(Note: this document was issued to all candidates prior to the examination as pre-reading material)

The Heng Heng Gas Supplies and Superior Software Systems Contract Case Study

1. Introduction

Heng Heng Gas Supplies Pte Ltd (HHGS) is a major gas supplier based in Tuas. It provides various specialist gas services to Tuas and the Jurong Island Company. In order to do this it has an extensive gas pipeline network and supply and storage facilities. The operations of these facilities are in turn monitored and managed by a set of software applications. Other software applications also support the financial, human resource (HR) and maintenance functions of the company. Until 2010, these IT applications and services were provided by the HHGS IT department, but during that year the HHGS operations director attended a seminar on outsourcing. In this seminar he learnt that outsourcing IT services was the way to go. He then instructed the head of the IT department to begin outsourcing a major portion of the IT application services currently managed by the IT department. It was decided by the operations director and the head of the IT department that the IT services to be outsourced should include:

- (1) Monitor and control the supply of gas to the various clients of HHGS and ensure the required quantities were delivered.
- (2) Generate warnings in the event of gas supply failure.
- (3) Analyze the current status of the gas distribution network and assess current performance.
- (4) Perform diagnostics on performance and anticipate future supply problems.
- (5) Monitor the volume of gas supplied to clients and determine the price of these supplies and automatically invoice these clients.
- (6) Plan maintenance to be performed on the gas pipeline network.
- (7) Numerous other support tasks.

These services were performed by a set of COTS packages that had been purchased and operated by the IT department. It was hoped that that a professional IT company would be able to provide these services more cost-effectively and efficiently

2. Pipeline Network Monitoring and Diagnostics

An important IT application service is the analysis of current performance of the gas distribution network and the automated causal analysis that is performed on current or incipient problems in the pipelines leading to either planning preventative maintenance on defective pipeline components or replacing defective equipment. Currently this has been performed by the *GREATMASTER* software package:



- This was created, maintained and marketed by a specialist software company, Great
 House Systems Pte Ltd. It has a proved very successful in operation and has many
 users.
- It has been operated by the IT department and end users come from the distribution operations department, the maintenance department and the stores department.
- It has also been used by *Superior Software Systems Pte Ltd (SSS)* on several of their projects.

3. Contract Negotiation and Signing

After sourcing for suitable companies and going through an extensive vendor selection process, SSS were selected to be the service provider. After negotiations, the contract was agreed and signed on 1 December 2010. The contract duration was three years and contract value was \$1,300,000. The two signees were:

- Mr. Howard Lee (Director, Operations of HHGS)
- Mr. Chew Seng Kiat (Managing Director, SSS)

The project would formally begin on 1 January 2011. A high level business description of the services to be provided (a Business Services Requirement) was written by HHGS and incorporated into the contract.

Important sections of the contract are shown below, together with a description of subsequent events.

4. Extracts from the Heng Heng Gas Supplies - Superior Software Systems Contract

4.1 Terms and Conditions

4.1.1 Vendor's Services

a. The Vendor shall provide services that that will meet the Business Services Specification as shown in appendix A attached < not attached to this extract>. In particular the following packages/applications shall be provided

.....

(vii) The Vendor shall provide the GREATMASTER software package application that will be provided with a site license and associated help facilities. The package will be regularly updated and maintained, and the Vendor will provide 1st line support for users of this packages

.....

4.1.2 Charges

a. The Customer shall pay the Vendor the agreed contract price in accordance with the payment schedule listed below.



b. The Vendor shall submit an invoice to the Customer and the Customer shall become obliged to make payment within 5 days of receipt of such invoice.

Date	Payment linked to	Payment amount
31/01/11	End of Planning Phase	\$100,000
30/03/11	End of handover phase	\$100,000
30/06/11	End of operation phase 2	\$100,000
30/09/11	End of operation phase 3	\$100,000
30/12/11	End of operation phase 4	\$100,000
	< Remaining dates not relevant to the case>	

- c. In the event of any default in payment as aforesaid, for any reason whatsoever, interest at the rate of 5% per month shall be charged on the amount as stated on the invoice or any part thereof remaining unpaid from the date when payment was due to the date of payment or until the expiration of the notice to terminate this Agreement given by the Vendor in accordance with section 4.1.7 of this Agreement.
- d. Without prejudice to paragraph(c) above and in addition thereto, if any of the invoices are not paid within 20 days of the date thereof including any interest accrued thereon, for any reason whatsoever, then the Vendor may by notice in writing to the Customer suspend the performance of this Agreement until the invoice and all interest accrued thereon are paid in full.
- e. In the event the Customer fails, neglects or refuses for any reason whatsoever to pay the invoice and interest in full within 35 days of the due date, this shall be deemed a material breach of this Agreement and the Vendor shall be entitled at its option to terminate this Agreement in accordance with section 4.1.7 of this Agreement, without prejudice to it's rights or remedies under this agreement and under the general law.

4.1.3 Schedules

a. The Customer and the Vendor agree to perform their respective obligations in accordance with the schedules displayed below

Date	Milestone	
3/1/11	Formal initiation of project and startup meeting	
25/1/11	Vendor submits project plan for Customer approval	
30/1/11	First Progress Meeting	
28/2/11	Second Progress Meeting	
	< remaining dates not relevant to the case study>	

4.1.4 Substitution

The Vendor may not, permanently or temporarily substitute another product or service for a product or service already specified in section 4.1.1 in this contract, where the product or services

- a. Different in nature from, or has a different function to, the Substituted Product;
- b. Supplied or sourced from a different country of origin than the Substituted Product; or
- c. Manufactured by a manufacturer other than the manufacturer of the Substituted Product.

Unless with written prior agreement of the client.

4.1.5 Liaisons

a. The Vendor and Customer hereby agree that the following individuals shall serve as their respective liaisons. The liaisons shall serve as a point of contact by which the parties to this Agreement may communicate. The liaisons listed below shall meet at least once a month in person to discuss any relevant matter that may arise. The Vendor or the Customer may change their respective liaisons listed below provided the written consent of the other party is obtained, such consent not being unreasonably withheld.

i. Customer's Liaison: Mr Peter Koh (Contract Manager, Heng Heng

Gas Supplies IT Service Contract)

ii. Vendor's Liaison: Ms Emily Tan (Project Manager, Superior

Software Systems)

4.1.6 Warranties

- a. The Vendor hereby warrants that he will perform his duties in a skilful, efficient and workmanlike manner.
- b. The Vendor further warrants that by entering into this Agreement the Vendor shall not violate any other Agreement to which Vendor is a party.
- c. The Customer warrants that by entering into this Agreement, the Customer shall not violate any other Agreement to which Customer is a party.

4.1.7 Expiration and Termination

- a. This Agreement shall become effective upon, 1 January 2011 (the "Effective Date") and shall remain in force for a period of three years there from (the "Agreement Term").
- b. If either party materially breaches this Agreement and fails to remedy such breach within 30 days after receiving written notice from the non-breaching party, the non-breaching party may terminate this Agreement upon 20 day's prior written notice.

4.1.8 Confidential Information

a. The Vendor and Customer expressly agree that all information communicated to the Vendor with respect to this Agreement and with respect to the services provided by the Vendor pursuant to this Agreement, including, but without limitation, any



confidential information obtained by the Vendor by reason of its association with the Customer, is confidential. The Vendor shall take all reasonable measures to protect such information. Vendor further agrees that all information, conclusions reports, designs, plans, project evaluations, data, advice, business plans, Customer lists and other documents available to the Vendor pursuant to this Agreement are the confidential and proprietary property of the Customer. Further, it is hereby agreed that this section shall survive the termination of this Agreement.

4.1.9 Notices

a. Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been given to the intended party when copies are delivered personally to the party, or 2 days after a copy has been sent by registered mail addressed to the party at the address set forth below:

i. **Notice address of Vendor:** Superior Software Systems 23, Ang Mo

Kio Street 99, #02-5, Singapore 463226.

ii. Notice address of Customer: Heng Heng Gas Supplies, Iris House,

#01-13, 6 Pioneer Road, Singapore

536712.

b. Either party may change its address as set forth above by a written notice to the other party given in the manner specified in this section.

4.1.10 Governing Law

a. This Agreement shall be deemed to be a contract made in Singapore and shall be subject to, governed by and interpreted in accordance with the laws of the Republic of Singapore.

4.1.11 Dispute Resolution and Arbitration

- a. If a dispute occurs which cannot be resolved using normal working procedures then the liaison shall inform the other parties' liaison in writing of the occurrence, and a meeting will be arranged within 48 hours of the issue of the notice between the two liaisons.
- b. If the dispute is still unresolved then either liaison will give written notices of the inability to resolve the dispute to the senior management committee. This committee will consist of the *Heng Heng Gas Supplies* liaison, the *Superior Software Systems* liaison, the Managing Director of *Superior Software Systems*, (or his nominated representative) and the Operations Director of *Heng Heng Gas Supplies*. This committee will meet within 96 hours of receipt of the notice of inability to resolve dispute.
- c. If this dispute still cannot be resolved by negotiation between the parties, including any disputes concerning the validity of this Agreement, then the dispute shall be resolved by arbitration in accordance with the Arbitration Act of Singapore.



5. Subsequent Events

- a. During contract negotiation, SSS became aware that another company, *Eastern Dawn IT Pte Ltd (EDIT)*, was involved in a takeover bid of *Great House Systems Pte Ltd*. EDIT was a direct competitor of SSS and there was even personal animosity between the managing directors of each company. Despite the uncertainty the contract, was agreed and signed on 1 December 2010.
- b. On 20 December it was publically announced that EDIT had purchased *Great House Systems Pte Ltd*. This company would be run as a subsidiary of EDIT. When he was told of this, the managing director of SSS flew into a rage and said that no longer would his company use any products or services of *Great House Systems Pte Ltd*. Ms Emily Tan, the project manager of the *Heng Heng Gas Supplies Superior Software Systems* contract was told that she must find an alternative to the *GREATMASTER* software package.
- c. In the first month of the contract, Emily worked closely with the IT service engineers allocated to the project and came up with a plan to enhance an existing SSS package (called *XSTANDARD*) that:
 - Would fulfil the major functions of the *GREATMASTER* software package.
 - Could be modified and installed by 30/3/11 (the original date agreed for handover with the client).
 - Would cost an extra \$50,000.
- d. After further discussions with the SSS managing director, it was agreed that this would be communicated to the customer at the first progress meeting. The managing director also said that the client should be asked to agree to pay the extra costs of \$50,000 for the new software as they were being offered *an innovative product*.
- e. The project plan was presented to the customer on 25 January for review. HHGS were generally happy with this plan, as it was quite detailed and accurately identified all the tasks in the project and the resources required.
- f. However, the first progress meeting on 30 January was not a success! When the HHGS contract manager was told that SSS would not be providing or supporting the *GREATMASTER* software package at all he was extremely upset. He explained to the SSS project manager that:
 - One of the reasons that that SSS had been selected was that they had experience with the *GREATMASTER* software, and they were prepared to provide and support it.
 - The end-users in HHGS had been using the *GREATMASTER* software for several years and had built up considerable skills in using it to support operations. Several HHGS maintenance and repair procedures were actually written around the use of the software. The proposed replacement had not yet been developed and may not even have the same capabilities as *GREATMASTER*.



- The cost of learning a new package and re-writing operational procedures would be very large indeed and could not be accepted by HHGS.
- g. When the HHGS contract manager was also asked if his company would pay for the extra \$50,000, he abruptly terminated the meeting and said that the future of the contract would be decided by senior management.
- h. The worried SSS project manager returned to her office and briefed her managing director on the results of the progress meeting. As a result of this the SSS managing director decided to make a telephone call to the operations director of HHGS. However, this made matters worse:
 - The SSS managing director explained that he could not provide *GREATMASTER* service or support as it was now owned by a business rival. Commercial confidentiality issues would prevent SSS from using this package
 - The HHGS operations director stated that he did not believe this. If commercial confidentiality was the issue here, why had SSS agreed to provide and support *GREATMASTER* during the proposal and contract negotiation stage?
 - The SSS managing director said that it had not been a problem pre-contract, as *Great House Systems Pte Ltd* had only been taken over by EDIT after the contract had been signed.
 - Further, the SSS managing director offered to waive the extra \$50,000 costs of using the proposed new *XSTANDARD* software.
 - However, the HHGS operations director replied that the situation was **completely** unsatisfactory, and he believed that SSS had broken the contract. He then terminated the telephone call.
- i. After the phone call, the HHGS operations director summoned the HHGS contract manager to his office and told him to suspend the initial payment of \$100,000 to SSS that was due on 31/01/11. The HHGS operations director would write a letter to SSS telling them that the contract was to be cancelled immediately.
- j. Two days later this letter was received by the SSS managing director and both he and the HHGS operations director are considering their next steps.

