed in SATS Inflight catering Centre since 2001, have sub-systems and components that requires replacement to ensure it can continue to run efficiently.

Namely the air-cooled condenser units, these have aged beyond economical repair and corroded significantly, and therefore a replacement is necessary for the refrigeration plant to run efficiently. The control and monitoring system of the plant is also obsolete. The system manages the the full alarm monitoring of all temperatures of the refrigeration units, as well as critical operating data and audit trail relating to SATSCAT operational CCP, and these components will have to be replaced and overhauled. With advancement in data analytics and predictive maintenance, there will be an opportunity for improvements to be implemented.

The project also calls for a new refrigeration machine (Compressor, Condenser, control and monitoring and its peripherals) to support a new Spiral Blast chiller, to be installed on-site by others, and a new cold-room to support operational requirements.

SATS CATERING PTE LTD ("SATSCAT" OR "Owner") is planning to engage the vendor to upgrade/enhance the existing REFRIGERATION 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
3. Replacement of existing units of air-cooled condensers with new units
4. Installation of a new cold room in casserole assembly area to support operational requirements (Option)
5. Installation of a new compressor/condenser to support and run a new spiral blast chiller
6. Installation, testing and commissioning of the scope of work for item 2. – 5.
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 1year warranty to the commissioned system
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.

Site show round is scheduled on **13th May 2022 from 1000 hours to 1700 hours**. The meeting place will be in Singapore Inflight Catering Centre 1 Main Lobby, 20 Airport Boulevard Singapore 819659

For request, please email the following information of the attendees for the site show-round by **1400 hours on 9th May 2022**

- Name as in NRIC/ FIN
- Last 4 characters of NRIC/ FIN no.
- Requested timing for site show-round

2. EVALUATION CRITERIA

The proposals will be evaluated based on the following factors (including but not limited):

- Overall value; i.e. cost versus benefit to SATSCAT
- Point-by-point responses to the Scope of Work
- Completeness of solution
- Completeness of tender submission
- Ease of integration with existing system
- Technical Expertise
- Prior Experience
- Timeline and schedule
- Value added services (Energy Conservation, Process Re-Engineering, reduced running cost etc)

The evaluation process may include telephone calls to your referees (clients) to verify claims made by your company.

The shortlisted candidates may be asked to present their Tender Submission on-site at SATS premises. SATS will provide the necessary facilities for the presentation but all other expenses incurred by the Vendors in making the presentations will be borne by Vendors.

3. PRICING

3.1 PRICING SUMMARY

Supply, installation & commissioning of the following items including all the accessories (otherwise stated as described in “Technical Specification”). All additional separate tables must be stamped and signed formally. For software items, the required run-time licences and development licences must be stated separately but clearly.

The contractor must submit a fixed fee proposal. Items illustrated in the itemised pricing table are not exhaustive. The contractor shall provide a detailed price breakdown including those that has already been listed in the pricing table, with unit prices.

SATSCAT places high importance to running cost and energy conservation. If for any systems or equipment there are solutions that reduces the running cost (including utilities) even if the initial cost is higher, please quote as an option.

Options proposed by the vendor shall be quoted separately.

All prices should be quoted in Singapore Dollars (SGD)

**The total contract sum is _____
(No Exceptions to Specifications) excl. GST**

**Options as proposed by vendor, purchase price is _____
(No Exceptions to Specifications) excl. GST**

3.2 ITEMISED PRICING TABLE

Item	Description	Qty	Unit Price (S\$)	Total Price (S\$)	Remarks
1	Dismantling and disposing of existing Equipment				
2	Supply and installation:				
i					
ii					
iii					
iv					
v					
vi					
vii					
viii					
ix					
x					
xi					
3	Other Proposed Equipment and accessories (Please specify):				
i					
ii					
iii					
4	Design & Engineering:				
i	Engineering (Drawings, Documentation, approval etc) which include Exploded-view assembly drawings with component OEM brand & part numbers and Electrical System: wiring diagram & schematics with cable connector OEM brand & part numbers.				
ii	Quality Control Plan: <i>Critical-To-Quality</i> tree of the entire system.				
iii	Project Management & Coordination				
iv	Testing and commissioning				
5	Training				
6	Warranty (1 Year)				
7	Maintenance Services:				
i	Year 1				
ii	Year 2				
iii	Year 3				
8	Monitoring System complete with cabling and software with computer located in Technical Office				

3.3 ITEMISED PRICING TABLE

Please complete the Matrix briefly (URLs are not acceptable). Additional information and its respective relationship in the overall system's **Critical-To-Quality** tree (CTQ tree) can be given as an attachment and / or in the relevant parts of your tender proposal.

Optional items :

Item	Description	Qty	Unit Price (S\$)	Total Price (S\$)	Remarks
1					
2					
3					

All prices as quoted to be in Singapore Dollars

3.4 SPARE PART ITEMISED PRICE LIST

Please complete the Matrix briefly (URLs are not acceptable). Additional information can be given as an attachment and / or in the relevant parts of your tender proposal. While this itemised price list for spares and ad hoc corrective maintenance (CM) works will not be exhaustive, it should endeavour to cover more than 70% of the value of such spend annually.

Item	Description	Unit Price (S\$)	UOM	Country of Origin	Maximum Lead Time	Projected lifespan (months)
1						
2						
3						

All prices as quoted to be in Singapore Dollars

3.5 Quality Documentation Controls

Please provide your preliminary draft project management, material/work flow charts articulated in ISO9001:2015 clause 7.3 & 7.5 and your proposed draft Procedures for Release as very briefly described in ISO9001:2015 clause 6.3 & 8.5.2 & 8.6 for our records.

4. VENDOR MATRIX

Please complete the Matrix briefly (URLs are not acceptable). Additional information can be given as an attachment and / or in the relevant parts of your tender proposal.

Category/Section	Description
Corporate Information	
Company's Name and Address	
Year of Incorporation	
Parent Company Name and Address (if any)	
Mission and Direction	
Core Competencies / Business	
Revenue for the 3 most current year-end periods	
Net Profit for the 3 most current year-end periods	
Technology / Business Partner	
Contact Person's Name, Job Title, email address, mobile & DID contact no., fax no.	
Experience	
Project Experience with Refrigeration System for Food Manufacturing/Catering <ul style="list-style-type: none"> - number of years - state the projects title & customer reference (a brief description can be given as attachment) 	
Product Features	
Estimated Market Share (Singapore)	
Resources	
Number of Staff in Singapore <ul style="list-style-type: none"> - Total - Technical (Consultant, Engineer, etc) - Maintenance Support 	
Project Management	
Development Methodology Adopted	
Development Model (on-site/off-shore/ hybrid)	
CMM, ISO or equivalent Certification	

5. PROJECT SCHEDULE

The following schedule gives the overview guideline on the project tasks and the fixed milestone dates. Vendor to submit project schedule base on the guidelines. These dates shall be detailed by major installation stages, sub-packages and areas in the building. Additional information can be given as an attachment and / or in the relevant parts of your tender proposal.

<u>SN.</u>	<u>Task</u>	<u>Timeline</u>
A.	Preliminary Design Submission (Scale 1:100) including Building and Utilities Requirements	<i>3 Weeks</i>
	Preliminary Equipment Details and Design Specification Submission	
	Review Meeting	
B.	Approval of Final Equipment Design Specification Submission	<i>1 Week</i>
	Commence Fabrication/Construction	<i>16 Weeks</i>
C.	Delivery and Installation of Equipment	<i>6 Weeks</i>
	Permanent Power turn on	<i>1 Week</i>
	Testing and Commissioning	
D.	Handover*	
.	Staff Training	<i>1 Week</i>
E.	Start of Full Production	
	Start - up support / Warranty Servicing	
F.	Final Acceptance Test	
G.	Warranty Period (1 year plus time from Start of Full Operation to Final Acceptance)	

6. FUNCTIONAL DIAGRAM AND DESIGN WRITE-UP

Vendor to submit functional diagram, and design write-up. Please refer to Technical Specification for design requirements and details.

7. SPECIFICATION EXCEPTION

UPGRADE/ENHANCEMENT OF THE REFRIGERATION SYSTEM FOR SATS INFLIGHT CATERING CENTRE 1

SPECIFICATION EXCEPTION

Should SATS Catering Pte Ltd (“SATSCAT”) permit us to make exceptions to the Specifications, we agree to reduce our fixed sum price. Each exception to the Specification and its associated price reduction is listed below (and on the attached sheets, if any). We agree that SATSCAT has the option of permitting us one or more of those exceptions listed and that all other provisions of the Specifications will be complied with.

[The Contractor shall indicate the net effective cost decrease to the total tender value. Price reduction shall be “installed” prices, where applicable, as such covering F.O.B. costs and all additional and overhead costs, such as shipping, installation, control systems, project management et.]

SPECIFICATION DOCUMENT PRICE

CHANGE	CHANGE		
<u>PAGE & PARA</u>	<u>FROM</u>	<u>TO</u>	<u>DOLLARS (\$\$)</u>

SATSCAT shall not be responsible to entertain/accept any exception/deviation from what is specified in this tender document.

All other request and specifications stated herewith/except those exceptions above) shall deemed to be accepted by Contractor and will be executed/implemented upon signing the contract.

8. CONTRACTOR - OWNER AGREEMENT

Upon SATSCAT evaluation and selection of the Tender which best meets its interest, the successfully tenderer(s) will execute a Contract Agreement, a specimen copy of which is presented on the following pages.

CONTRACT AGREEMENT

THIS AGREEMENT, is made the _____ day of _____ 2022 between **SATS CATERING PTE LTD** (“SATSCAT”) having its registered office at 20 Airport Boulevard, Singapore Changi Airport, Singapore 819659, of one part and _____ (“the Contractor”) having a place of business at _____, of the other part.

WHEREBY IT IS AGREED AS FOLLOWS: -

1. CONTRACT PRICE

The Contractor shall design, transport, construct, erect, install, inspect, commission and deliver certain equipment and certain equipment improvements (“the Work”) as further defined herein, for the price of Singapore Dollars _____ (S\$_____) (“the Contract Price”). The breakdown of the Contract Price is presented in **Annex A** of this document and Summary Totals attached hereto and made a part hereof.

2. DEFINITIONS

Whenever the words, forms or phrases defined herein, or pronouns used in their place occur in these Specifications, in the Contract or in any other document or instrument herein contemplated, the intent and meaning shall be interpreted as follows:

Interface Drawings: Those plans and drawings designating the provisions made in the facility for accepting, supporting, anchoring, supplying power to, accessing and clearing the Contractor’s equipment, and groupings.

Tenderer: Any person, persons, partnership, company, firm, association or corporation acting directly or through a duly authorised representative submitting a proposal for the Work contemplated.

Buyer: Owner.

Calendar Day: Any day including Saturday, Sunday and gazetted public holidays.

Conditional Acceptance: Signifies acceptance by SATSCAT in writing of installed operating groupings conditional upon additional prescribed work endorsed in the Certificate of Conditional Acceptance being accomplished by the Contractor on such-groupings within a specified period, during which Owner may elect to put the equipment into operation.

Contract: The written agreement covering the performance of the Work. The Contract includes the Contract Agreement, Specifications, Plans, and any supplemental changes or agreement pertaining to the Work or - materials thereof, and attachments and exhibits to the foregoing.

Contract Documents: The list of documents identified by and incorporated into the Contract.

Contract Sum: means the total sum payable for the Project in accordance with clause 10; synonymous with *Contract Price*.

Contract Time: The period of time allotted in the Contract for the completion of the Work.

Contractor: The person, persons, partnership, company firm, association or corporation entering into Contract for the execution of the Work, acting directly or through a duly authorised representative; synonymous with *Seller, Vendor, Manufacturer, Cooking Equipment Supplier*.

Critical Path: That sequence network schedule which has the least slack time. The Critical Path determines the duration of the Work.

Employer: Owner.

Engineer/Consultant: SATSCAT for acceptance of Work, certification of compliance with plans and specifications unless otherwise specified by SATSCAT from time to time.

Equipment: Includes all machinery together with the tools, apparatus and supplies for the construction, upkeep, and maintenance of the Work until unconditionally accepted by SATSCAT.

Final Acceptance or Certificate of Acceptance: The formal issuance of a Certificate of Acceptance by Owner signifying its acceptance of the installed operating system, equipment or grouping, unconditionally, relieving the Contractor of all responsibilities except those that pertain to the warranty conditions, and manufacturing defects.

Inspector: An authorised representative of the Engineer/Consultant or SATSCAT assigned to make the inspections of the Work, which has been or is being performed including materials furnished by the Contractor.

Letter of Award: A letter to the successful tenderer stating that his Tender has been accepted and that, in accordance with the terms and conditions, he is to execute the Contract and furnish satisfactory Insurance.

Materials: Include all materials, equipment, supplies, parts, and hardware incorporated or to be incorporated into the Work.

Notice to Proceed: A written notice to the Contractor of the date on which he is to begin the Work and the starting date for calculating the duration of the Work based on project schedule.

Owner: SATS Catering Pte Ltd (SATSCAT). Owner is synonymous with Buyer or Employer.

Plans: All the drawings initiated and issued by SATSCAT including any supplementary drawing or addenda as may be issued through the Engineer in order to clarify the drawings, or exact reproductions thereof, which show the location, character, dimensions, and details of the Work, or for the purpose of showing changes in the Work hereinafter authorised in accordance with the Plans which forms an integral part of the Contract.

Progress Plan: The Contractor-prepared schedule showing planned and actual progress by items by the Work, also called Status Report.

Special Provisions: The specific provisions setting forth conditions or requirements peculiar to the specific contract work within a Project involved, supplementing and modifying the General Provisions

and taking precedence over any conditions or requirements of the General Provisions with which they are in conflict.

Specifications: The Procurement Specifications, General Specifications, and the Item Specifications and Addenda thereto. Specification drawings are also part of the Specifications.

Structures: The buildings, facilities, roads, bridges, paved area, ramps, culverts, including headwalls and endwalls, drainage construction such as storm sewers, gutters, catch basins, drop inlets, manholes, retaining walls, lighting structures, system element support structures, control offices, and other construction, which may be encountered on the Work Site.

Site: An area provided to the Contractor to work, store materials and/or equipment, and perform other activities associated with performing the Work.

Tender: The written statement or statements duly filed with SATSCAT or the person, persons, partnership, company, firm, association, or corporation proposing to do the Work contemplated, including the approved form on which the formal Tender for the Work is to be prepared; synonymous with proposal, or bid, or quote.

Warranty Period: Defects Liability Period (DLP).

Work: All work including the furnishing of designs, labour, materials, tools, equipment, and incidentals to be performed by the Contractor under the terms of the Contract.

Working Time: The period of time allotted in the Contract for the completion of the Work. Unless otherwise stated, whenever in these Specifications or upon the Plans, the words “declared”, “directed”, “required”, “permitted”, “ordered”, “designated”, “prescribed”, or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of SATSCAT is intended; and similarly, the words “approved”, “acceptable”, “satisfactory”, or words of like import shall mean approved by, or acceptable to, or satisfactory to SATSCAT.

3. THE WORK

The Work shall be performed by the Contractor as an independent Contractor and shall consist of furnishing all designs, labour, tools, scaffolding, hoist, mobile cranes, power appliances machinery and materials necessary for the construction, manufacture, transportation, installation, inspection, commissioning and delivery of the completed Work in accordance with the Plans, Specifications, and any other documents approved and adopted by SATSCAT, and which Plans, Specifications, and documents are set forth in the **Annexes** attached hereto and made a part hereof.

4. COMMENCEMENT OF WORK

The Contractor shall commence the Work immediately upon receipt of the Notice to Proceed by SATSCAT. The Notice to Proceed is the written notice to the Contractor of the date on which he is to begin the Work and the starting date for calculating the duration of the Work.

5. COMPLETION OF WORK

The Contractor shall prosecute the Work with reasonable diligence after the commencement thereof and shall fully complete and finish the same for final acceptance inspection and testing by SATSCAT as

stated in the Project schedule set forth in **Annex B**. The Contractor shall upon receipt of the notice to commence work from SATSCAT, proceed to layout the Final Design of the Equipment.

6. DELAY OF COMPLETION

SATSCAT shall be the sole judge as to whether or not the Work has been completed within the time allotted, which shall include the original project schedule attached to this Contract and any extension, in writing, granted by SATSCAT. For delay in commencing the individual tasks beyond the dates fixed in the project schedule or such extended completion date as granted by SATSCAT where liquidated damages are imposed, SATSCAT shall recover and the Contractor shall pay liquidated damages of:

- a) one percent (1%) of the first Singapore dollars fifty thousand (S\$50,000) of the contract price, per day or part of a day of delay in delivery, installation or commissioning;
- b) one half percent (½%) of the next Singapore dollars two hundred thousand (S\$200,000) of the remaining amount in respect of the contract price, per day or part of a day of delay in delivery, installation or commissioning; and
- c) one quarter percent (¼%) of the remaining amount in respect of the contract price or Singapore dollars one hundred (S\$100), per day or part of a day of delay in delivery, installation or commissioning, whichever is the higher;

stated in Clause 1 hereof per day for each calendar day that the Work remains uncompleted, subject to a maximum of ten percent (10%) of the Contract Sum. Nothing in the aforesaid clause shall in any way affect the liabilities of the Contractor for performance under this Contract.

7. STEP IN RIGHTS

SATSCAT reserves the right to appoint an alternative vendor to provide any Services in the event that the Vendor is unable to perform any of its obligations under this Agreement, such inability to be determined by SATSCAT at its sole discretion. Such appointment and step-in Services shall be completed within a reasonable period as reasonably determined by SATSCAT. The Vendor shall reimburse SATSCAT for the additional costs of engaging an alternative vendor. Such right shall be without prejudice to any of SATSCAT's rights or remedies under this Agreement or at law.

8. GOVERNING LAW

The laws of the Republic of Singapore shall govern the validity and interpretation of this Agreement and the legal relationship of the Parties to it.

9. EQUIPMENT

The Contractor shall design, fabricate, manufacture, configure, deliver and install for SATSCAT, and place in working order, the equipment ("Equipment") under the supply scope awarded to the contractor for the upgrading/enhancement of the Refrigeration System for SATS In-flight Catering Centre 1 (SICC1) in Singapore. The Equipment shall be installed in order of priority, such priority to be mutually agreed upon.

10. CONTRACT SUM AND PAYMENTS

10.1 Subject to any changes agreed to in writing by the Parties, the Contract Sum for the Project shall be set out in applicable Schedules/Annexes (Contract Sum), exclusive of any GST thereon chargeable

10.2 The Contractor agrees that the Contract Sum, and any other charges quoted in this Agreement, shall not be increased except in accordance with clause 18.

10.3 The Contract Sum (together with GST thereon) shall be paid by SATSCAT in accordance with schedule of payment set out in clause 11, after receipt of invoice from the Vendor. Each invoice for the relevant part of the Contract Sum or the charges, as the case may be, shall be issued to SATSCAT after the corresponding relevant stage of the Project or the Services has been duly completed and accepted by SATSCAT in accordance with this agreement, specifying the amount payable by SATSCAT and attaching evidence of acceptance of deliverables by SATSCAT. SATSCAT shall pay all undisputed charges within sixty (60) days of receipt of an invoice

10.4 The parties shall use their best endeavours to resolve such disputes or differences in relation to the disputed charges in accordance with the dispute resolution process/procedure as contained in clause 30.

10.5 Unless otherwise specified, all invoices will be billed in Singapore dollars and all payments required to be made under this Agreement shall be made in Singapore dollars.

10.6 Unless otherwise specified herein or agreed, all permits, licences, royalties and fees whatsoever claimable by or payable to any person, firm or corporation or government or in connection with intellectual property used or required to be used in connection with the Vendor's obligations under this Agreement are deemed to be included in the Contract Sum, and shall be for the account of the Vendor and shall not be charged to SATSCAT.

10.7 Unless otherwise expressly provided, all amounts stated in this Agreement expressed to be exclusive of any GST arising in respect of any supply made hereunder shall on the issue of a valid tax invoice in respect of the same be paid to the Party making such supply by the Party to whom it is made in addition to any other consideration payable. Save for the foregoing, all other Taxes shall be borne by the Vendor, including without limitation any withholding tax payable as a result of this Agreement. SATSCAT shall pay to the Vendor all amounts due under this Agreement net of any withholding tax, and shall be permitted and entitled, if required in compliance with applicable laws or regulations, to withhold or deduct from the amounts payable to the Vendor under this Agreement such taxes, withholdings and/or deductions.

11. SCHEDULE OF PAYMENTS

For the supply of the work, the Contractor shall submit invoices together with the required Billing Report and Progress Log, as follows; expressed as a percentage of the Contract price of the Work:

- 5% - Upon issue of Letter of Award/Notice to Proceed and receipt of the Performance Bond
- 15% - Upon confirmation and approval of equipment and design.
- 50% - Upon proof of completion of Equipment delivery
- 10% - Upon Final Acceptance of the Equipment
- 15% - Upon resolution of all outstanding works / rectification and contractual matters

5% - Upon satisfactory completion of the Warranty Period, twelve (12) months from the date of Final Acceptance of the Work

The percentage stated above shall be calculated on the basis of the Contract Price per Clause 1. SATSCAT shall pay all such invoices within sixty (60) days of the date of receipt of the Contractor's invoices.

12. PROJECT SCHEDULE

12.1 Within fifteen (15) days following the date of commencement of the Work, the Contractor shall furnish to SATSCAT a detailed Project Schedule for SATSCAT's approval. SATSCAT may extend the Project Schedule up to a maximum period of three (3) months with at least fifteen (15) days' prior written notice to amend the completion date accordingly. This shall be at no additional cost to the Contract Price.

12.2 The Contractor shall provide SATSCAT with monthly project Status Reports and in a regular 'Progress Log' stating progress in comparison with scheduled project tasks.

13. FORCE MAJEURE

13.1 Neither Party shall be liable to the other for any delay in performing or any failure to perform, its obligations under this Agreement where such delay or failure is caused by Acts of God, public enemy, war, revolution, civil commotion, blockage or embargo, tornadoes, epidemics, quarantines, freight embargoes and acts of government ("Force Majeure Event").

13.2 The Party claiming the Force Majeure Event will promptly notify the other in writing within seven (7) days on becoming aware of the occurrence of the Force Majeure Event, giving reasons for the delay or stoppage (and the likely duration).

13.3 The Party affected by the Force Majeure Event shall for the duration of such event be relieved of its obligations as is affected by such event and the period of performance of this Agreement by the affected Party shall be extended by a period equal to the period of delay or stoppage. As regards such delay or stoppage:

13.3.1 any costs arising from the delay or stoppage will be borne by the Party incurring those costs;

13.3.2 either Party may, if the delay or stoppage continues for more than sixty (60) continuous days, terminate this Agreement with immediate effect on giving written notice to the other and neither Party will be liable to the other for such termination; and

13.3.3 The Party affected by a Force Majeure Event shall make all reasonable efforts to remedy the conditions causing the suspension or failure of full performance hereunder and to resume fulfilment of all its obligations hereunder.

14 SERVICE STANDARDS

14.1 At all times, the Vendor shall perform the Services so as to meet or exceed the Service Levels as contained in **Annex C** (Service Level Agreement) and shall comply at all times with the requirements of the Service Levels.

14.2 The Vendor acknowledges that the non-performance of those Services may have immediate impact on SATSCAT by way of increase expenses.

14.3 Without limiting any other right which SATSCAT has under this Agreement, failure to achieve a Service Level shall result in a Service Level Credit pursuant to **Annex C** (Service Level Agreement).

14.4 The Vendor shall perform the Services so as to meet or exceed the higher of the following:

14.4.1 the best industry and professional standards and practices;

14.4.2 the Service Levels

14.5 Without in any way limiting any other obligation as set out in this Agreement, the Parties agree to the concept of continuous improvement to the Services.

14.6 In the event the Vendor fails to meet the Service Levels as contained in Annex C (Service Level Agreement), SATSCAT shall be entitled to the payment of Service Level Credits in the circumstances contemplated in Annex C (Service Level Agreement).

15. WARRANTY/WARRANTY SERVICING

15.1 The Contractor **HEREBY WARRANTS** that the work manufactured and/or supplied shall be free from defective parts and labour for a period of not less than twelve (12) calendar months from the date of commencement of warranty as specified in the Certificate of Acceptances issued by SATSCAT. The Contractor also **HEREBY WARRANTS** that the work manufactured and/or supplied have no design flaws or defects for a period of not less than five (5) years from such date of commencement of warranty.

15.2 Any fault due to material, workmanship or structural faults or design flaws or defects which may be observed during the relevant warranty period specified in Clause 15.1 shall be made good by the Contractor at its own expense which shall include the cost of labour and replacement of parts. The Contractor shall provide its Singapore-based service representative to supervise warranty labour work. All parts repaired and/or replaced during the relevant warranty period specified in Clause 15.1 shall be warranted for an additional year from the date of such repair and/or replacement and be subject to approval by SATSCAT. In the event that any single part is repaired and/or replaced within the twelve (12) month warranty period specified in Clause 15.1 more than twice, that part shall be considered to be a defective design and the warranty period of five (5) years specified in Clause 15.1 shall be applied.

15.3 For the purpose of making good any fault, the Contractor shall proceed with reasonable despatch to carry out repairs and remedial work, and minimise the down-time or non-availability of the work manufacture and/or supplied. The Contractor shall have appropriate personnel, familiar with the equipment, available for on-call warranty servicing seven (7) days per week, twenty-four (24) hours per day. The Contractor shall commence remedial action according to **Annex C** (Service Level Agreement) from receipt of notice from SATSCAT requiring such action to be taken. The Contractor shall supply all necessary tools and manuals for servicing of the equipment.

15.4 The Certificate of Acceptances shall be issued by SATSCAT within two (2) weeks from the date of commissioning of the Work. "The date of commissioning of the Work" means the date on which the Work is commissioned by the Contractor's local engineer on site and are found functionally operational and acceptable by SATSCAT.

15.5 The Vendor agrees to provide preventive maintenance services, upon the request of SATSCAT, in relation to the Work at the agreed charges set out in **Annex A** (Pricing Table) for a period of twelve

(12) months immediately following the expiry of the Warranty Period and containing an option to extend the term of such services thereafter for further successive periods of twenty four (24) months upon the expiry of the Warranty Period, in accordance with but not limited to the service levels set out in **Annex C** (Service Level Agreement). The Vendor agrees to execute a formal Preventive Maintenance Agreement with SATSCAT setting out, inter alia, the abovementioned terms before the expiry of the Warranty Period.

15.6 The Vendor shall not be obliged to provide, and SATSCAT shall not be obliged to require, respectively, a maintenance services from the Vendor, nor shall the Parties be obliged to enter into a Maintenance Agreement, if this Agreement shall be terminated, for any reason.

16. APPROVALS

16.1 The Contractor shall be responsible for compliance with all regulations and requirements as imposed by the various relevant Government Authorities.

16.2 The Contractor shall secure and maintain all required permits and licences from the various relevant Government Authorities for the commencement, management and completion of the Work to be performed under this Agreement. All fees for required permits and licenses in Singapore shall be borne by the Contractor (including the entire warranty period). The Contractor shall submit its plans and specifications for approval after SATSCAT's endorsement. The Contractor shall make such modifications as required to obtain approvals, at no cost to SATSCAT.

17. GUARANTEE OF SPARE PARTS

17.1 The Contractor shall provide SATSCAT with a list of spare parts/components required for preventive maintenance, and a recommended spare parts/components list (with [MTBF/MTTR](#) data) for corrective maintenance, each to be accompanied by a detailed price list with a price validity of at least two (2) years, and with its attendant details of the component manufacturer's company name and that component manufacturer's native Part Number. The Lists of spare parts/components shall be reviewed annually for updating, completeness and relevance (inventory/usage analysis) together with the regular annual contract review.

17.2 Notwithstanding Clause 17.1, the Contractor guarantees that the spare parts/components necessary for the efficient working of the work manufactured and/or supplied shall be readily available at all times for ten (10) years from the date of issue of the Certificate of Acceptances by SATSCAT.

17.3 The Contractor shall not be relieved of its obligations under the agreement should there be a transfer or change of agency for any reason whatsoever.

17.4 Any parts required for supporting the Service Standard set out in Clause 14 shall be purchased by the Contractor and held by the Designated Company in Singapore.

18. CHANGE ORDERS

18.1 SATSCAT may from time to time change orders in writing to amend any of the Work specifications and the Contractor shall, upon receipt of such order set forth the particular specifications or data involved in the changes therein, and the effect if any, of such changes on the equipment price, engineering costs, installation costs, design, quantity, performance and schedule.

18.2 The Contractor shall provide, on timely basis, all changes proposals corresponding to applicable changes affecting the tendered Equipment in design or further expansion, stating the effect, if any, of

such changes on the Equipment price, engineering costs, installation costs, design, quantity, performance and schedule.

18.3 A change order shall not be binding on either party until executed in writing by both SATSCAT and the Contractor.

19. INSTALLATION REQUIREMENTS

19.1 **MUTUAL COOPERATION** -The Contractor shall actively co-ordinate in a pro-active way the on-site work with all contractors and co-operate to resolve any interference problems arising or envisaged. When such solution require an on-site, immediate decision and will result in field changes to the Equipment or Grouping and/or its installation, where such changes may or may not affect Equipment price, engineering costs and installation costs, SATSCAT shall have a Project Engineer or representative with authority to authorise such changes.

19.2 **PROTECTION OF EQUIPMENT** - The Contractor is fully responsible for ensuring that the Equipment that has been installed or that is going to be installed is sufficiently and properly protected from any potential damages.

19.3 **WORK CONSIDERATIONS** – In view of the fact that SICC2 is a fully operating catering facility, the Contractor, while carrying out the work, or during the movement or staging of the equipment must take into consideration hygiene conditions and requirements.

19.4 **BUILDING MODIFICATIONS** - The Contractor shall accomplish all building interface provisions and alterations required for the proper installation of the Equipment. The cost of any building modification contrary to the Specifications will be borne by the Contractor.

19.5 **SUBCONTRACTORS** - All major subcontractors and their respective qualifications as submitted in the Contractor's tender documents or mutually agreed to by SATSCAT and the Contractor before the award of Contract shall form an attachment to this Contract. Any changes of subcontractors by the Contractor, affecting this attachment, shall be only with the express written approval of SATSCAT. SATSCAT may require a change in subcontractors during the course of the Work, should the original subcontractor be reasonably judged as incompetent, unlawful, uncooperative, or acting in a manner detrimental to the timely, safe and effective completion or quality of work and the Contractor shall comply with the requirement. Employment of any subcontractors by the Contractor or by the Contractor's approved subcontractors, not listed in the said attachment shall not be allowed unless SATSCAT's express written approval is obtained.

19.6 **DEPARTURE FROM THE SITE** - At the expiration or sooner determination of this Agreement, the Contractor shall leave the Site in a clean and tidy condition and shall, at its expense, remove from the Site all tools equipment and any surplus materials supplied by the Contractor under this Agreement. If the Contractor fails to comply with the provisions of this clause, SATSCAT may carry out such work by its employees or other contractors and SATSCAT shall deduct all the costs and expenses of such cleaning, tidying and removal incurred from the progress payment due to the Contractor. Such tools equipment and surplus materials removed as aforesaid shall be stored at the contractor's risk and expense. SATSCAT may sell such tools, equipment and surplus materials, after the expiration of twenty-one (21) days from the date of expiration or sooner determination of this Agreement without being liable for any claims whatsoever by the Contractor. The Contractor shall indemnify SATSCAT against any claims whatsoever in respect of such tools, equipment or surplus materials sold as aforesaid.

19.7 **NON-INTERFERENCE** - During the execution and maintenance of the Work the Contractor shall ensure that its vehicles, including during movements of equipment and materials, and his employees do not at any time interfere with the operations of SATSCAT and other contractors employed by

SATSCAT and the various authorities for the execution of works in and around the Site. The Contractor shall carry out all necessary protection works (to SATSCAT satisfaction) prior to carrying out any installation works.

19.8 SITE SAFETY - The Contractor shall at all times comply with its obligations under the Workplace Safety and Health Act.

20. TRAINING

The Contractor shall provide SATSCAT all the training, training aids and documentation required for SATSCAT's Testing, Operating and Maintaining. The cost of such materials is included in the Contract Price.

21. CONFIDENTIAL INFORMATION

21.1 The Contractor, its assigns, agents and employees shall hold in confidence any and all information disclosed to them by SATSCAT, including technical information included in or on tracings, drawings, field notes, calculations, the Specifications and engineering data. Such information is the property of SATSCAT and shall not be disclosed to any person or persons except for the purpose of execution of the Work, and shall at all times remain the property of SATSCAT and shall be returned to SATSCAT upon completion of the Work.

21.2 The Contractor's obligations hereunder shall survive any termination of the contract. SATSCAT may, without the Contractor's permission, photograph, publish, demonstrate or advertise by any media, SATSCAT's possession of the Refrigeration System as SATSCAT may deem advantageous to SATSCAT's business, including but not limited to, reference to the Refrigeration System Equipment by another name.

22. INTELLECTUAL PROPERTY RIGHTS

22.1 The Contractor shall pay all royalties and settle all claims in respect of patent rights or any other rights for anything supplied or work done under this agreement. The Contractor shall indemnify SATSCAT and its agents against all claims, liabilities, damage, loss, costs and expenses arising out of any breach of this Clause by SATSCAT or any infringement of the intellectual property or other rights of any third party connected with or arising out of the supply, delivery and commissioning of the Work under this agreement.

22.2 The Contractor hereby irrevocably grants to SATSCAT a perpetual license free of charge, to use, reproduce, modify, develop on and sub-licence all software/programming to be developed by the Contractor for SATSCAT under this agreement.

23. CONSEQUENTIAL DAMAGES

Subject to the foregoing provisions of this Agreement from and after the expiration of the warranty period, the Contractor shall not be liable for any consequential damages suffered by SATSCAT resulting from the design, material, workmanship or maintenance of the Refrigeration System which damages are not insured against by the Contractor pursuant to the terms of this Agreement provided, however that the provisions of this Clause shall not apply to consequential damages suffered by SATSCAT, as a result of the Contractor's negligence and/or misconduct in respect of which damages the Contractor shall remain fully liable to SATSCAT.

24. TERMINATION

24.1 Without limiting any other rights of remedies, which it may have, SATSCAT may terminate this Agreement by issuing at least thirty (30) days prior written notice or any part of this Agreement in the event the Contractor:

- (a) fails to comply with any provisions of this Agreement to correct its action and has failed to comply with such provision or provisions, or fails to submit an acceptable plan to correct its action and institute such plan immediately; or
- (b) gives or offers any substantial gift whether by way of money, goods, or otherwise to any employee or family of an employee of SATSCAT, or the Engineer has an unrevealed substantial interest in the Contractor's business of which the Contractor has knowledge; or
- (c) takes or has taken or instituted against it any action or proceeding, whether voluntary or compulsory, having for its object the winding up of the Contractor other than a voluntary winding up by members for the propose of reconstruction or amalgamation, or if a meeting of the Contractor's creditors be called, or if a receiver or official manager be appointed in respect of all or any part of the Contractor's property business or undertaking, or if a distress or execution be threatened or levied on or against all or any part of the Contractor's property, or if the Contractor enters into a composition or other arrangement with its creditor.

In any such event, SATSCAT shall not be liable to the Contractor for any claim by the Contractor for any losses, damages, costs or expenses as a result of such determination and SATSCAT may complete the Work by its employees or by other contractors and the Contractor shall reimburse SATSCAT for any losses and the amount of any additional expenses incurred by SATSCAT.

24.2 Notwithstanding any of the forgoing provisions, SATSCAT may at any time terminate the Agreement by giving the Contractor at least one (1) month's prior notice in writing (without assigning any reason whatsoever for such termination). In such an event, the Contractor will be paid the proportionate amount of the Contract Price which corresponds to the extent of the Work already done as at the date of such termination.

25. TITLE TO PROPERTY

25.1 Title to each item of Equipment and Systems may remain vested in the Contractor until the progress payment thereof is made by SATSCAT in accordance with clause 11 hereof.

25.2 The Contractor and its insurers shall be responsible for all insurable risks, loss or damage to the relevant specified EQUIPMENT and the Contractor shall continue to be responsible for compliance with all specifications until Final Acceptance.

25.3 SATSCAT shall become the sole owner of all works and all documents, drawings, designs, software, models relating to this Agreement, and the sole ownership of the aforesaid shall be vested in SATSCAT from the date of delivery by the Contractor to SATSCAT of the aforesaid, and all such works and materials shall be used by SATSCAT at its own discretion.

26. PERFORMANCE BOND

26.1 The contractor shall no later than seven (7) days from the date of this Agreement, furnish a Performance Bond by way of cash or a banker's guarantee issued by a reputable bank acceptable to SATSCAT on terms prescribed by SATSCAT, equivalent to five percent (5%) of the Contract Sum, valid up to and including the date of expiry of the Warranty Period, failing which SATSCAT will, without further notice, set off and deduct against any payment(s) due to the Contractor, such amounts sufficient to comprise the security deposit, and shall hold the same as the security deposit in cash pursuant to this clause.

26.2 This deposit will be refunded after the expiry of the Warranty Period, if the Vendor fulfils all the terms and conditions and obligations of this Agreement, in Singapore currency by way of a cheque drawn on a bank in Singapore or return of the banker's guarantee if requested by the Vendor, as the case may be. If the Vendor breaches this Agreement, the Vendor will forfeit part or the whole of this deposit to SATS, the actual amount of forfeiture to be determined by SATSCAT, and the balance thereof, if applicable, shall be refunded to the Vendor. No interest shall be paid on the deposit or upon refund thereof.

27. INDEMNITIES

(The term "Employer" herein means SATSCAT and its related and associated companies)

27.1 The Contractor shall be solely liable for and shall indemnify the Employer against any expenses, liability, loss, claim or proceedings in respect of any personal injury or death of any person or damage whatsoever to any property real or personal in so far as such injury or damage arises out of the Work.

27.2 The indemnities given by the Contractor under Sub-Clause 1 hereof shall not be defeated or reduced by reason of any negligence or omission of the Employer or Consultant or Clerk-of-Works in supervising or controlling the Contractor's site operations or methods of working or temporary works, or in detecting or preventing or remedying defective work, or in ensuring proper performance of any other obligations of the Contractor.

27.3 Notwithstanding the above, the Contractor shall be liable for and indemnify and hold harmless the Employer, its subsidiaries, associated companies, Directors, officers, servants and agents against all losses, damages, proceedings, expenses, liability, claims (including liability to its own employees and employees of the Employer) and cost (including legal cost) which the Employer may incur or suffer as a result or arising from their services rendered under this Contract.

27.4 The Contractor agrees to maintain at its own cost a comprehensive policy of insurance to adequately cover its entire liability in respect of any act or default for which it may become liable to indemnify the Employer under the terms of this Agreement.

27.5 The remedies contained in this clause are without prejudice to and in addition to any warranties, indemnities, remedies or other rights provided by law, and/or under any other provision of this Agreement for the benefit of the Employer.

28. DAMAGE TO PROPERTY

The Contractor shall be liable for and shall indemnify SATSCAT its servants and agents in respect of any liability, loss, claim or proceedings and for any injury or damage whatsoever arising out of or in the course of or by reason of the execution of the Work to any property, real or personal due to any negligence, omission or default of itself, its servants and agents or of any authorised subcontractor.

29. EQUIPMENT DAMAGED OR LOST IN TRANSIT

The Contractor shall repair or replace without any cost to SATSCAT the Equipment damaged or lost in transit provided SATSCAT shall give to the Contractor written notification of such damage or loss within a reasonable time.

30. DISPUTE RESOLUTION

30.1 In the event of any dispute of difference arising out of or in connection to this Agreement or the breach thereof including any question regarding its existence, validity or termination, the Parties shall use their best endeavours to settle such disputes or differences through amicable discussions. To this effect,

they shall consult and negotiate with each other, in good faith and understanding of their mutual interests, to reach an amicable and equitable solution satisfactory to both Parties.

30.2 If the Parties are unable to reach any solution within a period of thirty (30) days after the commencement of the negotiation then the disputes or differences shall be referred to and finally resolved by arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre ("SATSC Rules") for the time being in force which rules are deemed to be incorporated by reference into this clause. All arbitration proceedings shall be in the English language.

30.3 The commencement of any arbitration proceedings under this clause shall in no way affect the continual performance of the obligations of the Parties under this Agreement, except insofar as such obligations relate to the subject matter of such proceedings.

31. EMPLOYMENT OF ILLEGAL WORKERS/ WORKERS

31.1 The Contractor will not employ any illegal foreign workers in the supply, delivery and commissioning of the Work. If any illegal foreign worker is employed by the Contractor, SATSCAT may take such measures, including without limitation the termination of this agreement, withholding of payments due to the Contractor, forfeiture of the Security Deposit or debarment of the Contractor from future tenders/quotations of SATSCAT or its related or associated corporations, as SATSCAT may deem appropriate in the circumstances.

31.2 SATSCAT may conduct random on-site checks on the Contractor's employees and workers at the Contractor's premises to verify that the Contractor has complied with this Clause, and the Contractor will permit SATSCAT to enter its premises for this purpose and cooperate with and render all reasonable assistance to SATSCAT in connection with such verification. Notwithstanding the foregoing and any actual checks done by SATSCAT, the Contractor will continue to be fully liable to SATSCAT and its related or associated corporations for any lack of compliance with this Clause.

31.3 The Contractor will, before the commencement of this agreement, provide SATSCAT with a list of the names and particulars (including address, nationality, passport number and work permit number) of all the workers and employees of the Contractor who will be engaged in the performance of this agreement, including without limitation in connection with the delivery of the Work to SATSCAT in accordance with this agreement. The Contractor will submit an updated and duly-certified information sheet on its workers (such information to be given to SATSCAT in whatever means or form as required by SATSCAT), including a copy of each of the following items, to SATSCAT weekly for its inspection and record:

- (a) Personal particulars (including name, address, nationality, passport number and work permit number) of its workers in the execution of any part of the works performed for SATSCAT;
- (b) The work permits of new workers;
- (c) The passports, entry permits or re-entry permits of these workers showing that they have lawfully entered and remained in Singapore;
- (d) Personal particulars (including name, identity card, passport and/or foreign identification numbers, and nationality) of all its workers currently or previously (as appropriate) employed by the Contractor to execute works on the premises of SATSCAT and
 - (i) are no longer in the Contractor's employ;

- (ii) are no longer working on the premises of SATSCAT;
- (iii) have tendered their resignation to the Contractor or whose employment has been terminated by the Contractor; or
- (iv) have been absent without official leave from the Contractor.

(e) Full personal particulars of all its workers who have or had been issued with airport passes, or any other identification passes (particulars to include the airport and other identification pass numbers and expiry dates of such passes), and an update on the return of such passes to the issuing authorities.

31.4 The Contractor shall submit health declaration forms (as prescribed by SATSCAT in its absolute discretion) for each of its workers on a regular basis or as often as shall be determined by SATSCAT.

32. INTERPRETATION

Article and paragraph headings used in this Agreement are for reference and shall not in any way affect the interpretation of this Agreement.

33. NOTICES

All notices permitted or required to be given hereunder shall be in writing and either delivered in person or sent by telegram, or certified registered air mail, postage prepaid, addressed to the respective designated personnel of SATSCAT and the Contractor set out as follows:

SATSCAT

To:
 Name of Company: SATS Catering Pte Ltd
 Address: 20 Airport Boulevard
 Singapore Changi Airport
 Singapore 819659
 Dept: Technical & Systems Support

Contractor

Name of Company: _____

Address: _____

Attention: _____

Title: _____

34. GENERAL

34.1 Set-Off: Notwithstanding any other provision to the contrary contained in this agreement, SATSCAT will be entitled, at any time and from time to time, without notice to the Contractor, to set off and deduct from any and all amounts payable by SATSCAT to the Contractor (whether under this agreement or any other agreement), any and all sums that may be due and owing by the Contractor to SATSCAT, whether under this agreement or otherwise (including without limitation, any liquidated damages payable under any of the clauses of this agreement, or any amounts previously overpaid to the Contractor).

34.2 Waiver: No waiver of any rights arising under this Agreement shall be effective unless in writing and signed by the Party against whom the waiver is to be enforced. No waiver of any breach of this Agreement shall operate as a waiver of any subsequent breach of the same or any other provision. The failure of either Party to enforce at any time of the provisions of this Agreement shall in no way be interpreted as a waiver of such provision.

34.3 Severability: If any term or provision of this Agreement shall be held to be invalid, illegal or unenforceable, the remaining terms and provisions of this Agreement not affected by such invalidity illegality or unenforceability shall remain in force and effect and such invalid, illegal or unenforceable term or provision shall be deemed not to be part of this Agreement.

34.4 Assignment/Novation: This Agreement is personal to the Vendor and shall not be assigned or novated either as to the whole or any part thereof, without the prior written consent of SATSCAT. SATSCAT may, by notification to the Vendor, assign or novate the whole or any part of this Agreement to any party. The Vendor shall be deemed to have consented to such assignment or novation, which shall be effective on the date that SATSCAT notifies the Vendor.

34.5 Entire Agreement/Amendments: This Agreement including all annexes and attachments hereto contains the entire agreement between the Parties with respect to the Project and supersedes all previous agreements and understandings between the Parties relating to the subject matter herein. No amendments or changes to this Agreement shall be effective unless made in writing and signed by authorized representatives of the Parties.

34.6 Priority of Document: Whenever there is a conflict between the terms of this Agreement and the Specifications or Exhibits or Attachments or Schedules attached hereto or referred to herein, the terms of this Agreement shall prevail.

34.7 No Partnership or Joint Venture: Nothing in this Agreement shall create or be deemed to create a partnership or joint venture between the Parties and unless otherwise expressly provided in this Agreement no Party shall enter into or have authority to enter into any engagement or make any representation or warranty on behalf or pledge the credit of or otherwise bind or oblige the other Party thereto. The Parties enter into this Agreement as independent contractors.

34.8 Exclusion of Third Party Rights: A person not party to this Agreement (other than a permitted assignee to whom rights have been assigned in accordance with the provisions of this Agreement) shall have no right under any legislation for the enforcement of contractual terms by a third party (whether in force now or to be enacted in the future and as the same may be modified, adapted or supplemented from time to time) to enforce any term of this Agreement.

34.9 Time is of the essence: Time is of the essence of this Agreement but no failure or delay on the part of SATS in exercising any right, power, privilege or remedy shall impair any such right, power, privilege or remedy or be construed as a waiver thereof or an acquiescence to such default.

34.10 Urgent Remedy

Without limiting its other rights or remedies, SATSCAT may by 2 days' written notice require the Contractor to remedy a breach by the Contractor of any of these Conditions or contract clauses. The Contractor shall continue to perform all obligations under this contract and shall:

- a) devote all necessary resources to the resolution or mitigation of the breach for immediate resolution, promptly meet with SATSCAT to agree on a strategy (the "Urgent Remedy Plan"), which if approved by SATSCAT, shall be implemented by the Contractor immediately;
- b) and reporting on a daily basis until resolution to SATSCAT satisfaction.
- c) The Contractor shall at the same time draft a "Prevention Plan" to prevent a recurrence, after which upon SATSCAT approval the "Prevention Plan" shall be included into the supplied scope, at no cost to SATS.
- d) A failure by the Contractor to comply with these obligations constitutes a material breach of this Order, without prejudice to SATSCAT other rights and remedies.

34.11 Regular (Bi-annual/annual) contract performance Reviews

There shall be regular performance reviews. The Contractor shall prepare the required performance reports in the format required by SATSCAT. The Contractor shall also identify, categorize and report all service delays or operational issues or supply disruptions or warranty claims, Billing Report and any other matters which may have been raised by SATSCAT representatives/supervisors, in a formal report to SATSCAT. The Contractor's performance report shall be subject to review by SATSCAT for acceptance.

ANNEX A
CONTRACT SUM (PRICING TABLE)

(* To be attached with the final price schedule)

ANNEX B
PROJECT SCHEDULE

(* To be attached with the final project schedule)

ANNEX C
SERVICE LEVELS FOR WARRANTY PERIOD AND
PREVENTIVE MAINTENANCE SERVICES

1. WARRANTY / MAINTENANCE SUPPORT

1.1 Help Desk Telephone Service

For the duration of warranty period and application maintenance services (post warranty period), Vendor will operate from service centre located in Singapore and a helpline will be provided to SATS Catering staff. The helpline will be active for 24 hours x 7 days.

1.2 Process & Procedures

SATS Catering will provide first line support to Catering users and will carry out preliminary investigations to ascertain the nature of the problem, and having identified the problem, make a decision to call the vendor helpline to activate the vendor support with Severity Level made known to the vendor as well.

Vendors will need to comply with SATSCAT incident management flow (Refer to section 4).

2. PROBLEM RESOLUTION CRITERIA

2.1 Problem Response Time

The time taken by the maintenance team to validate, confirm and acknowledge that it is an application problem.

2.2 Problem Resolution Time

The time taken by the application maintenance team to fix the problem, produce a workaround or resolution plan.

3. SERVICE LEVEL

3.1. Severity & Service Levels Table

Severity Level	Definition of Severity Level	Response time		Resolution time
		Office hours	After office hours	
1	Affects 50% or more of the entire System. No acceptable workaround is available leading to significant business impact.	2 hour	2 hour	Within 2 hours
2	Affects up to 50% of the entire System. No acceptable workaround is available leading to substantial business impact.	2 hour	2 hour	Within 1 working day
3	Error in the system functionality, which does not interrupt the operational flow due to availability of an acceptable workaround.	4 hours	Next working day	Within 3 working days
4	Non-critical error or a cosmetic change, which disrupts neither the functional nor operational flow.	1 working day	Next working day	Within 10 working days

3.2 Service Credits for Non-compliance of Service Levels

In the event of a Service Level default (where the Vendor is unable to meet the Service Level stipulated in Section 3.1 above), the Vendor will provide Service Credits (SCUs) per incident per day or part of a day that the work manufactured and/or supplied are not available as a consequence of the non-compliance. SCUs are payable in the following month in which the Service Level default has occurred i.e. if Service Level default occurred in Jan 2022, the SCUs are to be paid in Feb 2022. Should the Vendor’s non-compliance persist, SATSCAT reserves the right to exercise other remedies under Contract and/or General Law.

Severity Levels	Service Credits for Non-Compliance of Service Levels
Severity level 1	4
Severity level 2	3
Severity level 3	2
Severity level 4	1

The value of the SCUs will be calculated using the following formula:

$$\text{Value per SCU} = \frac{\text{At Risk Amount} \times \text{Allocation factor} \times \text{Number of Day}}{\text{Maximum SCU}}$$

$$\text{At Risk Amount} = 3\% \text{ of Contract Price}/100$$

$$\text{Allocation Factor} = \text{Service Credits for Non-Compliance of Service Levels (Depending on severity levels)}$$

$$\text{Maximum SCU} = 4$$

The Vendor acknowledges and agrees that the Service Level Credits and the Vendor’s obligations relating thereto shall not in any way limit SATSCAT’s rights and remedies at law or under this Annex or the Agreement nor shall the Service Level Credits be deemed or construed to be liquidated damages or a sole and exclusive remedy or in derogation of any other rights and remedies SATSCAT has hereunder or under the Agreement.

4. INCIDENT MANAGEMENT

Resolver Acceptance

Roles and Responsibilities

1. Allocate initial resource to assess the Incident
2. Assess the assigned Incident Severity and feedback to SATSCAT if there is any discrepancy.

Incident Resolution

Roles and Responsibilities

1. Ascertain whether there is a workaround
2. If so, apply the workaround and update status and Severity if necessary
3. If no workaround available:-
 - a. Ascertain whether more resources are required.
If required, then assign additional resources
 - b. Commence work to resolve problem

Incident Closure

Roles & responsibilities

1. Contacts SATSCAT appointed personnel(s) to discuss any outstanding issues regarding the Incident.
2. Resolves incident and updates with details of incident resolution with stated date/time of completion. (Field Service Report)
3. SATSCAT is the only entity that can close an Incident. A closure request can be from:
 - an intermittent problem where the problem has "gone away"
 - Resolver who has resolved the Incident to the satisfactory of SATSCAT

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands the day and year first above written.

Signed by:

Name: _____]

Designation : _____]

for and on behalf of]

SATS CATERING PTE LTD]

_____]

in the presence of :]

(Signature & Company Stamp)

(Signature of Witness)

(Name)

Signed by:

Name: _____]

Designation: _____]

for and on behalf of]

_____]

_____]

in the presence of:]

(Signature & Company Stamp)

(Signature)

(Name)

9. BANKER’S GUARANTEE (Specimen)

SATS Catering Pte Ltd
SATS Inflight Catering Centre 1
20 Airport Boulevard
Singapore 819659

Dear Sir/Madam,

BANKER’S GUARANTEE NO: FOR S\$_____
AGREEMENT FOR THE UPGRADE/ENHANCEMENT OF R AT SATS INFLIGHT CATERING
CENTRE ONE (1) FOR THE PERIOD _____ TO _____

In consideration of your awarding the above Agreement to Messrs [_____] of [_____] (“the Contractor”) and agreeing to accept this guarantee in lieu of cash security deposit required under the above agreement, we(name of bank)..... of.....(address)....., **HEREBY BIND OURSELVES AND UNCONDITIONALLY GUARANTEE PAYMENT TO YOU** on demand the sum of Singapore dollars [_____] only (S\$_____) (“the guaranteed sum”) for the due and complete performance by the Contractor in accordance with the above agreement.

2 The guaranteed sum or any part thereof demanded by you shall immediately become due and payable upon receipt of your written demand/notification stating the sum claimed and that the Contractor is in default under the above agreement. Such demand/notification shall be conclusive evidence that the sum claimed is due and payable to you. We shall not be entitled or obliged to enquire into the circumstances of such a demand/notification.

3 This guarantee shall be valid from _____ to _____ and is conditional on a claim in writing being made hereunder no later than two (2) months after the expiry date of this guarantee.

4 You may make more than one claim on this guarantee so long as the claims are made no later than two (2) months after the expiry date of this guarantee and the total claims do not exceed the guaranteed sum.

Dated this day of 2009

Yours faithfully
NAME OF BANK

.....
AUTHORISED SIGNATORIES



10. SATS Ops Tech Reference Architecture Checklist

Instructions:

- 1) Please read through the following guidelines and fill in the Compliance table as part of the tender submission.
- 2) Any deviation please state clearly the reasons for doing so and propose a workaround solution.

Reference Architecture Checklist

Category	S/N	Guideline	Comply (Y/N) - Remarks
System Criticality and Information Classification	1.01	Data stored to be in compliant with PDPA if applicable (e.g. Personal identifiable data such as NRIC/FIN/Passport/Photo/Video/Name/Contact/Address etc)	
Category	S/N	Guideline	Comply (Y/N) - Remarks
		SATS OT Policy and Standards Compliance	
System Architecture	1.02	System shall adopt Secure-by-Design principles during the design phase of the system Refer to Appendix A1 and A2	
	1.03	The contractor shall provide additional system architecture diagram based on Industrial Control System (ICS) Purdue model. Refer to Appendix A1 and A2	

Category	S/N	Guideline	Comply (Y/N) - Remarks
	1.04	<p>Vendor Agreements must ensure that service providers are aware of their security responsibilities and comply SATS Information Security Policy and SATS OT Security Standards (SATS-OTS-002), including operation, use, disclosure and protection of SATS operational systems.</p> <p>  01_SATS_Information_Security_Policy_v2.5. SATS_OT Security Standard v1.0.pdf</p>	
Category	S/N	Guideline	Comply (Y/N) - Remarks
Security Management		Security Hardening	
	1.05	Security configuration documents shall be in place for the OT system's operating systems, application, network equipment and security appliance to ensure their OT systems are effectively hardened.	
	1.06	Reference shall be taken from industrial security benchmarks such as CIS/IEC/NIST/ISA/ISO to establish the security hardening guidelines to harden OT systems before connecting to an operational network.	
		Minimum security hardening baseline to be complied to as below	
	1.07	least access privilege and separation of duties enforced and disable default accounts	
1.08	password complexities and policies enforced		

1.09	removal of unnecessary services and applications enforced, e.g. removal of compilers, project development tools and vendor support applications	
1.10	closure of unused network port enforced	
1.11	protection against malware enforced	
1.12	timely update of software and security patches that are approved by system vendors enforced	
1.13	All login attempts to access the system shall be logged and retained for 12 months	
	Development Environment	
1.14	Development environment must be segregated from the production environment. (e.g. accounts, rights, network, data that is classified as confidential and/or secret shall not be used for testing purposes, if require have to be sanitized before usage)	
1.15	Source code reviews should be conducted where possible throughout the system development phase for quality assurance. (e.g. NA for COTS, only applicable to custom SDLC)	
	Patch Requirement	
1.16	Procedures to ensure all devices of the OT System, including new devices prior to their commissioning, are applied with the latest applicable security and functional patches must be established, documented and updated once every 12 months .	

Category	S/N	Guideline	Comply (Y/N) - Remarks
Security Management	1.17	Where information is available, patches installed shall be verified against the product principal on its compatibility prior to application and tested extensively on development environment by vendor and ensure such activity will not nullify warranty or support.	
	1.18	In the event where critical security patches or updates cannot be applied in a timely manner, a risk assessment to ascertain the risk level along with appropriate mitigations is to be performed and approval to be sought from the OT System Owner.	
		Anti-Malware Updates	
	1.10	Anti-malware tools, and the malware definitions and signatures shall be regularly kept up to date with roll back plan in place.	
		Audit Logs	
	1.20	Audit logging shall be enabled for all SATS OT system components, such as operating system, applications, network equipment, security appliances and field devices (HMIs, PLCs, RTUs, etc.), where the functionality exists.	
	1.21	Audit logs must include sufficient information to establish what events have occurred and who, when and what has caused them. Information logged should contain the following: a. User IDs; b. Date and time of log on and log off; c. Host identity;	

		d. Successful and failed attempts to access systems, data or applications; e. Files and networks accessed; and f. Use of system utilities.	
	1.22	System administrator and system operator activities shall be logged.	
	1.23	The audit log shall not reveal any sensitive authentication information such as security keys or passwords.	
	1.24	Procedures for the management of audit logs and their subsequent retention period must be established, documented and updated every 12 months .	
	1.25	Access privilege to audit logs shall be restricted to prevent unauthorized addition, modification and deletion.	

Category	S/N	Guideline	Comply (Y/N) - Remarks
Security Management	1.26	The system custodian shall monitor the storage volume and consider additional capacity or off-loading to alternate storage locations, in case the storage volume exceeds the threshold.	
	1.27	The internal system clocks of all audit log generating systems within the OT environment shall be synchronized with a universal time source (Network Time Protocol) to ensure date and time synchronicity across all systems.	
	1.28	All audit logs generated shall be attached with a timestamp, with a minimum granularity of one second.	
		System Security	
	1.29	When use of external storage media on OT System is necessary, approval from OT System Owner/Custodian is required and verification that the said media is free of malicious software through out-of-band method is the responsibility of the user.	
	1.30	All files introduced into OT system's environment via removable storage media shall be scanned on a designated computer installed with the up-to-date anti-malware tool.	
Physical Security		Physical Access	
		To ensure strict control of physical access to the systems (OT assets), data and SATS managed facilities, the following must be implemented at the very least:	

	1.31	Restrict physical access to OT assets and cable rooms to only authorised personnel.	
	1.32	Implement physical surveillance systems (e.g. CCTV cameras, intruder alarms, etc.), where applicable.	
	1.33	Maintain records (date, time and purpose) of personnel's physical access to a restricted area and/or OT asset.	
	1.34	Ensure that vendors, contractors or third parties obtain prior approval and are escorted at all times when on-premise.	
	1.35	All SATS' OT system assets shall be physically secured to prevent unauthorised access and/or removal.	
	1.36	When not in use, mobile computing devices used specifically for OT system functions shall be kept in areas with physical access control and can only be accessed by authorised personnel.	

Category	S/N	Guideline	Comply (Y/N) - Remarks
Access Control		Access Control	
	1.37	Access control and system software security features shall be implemented on systems to protect their data and resources.	
	1.38	Access to SATS OT systems must be authenticated and limited within the logical boundary.	
	1.39	Physical and logical access to data and resources must be controlled and restricted on a need-to and least privilege basis required to perform the necessary function.	
	1.40	Access to production system by external support personnel shall be restricted only for the support window on a per request basis.	
	1.41	Procedures governing access authorisation and de-authorisation must be established, documented, updated and reviewed regularly.	
	1.42	Where the functionality exists, a banner (e.g. Message of the day) shall be displayed before logon to inform users that usage of the system constitutes consent to abide by SATS OT security policies and standards.	
	1.43	The logon process must provide minimal information about the system. Proper controls, like limiting the number of invalid login attempts, must be implemented to minimise the opportunity of unauthorised access.	
	1.44	Where access control implementation is not possible (i.e. HMI and control panels, etc.), functionality and access readily available shall be controlled and limited for required purposes.	

		Remote Access Control	
1.45		Remote access to OT systems shall be prohibited unless approved by system owner for operational and/or maintenance purposes.	
1.46		System owner shall ensure relevant security assessments and sufficient safeguards are in place, to ensure the remote access is secured and controlled on a need-to basis.	
1.47		Procedures to approve and manage remote access to OT systems shall minimally include and document the following: a. Purpose and rationale for the remote access request; b. Accessibility window of remote access to be granted; c. Individuals granted remote access; and d. Source of remote access request.	

Category	S/N	Guideline	Comply (Y/N) - Remarks
Access Control		Account Management	
	1.48	Procedures for the management of all account(s) must be established, documented and updated once every 12 months . These procedures shall include: <ul style="list-style-type: none"> a. Request for account(s) b. Creation of account(s) c. Deletion of account(s) d. Issuance of account(s) e. Suspension of account(s) f. Modification of account(s) 	
	1.49	Review of all accounts and access privileges must be conducted once every 12 months or upon any changes to user status such as: <ul style="list-style-type: none"> a. termination / end of contract; b. resignation / retirement; c. extended leave; d. secondment / internal transfer; and/or e. change of role/job function; 	
1.50	Where a shared account is required and approved, alternate procedures must be in place. Shared account(s) shall be restricted to authorised personnel only and must be assigned with a primary owner to maintain ownership and accountability.		

Category	S/N	Guideline	Comply (Y/N) - Remarks
Access Control	1.51	Use of service account(s) shall be limited only to non-interactive login and access at all times.	
		Privilege Account Management	
	1.52	Privileged accounts must not be accessible beyond the OT System network boundary. Where access to privileged accounts from beyond the OT system network boundary is necessary, such as for maintenance purposes, OT system owner is required to ensure sufficient procedures and safeguards are in place to ensure the access is secured and controlled on a need-to basis. a. Secured end-to-end encryption b. Access granted only when necessary c. Network link must be disabled when no longer required	
		Password Management	
	1.53	Password policy for all accounts comply to 8.2.5 Password Management from SATS-OTS-002 for privilege, non-privilege, service accounts.	
	Emergency Login		
1.54	Emergency account comply to 8.2.6 Emergency Login from SATS-OTS-002.		

Network Security		Network Architecture	
		Network documentation shall include but not limited to:	
	1.55	a. Network devices communication lines and interfaces	
	1.56	b. Network logical and physical drawings	
	1.57	c. Definitions of the network security zones, including their boundaries, and information flow to/from other security zones	
	1.58	d. Approved network protocols/services	
	1.59	e. Routing tables	
1.60	f. Access control lists		

Category	S/N	Guideline	Comply (Y/N) - Remarks
Network Security	1.61	g. Firewall ruleset	
	1.62	Perimeter firewall shall be implemented at the OT network boundary to ensure separation with external interfaces	
	1.63	OT network shall, at a minimum, be logically separated from the corporate network (enterprise zone) on physically separate network devices	
Asset Lifecycle Management		Asset Inventory	
	1.64	System owner shall identify, classify and maintain a complete and up-to-date inventory of all SATS' OT assets and systems reviewed on a 12 months basis in accordance to <u>SATS OT Asset and Account Inventory TMPL.</u>	
		Asset Serviceability	
	1.65	All products and services acquisitions shall carry warranty supports from principal vendors.	
	1.66	Necessary reasonable measures should be taken to: a. acquire necessary supports for patching security issues on SATS' OT systems and networks; b. secure legacy support for end-of-life products and platforms; c. assure continued supply of authorised intellectual properties ("IP") and parts for SATS' OT systems and networks; d. prevent counterfeit products from being	

		introduced into SATS' OT systems and networks; and e. Security products should be certified.	
	1.67	Equipment shall be inspected, tested and maintained in accordance with the manufacturer's specifications and recommended service intervals (e.g. Quarterly, Bi-Annual, Annual).	
	1.68	All service work (e.g. Service Report for parts replacement, servicing work) must be documented and retained for at least 12 months .	
	1.69	Equipment must not be removed or relocated by means of physical security from designated area unless authorised. Any authorised movement must be documented and tracked in accordance to <u>SATS OT Asset and Account Inventory TMPL.</u>	
Category	S/N	Guideline	
Asset Lifecycle Management	1.70	An obsolescence management plan for SATS' OT system must be established. a. formulated by System Custodian; b. approved by System Owner; c. acted by System Custodian; and d. tracked by System Custodian.	
		Asset Removal and Disposal	
	1.71	System owner shall ensure that backup and data erasure are performed on the SATS OT assets and/or system prior to release from SATS' control (e.g. disposal, repair at third party facility), or release for reuse.	

	1.72	All OT system asset disposal records shall be retained for at least 24 months .	
System Resiliency		Resiliency for Critical Components	
	1.73	Critical components of OT assets should be protected by installing uninterrupted electrical power supply (“UPS”) systems, generators, fire detection, alarm and suppression system, and temperature and humidity control systems, where applicable.	
		Backup and Recovery	
	1.74	Backup and restoration plans procedures (e.g. playbook) for SATS' OT systems shall be established to support business continuity objectives.	
	1.75	An inventory of all backup media must be maintained and checked once every 12 months to ensure that it is accounted for.	
	1.76	Backups shall be tested to verify media reliability and information integrity.	

Category	S/N	Guideline	Comply (Y/N) - Remarks
System Manageability		Measurements in place based on system criticality assessment	
	1.77	Critical: <ul style="list-style-type: none">• High availability for critical component that compromises safety must be more than 99.9% with necessary support level (e.g. SLA:24x7x2)• Business continuity/Disaster recovery for critical component• Configuration monitoring and anomaly detection integrated to SOC• Vulnerability assessment and penetration test• Maintenance contract• Firewalls• Security hardening• Asset inventory and monitoring	
	1.78	Essential: <ul style="list-style-type: none">• Configuration monitoring and anomaly detection• Vulnerability assessment and penetration test• Maintenance contract• Firewalls• Security hardening• Asset inventory and monitoring	
1.79	Standard: <ul style="list-style-type: none">• Vulnerability assessment and penetration test• Maintenance contract		

		<ul style="list-style-type: none">• Firewalls (N.A. if OT system is standalone)• Security hardening• Asset inventory and monitoring	
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Category	S/N	Guideline	Comply (Y/N) - Remarks
System Manageability		Application Design and Testing	
	1.80	Application services or interfaces shall be identified and documented. All unused application services or interfaces shall be disabled.	
	1.81	Applications shall provide audit trails in accordance with all applicable information security policies, standards and guidelines.	
	1.82	User acceptance criteria for applications shall be clearly defined, agreed and documented.	
		Network Management	
	1.83	Physical access to network equipment, communication systems must be controlled and restricted to designated personnel only.	
	1.84	Only authorized users and devices shall be allowed to connect to the SATS OT network. All devices must meet the requirements as established in the configuration document before connecting to SATS' OT network.	
	1.85	The use of personal or unapproved network communication equipment, such as tethering, modems or wireless network connectivity, that simultaneously connect SATS' OT network to another network, is prohibited.	
1.86	Access to network equipment and communication systems must be through a secure channel and interface with authentication and logging.		

1.87	Configurations and settings for the entire network infrastructure shall be documented and kept current.	
1.88	Prohibit use of network sniffing tool unless authorized by SATS Technology.	
	Firewall Management	
1.89	All firewalls and firewall rules must be documented, checked and verified periodically.	
1.90	Firewalls shall be fail-safe. In the event of a hardware failure or reboot, the default rule must deny all traffic through the perimeter firewall.	
1.91	Upon recovery of hardware failure or reboot, system administrators must immediately review and enable all firewall rules.	
1.92	Firewalls must deny all packets and connections unless the traffic type and connections have been explicitly permitted.	

Category	S/N	Guideline	Comply (Y/N) - Remarks
System Manageability	1.93	Firewall logs, including all accepted, rejected and dropped packets, and audit trails must be activated and archived.	
		Wireless Network Management	
	1.94	Where wireless network access is required as part of OT System Infrastructure, a dedicated and separated wireless network is to be provisioned and shall be restricted and limited to devices within the infrastructure.	
	1.95	All wireless devices shall be first authenticated through proven secure authentication method before being allowed on the network.	
	1.96	Wireless network standards that contain weak/vulnerable security algorithm (e.g. WEP, WPA) must be avoided. The most secure mode shall be adopted whenever possible.	
		Change Management	
	1.97	Prior to any change in the state of security of SATS OT environment, a formal change management process shall be established and adhered to. The process shall minimally include performing risk and impact assessment on the security implications of the change.	
	1.98	A full system backup must be completed and to recover from any unforeseen events prior to deployment of any change for the purpose of rollback.	
	1.99	All change request documents and validation records shall be retained for at least 12 months .	

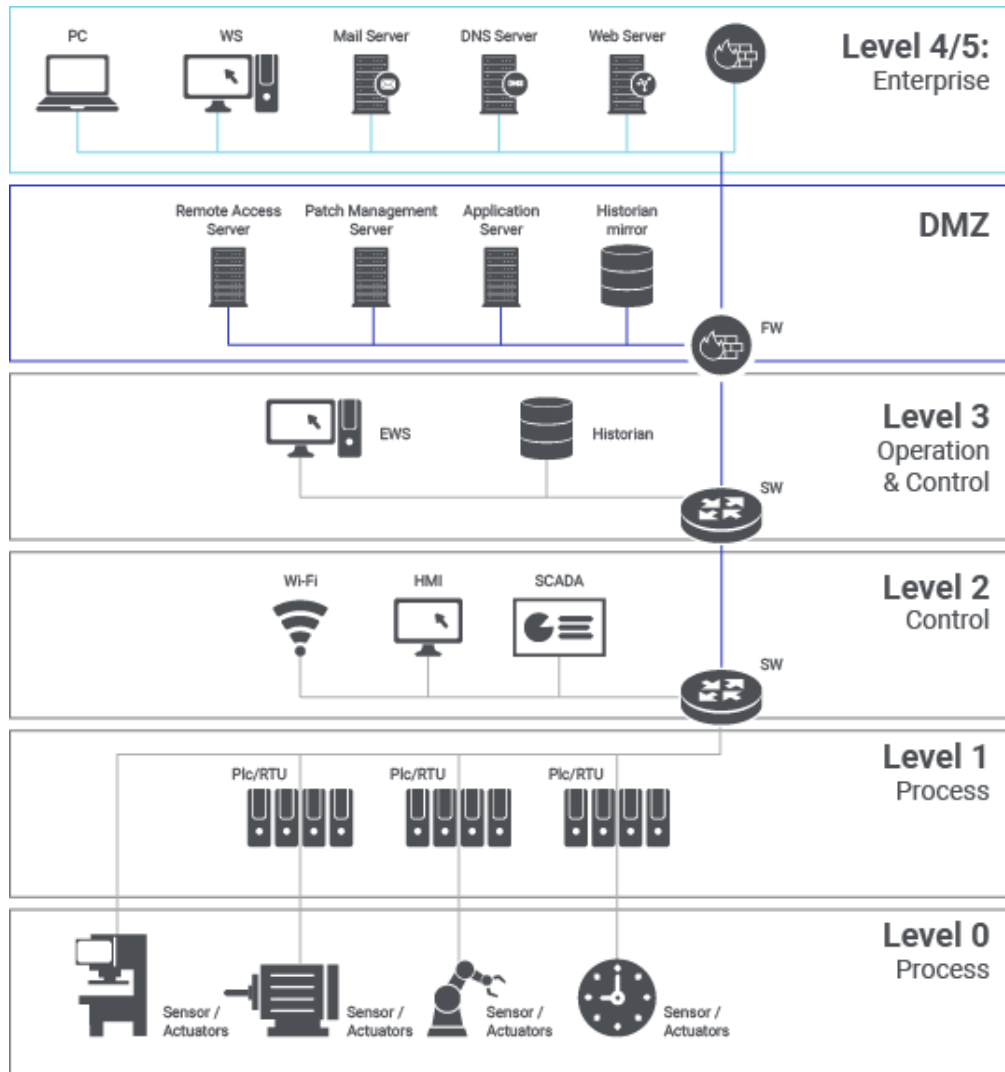
		Incident Management	
	1.100	Business continuity plan in place.	
	1.101	Incident response plan in place.	

Appendix A1 – Architecture Diagram (Production)

The architecture diagram(s) should incorporate the following details:

- 1) Details of connectivity between server-to-server or component-to-component and the protocol (e.g. RS232, RS485, Ethernet, IP, DNP3, S7, Modbus TCP, Modbus Serial, Profinet, Lora, Zigbee, Z-Wave, BLE, WIFI) and port numbers (e.g. Only applicable to TCP/UDP protocols, TCP 135, TCP 502, TCP 20000, UDP 123) that are used for the communication labelled with purdue model level reference (Level 0-Level 5) including any internet connectivity if applicable.
- 2) A separate firewall rules table can be provided to detail the ports connectivity between server-to-server or component-to-component, if it is difficult to show all these in the architecture diagram(s).
- 3) Details of versioning of operating system (e.g. Windows 2019 Std; Red Hat Enterprise 8.10), firmware (e.g. Firmware version V4.5 for S7-1200; Invgy_fw_uefi_tce134n-2.61_anyos_32-64.uxz), software application (e.g. SIMATIC IPC packages) together with end of life and end of support details.
- 4) Details of any integrations with other systems (e.g. integration with application X for retrieval of baggage data via flat file transfer or API calls).

Example (To be replaced by system's own Production system architecture diagram):



Appendix A2 – Architecture Diagram and Server Sizing Requirements (UAT)

The architecture diagram(s) should incorporate the following details:

- 1) Details of connectivity between server-to-server or component-to-component and the protocol (e.g. RS232, RS485, Ethernet, IP, DNP3, S7, Modbus TCP, Modbus Serial, Profinet, Lora, Zigbee, Z-Wave, BLE, WIFI) and port numbers (e.g. Only applicable to TCP/UDP protocols, TCP 135, TCP 502, TCP 20000, UDP 123) that are used for the communication labelled with purdue model level reference (Level 0-Level 5) including any internet connectivity if applicable.
- 2) A separate firewall rules table can be provided to detail the ports connectivity between server-to-server or component-to-component, if it is difficult to show all these in the architecture diagram(s).
- 3) Details of versioning of operating system (e.g. Windows 2019 Std; Red Hat Enterprise 8.10), firmware (e.g. Firmware version V4.5 for S7-1200; Invgy_fw_uefi_tce134n-2.61_anyos_32-64.uxz), software application (e.g. SIMATIC IPC packages) together with end of life and end of support details.
- 4) Details of any integrations with other systems (e.g. integration with application X for retrieval of baggage data via flat file transfer or API calls).

Example (To be replaced by system's own UAT system architecture diagram):

