

Question (a)

Details of work done by KCRC during tender assessment, including the report prepared by the technical assessment team after they visited Siemens in Germany in November 1999 before the contract was awarded.

Answers

Pre-qualification

In accordance with KCRC's procurement rules, the tendering of this contract began with a pre-qualification of companies which expressed an interest in bidding for the contract. This exercise was based upon evaluation criteria approved by the KCRC's Corporate Tender Board (CTB). Following pre-qualification, a short list of five companies was approved by the CTB, including Siemens Ltd., for the purpose of inviting tenders.

2. Five sets of tender documents were sent out, and three companies submitted tenders by the closing date of 25 June 1999 after a tender period of three months.

Tender evaluation

Technical and contractual

3. In accordance with the KCRC's procurement rules, the CTB approved the tender evaluation criteria before tenders were invited. The CTB also appointed technical and financial assessment teams to undertake tender evaluation, and a Tender Review Panel (TRP) led by a Senior Director to oversee the evaluation process.

4. In accordance with the CTB-approved evaluation plan, assessments were carried out in parallel but separately by the technical and financial assessment teams. Preliminary reports on the three tenders indicated general conformity with instructions to tenderers and the relevant specifications. Following this, there were exchanges of written questions and answers with the tenderers. These enabled points of clarification to be resolved. During this clarification process, Siemens Ltd. and the second lowest-priced tenderer satisfactorily answered all technical, commercial and financial questions. At

this stage the conformity of the radio system, metropolitan area network (*) and CCTV in respect of these two tenders were still subject to verification by overseas site visits.

5. The third and the highest-priced tenderer, however, declined to withdraw commercial qualifications attached to his tender, and also failed to demonstrate that the fire resistance of his proposed cable for the public address system conformed with KCRC's specifications. Accordingly this tenderer became non-conforming and was not considered further.

6. Upon concluding the technical evaluation, the situation was as follows –

Item	Siemens Ltd.	Next lowest conforming tender
General technical requirements	Pass rating	Good rating
Fibre optic transmission system	Pass rating	Good rating
Telephone system	Good rating subject to detail design development	Pass rating subject to detailed design development
Radio system	Good rating	Good rating
Public address system	Good rating with acceptable design proposal	Good rating with acceptable design proposal
Passenger Information Display system	Pass rating, in-house software platform to be developed	Good rating with the use of standard software tools.
Closed circuit TV-system	Pass rating subject to detailed design development of train and platform interface.	Good rating with acceptable proposal for train and platform interface.
Metropolitan area network	Pass rating	Pass rating
Systems integration and interface management	Good rating with strong in-house pool of resources.	Good rating mainly based on system product suppliers.
Project management approach	Good rating, sound execution plan	Good rating, sound execution plan

(*) Metropolitan Area Network refers to the data communication network serving a number of computer-based railway operating and information systems of West Rail. It is an intermediate version between a Wide Area Network and a Local Area Network.

7. The overall conclusion reached was that the contract could be awarded to either Siemens or the second lowest priced tenderer. Both tenderers demonstrated full conformity with the technical and contractual aspects of the instructions to tenderers and relevant specifications.

8. This conclusion took into account the findings of the KCRC team which visited Siemens and the next lowest priced tenderer in September 1999, to verify critical aspects of the radio system, the metropolitan area network and CCTV system. Details of the visit are annexed.

Financial evaluation

9. The detailed financial examination of the tenders involved the following -

- (a) checking to determine that all relevant information in respect of pricing had been submitted, and that there was full conformity with the tender instructions;
- (b) discounted cash flow calculations to confirm the lowest tender offer in present value terms;
- (c) calculation of hedging costs for tender prices expressed in US dollars and the impact on the total tender price in Hong Kong dollars; and
- (d) financial capability of the tenderers.

10. The results of the financial evaluation confirmed that both Siemens' tender and the second lowest priced conforming tender were fully conforming proposals. Accordingly either tenderer could be awarded the DB-1500 contract. Both tenderers had priced their tenders well below the KCRC's pre-tender estimate, in the case of Siemens at 66% below the estimate and the other at 46% below the estimate.

11. Analysis of the pricing make-up revealed generally lower unit costs from both tenderers, with Siemens pricing down the elements involving the use of its own resources. The KCRC's pre-tender estimate, on the other hand, adopted a general approach, based upon available prices from similar East Rail projects, and airport railway projects.

12. Further details in regard to the comparison with the Corporation's pre-tender estimate are given in the answer to Question (b).

Award of contract

13. On conclusion of the evaluation the CTB endorsed a contract award to Siemens Ltd., a pre-qualified company which had submitted the lowest- priced conforming tender. This was then put to the KCRC Managing Board which awarded the contract on 22 November 1999.

DB-1500**Site Visit Itinerary, Checklist and Findings**

1. Itinerary : The visit took place between 13 September 1999 and 24 September 1999, covering Siemens and the second lowest priced tenderer.

Date	Description of tasks	Tenderer	Location
13 Sept 99	Metropolitan Area Network (MAN) equipment demonstration	Siemens & other tenderer	Sydney, Australia
14 Sept 99	Client site visit Q&A on MAN	Siemens & other tenderer	Sydney, Australia
15 Sept 99	Visit to Radio System Software Subcontractor Visit to Tenderer's home office Platform-to-train CCTV equipment demonstration	Other tenderer	Singapore
17 Sept 99	Visit to Radio System client site	Other tenderer	USA
20 Sept 99	Radio System presentation Visit to Tenderer's home office	Siemens	Germany
21- 22 Sept 99	Radio System demonstration & factory visit Q&A	Siemens & other tenderer	Italy
24 Sept 99	Platform-to-train CCTV system demonstration	Siemens	UK

Note : Other tenderer is the second lowest conforming tenderer.

2. Checklist : Areas covered by the visiting team were as follows:
- (i) Project management – to meet key people and evaluate the off-shore management approach to the implementation of the project;
 - (ii) Radio System – to evaluate system performance and equipment availability;
 - (iii) CCTV System – to evaluate the system configuration and picture quality of the proposed Platform-to-train CCTV systems; and
 - (iv) MAN – to verify system performance and confirm compliance against the Specification.

3. Findings : In regard to the CCTV System and the metropolitan area network, the tenderers' proposals were confirmed to be acceptable. In regard to the radio systems, a further written question and answer exchange with both tenderers was required.

Subsequently the Tender Review Panel authorised such questions to be sent, and satisfactory answers were received from both tenderers.

Question (b)

Reasons for the substantially lower tender prices quoted by both conforming tenders as compared with the Corporation's own estimate.

Answers

The Corporation's pre-tender estimate took into account the prices of similar railway projects. The pre-tender estimate was conservative, costing the equipment and items of work individually, without making allowance for savings that could arise from the contractor's bulk buying gains or the use of in-house resources. A comparison between the three tender prices and the Corporation's pre-tender estimate is as follows –

Description	Siemens Ltd. (%)	2 nd lowest conforming tender (%)	3 rd lowest but non-conforming tender (%)
Project Management and General Requirement	-28	-5	+280
System Engineering	-78	-61	+55
Fibre Optic Transmission System	-75	-65	-51
Telephone System	-75	-68	+75
Radio System	-65	-37	-43
Public Address System	-52	-43	+44
Passenger Information Display System	-49	-19	-18
CCTV System	-39	-42	-1
Metropolitan Area Network	-67	-24	-40
Trainborne Equipment	-91	-82	-100
Installations and Partial Acceptance Test	-64	+1	+67
System Test and Commissioning	-58	-78	-63
Training and Support	-84	-87	-60
Provisional sums for spares and special tools	-70	-50	-48
Overall	-66	-46	-8

2. The Corporation drew the following conclusions from this comparison -

- (a) Siemens and the second lowest tenderer had both priced well below the Corporation's pre-tender estimate, with Siemens being more aggressive in respect of manpower resources, radio, the passenger information display systems, and the metropolitan area network;
- (b) The third lowest tenderer's pricing spread indicated extreme variations from the Corporation's estimate on a line item comparison, although the total price was close to the Corporation's estimate.

3. In this situation, the Corporation's procurement rules require the evaluation team to exercise particular care. The relevant rule reads -

“In recommending acceptance of a tender to a tender board, Departments should have value for money in mind. They must also bear in mind whether there are any circumstances in which conforming tenders are likely to result in inadequate performance or non-performance. This would arise, for example, in cases where a conforming tender has been priced at an unrealistically low level in relation to other tenders, or to similar recent contracts, or to prevailing market prices for similar goods or construction. Reports to tender boards should highlight these circumstances.”

4. Accordingly, the evaluation team put certain specific questions to Siemens, all of which were designed to probe Siemen's ability to perform and deliver.

5. In particular, questions were asked in respect of the resources for the installation of the systems to establish whether Siemens understood the requirements of the tender. In their response, Siemens provided clarification with substantiation to demonstrate their understanding. Most importantly, they stated their commitment to provide whatever resources were necessary to meet their obligations under the contract. Regarding the other sub-systems, questions were asked to clarify that, in respect of the quantities which seemed to have been understated, Siemens understood the requirements under the tender. In every case, Siemens provided substantiation which was included in a Letter of Clarification.

6. The evaluation team was satisfied that Siemens fully understood what was required of and from them under the contract, and that they could perform and deliver fully in conformity with the Corporation's specifications. In other words, the evaluation team asked Siemens the question: “Can you demonstrate that you can perform and deliver these (under-priced) items within your total tender price ?” Siemens' response was an unequivocal affirmation with substantiation. In all the circumstances, the evaluation team concluded that

Siemens' tender was acceptable notwithstanding its low price, and reported all its findings to the Corporate Tender Board.

Question (c)

Details of the World Trade Organization Agreement on Government Procurement (WTO-GPA) on awarding contracts to the lowest conforming tender.

Answer

The tender for contract DB1500 fell within the jurisdiction of the WTO-GPA.

2. The relevant provisions in the WTO-GPA are to be found in Article XIII, Paragraph 4 of which states-

- (a) *To be considered for award, a tender must, at the time of opening, conform to the essential requirements of the notices or tender documentation and be from a supplier which complies with the conditions for participation. If an entity has received a tender abnormally lower than other tenders submitted, it may enquire with the tenderer to ensure that it can comply with the conditions of participation and be capable of fulfilling the terms of the contract.*
- (b) *Unless in the public interest an entity decides not to issue the contract, the entity shall make the award to the tenderer who has been determined to be fully capable of undertaking the contract and whose tender, whether for domestic products or services, or products or services of other Parties, is either the lowest tender or the tender which in terms of the specific evaluation criteria set forth in the notices or tender documentation is determined to be the most advantageous.*
- (c) *Awards shall be made in accordance with the criteria and essential requirements specified in the tender documentation.*

3. The wording of tender notices and information to tenderers govern what evaluation criteria and essential requirements must be met. Examples of such criteria and requirements are-

- (a) the evaluation criteria shall include the “life-cycle” costs of a particular item being procured. Rolling stock is a pertinent example;

- (b) where financing offers are made in response to tender specifications, the cost of funding shall be evaluated on a net present value basis; and
- (c) in some contracts, the basis of tender evaluation may be a mix of technical and financial scores where, for instance, 70% of the evaluation rating will be based upon a tenderer's technical proposal and 30% will be based upon its financial proposal.

4. The DB-1500 tender did not include any such evaluation criteria or requirements, because the seven sub-systems required equipment built upon tried and proven technology.

5. The above WTO-GPA provisions make it clear that an entity such as KCRC must award a contract to the lowest conforming tenderer, if-

- (a) the tender conforms with the requirements set down in the tender documentation;
- (b) where there is an abnormally low tender compared to other tenders, it is satisfied having made due enquiry that the tenderer can fulfil the terms of the contract; and
- (c) there are no other reasons (which are advantageous to KCRC) for awarding the contract to another tenderer having regard to the requirements set out in the tender documentation.

KCRC, having satisfied itself that Siemens' tender was fully conforming, that the contractor was able to fulfil the terms of the contract and that no other tender offered an advantage having regard to the tender requirements, had no option but to award the contract to Siemens.

6. Had the contract not been awarded to the lowest conforming tenderer, Siemens would have been entitled to claim that the WTO-GPA had been breached by KCRC and consequently may have issued a bid challenge under Article XX. Such challenges if instituted in Hong Kong are heard by a specially convened Bid Challenge Review Panel, which has the power to suspend the procurement process, correct the breach or award compensation.

7. The relevant provisions of Article XX of the WTO-GPA are as follows -

2. *Each Party (i.e. each Government) shall provide non-discriminatory, timely, transparent and effective procedures enabling suppliers to challenge alleged breaches of the Agreement arising in the context of procurements in which they have, or have had, an interest.*

6. *Challenges shall be heard by a court or by an impartial and independent review body with no interest in the outcome of the procurement and the members of which are secure from external influence during the term of appointment. A review body which is not a court shall either be subject to judicial review or shall have procedures which provide that :*

- (a) participants can be heard before an opinion is given or a decision is reached;*
- (b) participants can be represented and accompanied;*
- (c) participants shall have access to all proceedings;*
- (d) proceedings can take place in public;*
- (e) opinions or decisions are given in writing with a statement describing the basis for the opinions or decisions;*
- (f) witnesses can be presented;*
- (g) documents are disclosed to the review body*

7. *Challenge procedures shall provide for :*

- (a) rapid interim measures to correct breaches of the Agreement and to preserve commercial opportunities. Such action may result in suspension of the procurement process. However, procedures may provide that overriding adverse consequences for the interests concerned, including the public interest, may be taken into account in deciding whether such measures should be applied. In such circumstances, just cause for not acting shall be provided in writing;*
- (b) an assessment and a possibility for a decision on the justification of the challenge;*

- (c) *correction of the breach of the Agreement or compensation for the loss or damages suffered, which may be limited to costs for tender preparation or protest.*

Question (d)

Internal or external legal advice obtained by the Corporation that contract DB-1500 would have to be awarded to Siemens i.e. the lowest conforming tender, even though the tender price submitted was much lower than KCRC's estimated cost.

Answer

Siemens' tender was dealt with at KCRC's Corporate Tender Board on 3 November 1999, together with all other tenders for contract DB-1500. The recommendation of the Corporate Tender Board was put to the KCRC's Managing Board on 22 November 1999.

2. The Company Secretary, who is also the Corporation's General Counsel and, as such, the most senior member of the Corporation's in-house legal team, is a member of the Corporate Tender Board.

3. During the course of the Corporate Tender Board's consideration of the recommendation that Siemens be awarded contract DB-1500, the General Counsel advised that in his opinion there were no legal grounds for not awarding the contract to the lowest-priced contractor in accordance with Article XIII of the WTO-GPA and the Corporation's procurement rules. The rationale for his opinion was-

- (a) that Siemens had been pre-qualified for the tender, which meant that it had demonstrated its technical expertise and experience together with its financial capability;
- (b) that the Siemens' tender was fully conforming, having met all the contractual, technical and financial requirements specified in the tender documents; and
- (c) that although the tender price was significantly lower than the Corporation's pre-tender estimate, the evaluation team found that Siemens' tender was conforming, and was both technically sound and would be adequately resourced.

In the opinion of the General Counsel, failure to award the contract to Siemens would, having regard to the prevailing circumstances, have been in breach of Article XIII of the WTO-GPA which would have entitled Siemens to lodge a bid challenge under the Bid Challenge Procedures provided for in Article XX.

4. As the legal issues were obvious, it was not considered necessary at the time the tender was considered to seek external legal advice. However, since the issue has become public KCRC has obtained external legal advice, which concurs with the opinion of KCRC's General Counsel that the Corporation had no choice but to accept Siemens' tender. A copy of that external legal advice is annexed.

Annex to Question (d)

Kowloon-Canton Railway Corporation
KCRC HOUSE
No.9 Lok King Street
Fo Tan
New Territories
Hong Kong

Our Ref : KRO/764748/1
Your Ref :
Direct Tel : 2843 4408
Direct Fax : 2130 5078
Date : 19 February 2002

Attn: Mr Mike Randall

By FAX: 2688 0199

Dear Sirs,

Contract DB-1500 – Article XIII of the World Trade Organization’s Government Procurement Agreement

We refer to our discussions with Mr David Fleming on Thursday 14 and Friday 15 February and to your facsimile message of 18 February 2002 in connection with the above and the Corporation’s decision to award Contract DB-1500 TO Siemens Limited in 1999.

Article XVII 2.(h) of the World Trade Organization’s Government Procurement Agreement (“GPA”) (with which the Corporation is obliged to comply pursuant to an agreement with the Government of the HKSAR) provides that the tender documentation provided to suppliers shall contain, inter alia:

“(h) the criteria for awarding the contract, including any factors other than price that are to be considered in the evaluation of tenders and the cost elements to be included in evaluating tender prices...”.

Section 7 of the Instructions to Tenderers included in the Invitation to Tender Documents issued in respect of Contract DB-1500 sets out details of the Tender Evaluation Process which was to be applied by the Corporation in its evaluation of Tenders submitted in respect of this contract, and contains, inter alia, the following provisions:

- (a) “1.1 Tenders will be evaluated based on the information included in the Tender Submission”;

- (b) “1.2 The selection process will consider technical, commercial, quality management and financial criteria separately. This valuation process may require further clarification to be provided by the Tenderer”;
- (c) “1.3 Technical assessment will be on the basis of compliance with the performance and functional requirements of the Specification and the ability of the Tenderer to meet programme requirements”; and
- (d) “2.2 Technical aspects to be considered are:
 - (a) whether the Tender is technically and contractually compliant;.....
 - (b) the detailed assessment of the technical proposals to be provided in Form T.1 – to meet the performance requirements specified in the Particular Specification.”

Article XIII 4. of the GPA further provides in respect of the award of contracts, as follows:

“4.(a) To be considered for award, a tender must, at the time of opening, conform to the essential requirements of the notices or tender documentation and be from a supplier which complies with the conditions for participation. If an entity has received a tender abnormally lower than other tenders submitted, it may enquire with the tenderer to ensure that it can comply with the conditions of participation and be capable of fulfilling the terms of the contract.

(b) Unless in the public interest an entity decides not to issue the contract, the entity shall make the award to the Tenderer who has been determined to be fully capable of undertaking the contract and whose tender, whether for domestic products or services, or products or services of other Parties, is either the lowest tender or the tender which in terms of the specific evaluation criteria set forth in the notices or tender documentation is determined to be the most advantageous”.

We understand that the Tender Submission made by Siemens Limited was adjudged by the Corporation to be fully compliant with the contractual, technical and financial requirements specified in the Tender Documents issued in respect

of Contract DB-1500. For the purposes of Article XIII 4.(a) of the GPA, the Corporation also made enquiries of Siemes Limited to ensure that it could comply with the conditions of participation and that it was capable of fulfilling the terms of the contract, as a result of Siemens Limited's bid being lower than other tenders submitted. We further understand that the Corporation determined that no other tender was contractually, technically, or financially more advantageous than the tender submitted by Siemens Limited, when considered against the specific tender evaluation criteria referred to in the tender documents.

In view of the provisions of Article XIII 4.(b) of the GPA, and the requirement that the Corporation make the award of Contract DB-150 to the entity submitting either the lowest tender or the tender which was determined to be the most advantageous, we believe that had the Corporation failed to award Contract DB-1500 to Siemens Limited as the entity submitting the lowest compliant tender, (and with no other tender having any advantage over the tender submitted by Siemens Limited), Siemens Limited could have sought to challenge the Corporation's decision to award the contract to another tenderer, under the Bid Challenge Procedure established by the Government of the HKSAR under Article XX of the GPA, on the basis that the Corporation was in breach of the provisions of the GPA.

We trust that this opinion is sufficient for your current purposes but please let us know if there are any other issues which you would like us to deal with.

Yours faithfully,

JOHNSON STOKES & MASTER

Question (e)

The two proposals presented to the KCRC Managing Board in September 2001 for resolving the situation as well as the document which gave the negotiation team the mandate of a maximum payment of \$98 million.

Answer

Background

In preparing the two proposals that were put to the KCRC's Managing Board, KCRC's management team took into account the events that had taken place following the award of the contract, which provides useful background material leading up to the proposals.

2. Three out of seven systems had generally progressed well, namely, the Fibre Optic transmission System (FOTS), the Metropolitan Area Network (MAN) and Telephone System. Four systems had experienced difficulties. They were Radio, Public Address System (PAS), Passenger Information System (PIDS), and CCTV.

3. Late in 2000, the Hong Kong Police elected to change their radio system from an analogue to a digital system. This change necessitated a variation which was issued in early 2001. The implication of this change included immediate delays of up to two months to the design of the radio system, which at that time was, overall, behind schedule by four weeks. Through management action and rescheduling, the delay resulting from re-design was minimized. Siemens, however, took the issue of the variation as an opportunity to submit claims totalling approximately \$158 million (including \$40 million in respect of the Radio System) and for 160 days extension of time.

4. Considering the other three subsystems, namely, PAS, PIDS and CCTV, the contractor proposed late in 2000 to subcontract the software supply to Optical Network Limited (ONL) in addition to the hardware supply. That change arose after pressure from the Engineer to recover design delays that had arisen because of Siemens' failure to find adequate in-house software resources needed for these subsystems. The appointment of a subcontractor was considered at that time to be a positive move which should have allowed recovery of the delay. The subcontractor demonstrated

its ability to perform the works to the satisfaction of the Engineer. However, the relationship between Siemens and ONL did not proceed as intended. It is believed that this was due to commercial disputes between the two parties. As a result, the promised delay recovery did not materialise and delay in the design of the software deteriorated to the point where, if nothing had been done, the projected delay to the opening of the West Rail would have been at least four months. The absence of any positive steps to correct the situation would have delayed the completion of civil interface works at stations and other interfacing railway systems. It is a Government requirement that the PAS, including its interface with the fire alarm system and the CCTV in lifts, be completed before the stations and West Rail headquarters building are allowed to become operational. In addition, the delays on this contract would have resulted in submission of multiple claims from the affected civil and system contractors.

5. In the absence of any noticeable improvement, the Engineer issued a Rate of Progress letter to the contractor in January 2001, requiring it to provide a plan to recover the delays. This was followed up in the same month by a visit by a member of KCRC's senior management team to Siemens in Germany to audit progress and discuss the delay recovery action plan. However, progress against the delay recovery action plan was relatively slow and delays of up to eight weeks were reported on software development activities by the end of March 2001. A follow-up meeting was held with the Siemens' Hong Kong senior management at the end of March 2001, at which KCRC expressed its disappointment at the lack of progress and the apparent failure of Siemens to adhere to the delay recovery action plan. At that meeting, Siemens committed to make visible progress over the following months. In keeping with that commitment, Siemens injected additional resources into its team, ensuring good progress on the FOTS, MAN and Telephone systems.

6. In May 2001, owing to lack of progress on the PAS, PIDS and CCTV subsystems, the Corporation again raised its concerns regarding Siemens' lack of progress to Siemens' higher management. This was done during a visit to Siemens' office in Germany, by the Corporation's Director, West Rail. Once again Siemens promised to resolve the issues covering the delays and a further delay recovery action plan was proposed. Weekly teleconferences were established at senior level with Siemens and ONL to monitor progress. A new Project Director was appointed by Siemens to rectify the ongoing delays in the three problematic subsystems (PAS, PIDS

and CCTV). However, during the weekly teleconferences, it became evident that the commercial issues between ONL and Siemens were preventing progress.

7. Further senior level follow-up meetings took place in July 2001 at ONL's offices in the UK and those of Siemens in Germany, with a view to ensuring the commercial issues between Siemens and ONL would not impact on the progress of the works.

8. In August 2001, as a result of increasing delays, a second Rate of Progress letter was issued to Siemens by the Engineer. In September 2001, a further meeting was held in Hong Kong with Siemens' higher management chaired by the Corporation's Senior Director, at which Siemens said that it would inject its own software resources into ONL's team to recover delays.

9. By October 2001, there were no positive signs of recovery, with delay in software design reaching up to ten weeks and Siemens failing to provide the promised additional resources to ONL. Further meetings in Hong Kong with Siemens revealed that ONL could not recover the programme delays to the three subsystems and programme slippage would continue to worsen unless rapid positive action were taken.

10. By this time, KCRC's senior management team had reached a number of important conclusions. In summary, they were -

- (a) that the Siemens/ONL subcontracting arrangement was clearly not working;
- (b) that Siemens' management attention had been focused far more on its claims for additional time and money, than on progress of the three critical subsystems;
- (c) that, in spite of the efforts made by the KCRC's management team, no amount of persuasion under the terms of the contract could move it forward fast enough;
- (d) that Siemens' project management in the case of this contract had failed fully to perform, and to deliver on three critical subsystems;

- (e) that the delays over the three critical subsystems would delay the scheduled opening of West Rail, for the reasons already given in paragraph 4 above;
- (f) that the delay over the three critical subsystems and this contract as a whole were beginning to have a serious impact on the completion of West Rail's civil construction and station services works. The civil contractors were obligated to provide access to Siemens for installing telecommunications equipment, starting in September 2001, but it was clear that the equipment was not being supplied on time.

11. Clearly, the time had come to identify and address drastic options, with a view always to ensuring that West Rail could open on time. KCRC was faced with the following options, namely -

- (a) do nothing, risk further delays and resolve claims through the dispute resolution provisions in the contract;
- (b) terminate the contract and re-tender; or
- (c) settle all extant claims and variations, and establish an effective delay recovery programme through a Supplemental Agreement.

To do nothing, risk further delay and resolve claims through arbitration

12. The KCRC management team, having witnessed repeated failure on the part of Siemens/ONL to perform and deliver the three critical subsystems on time, concluded that, if the contract were allowed to drift, the opening of West Rail could be delayed by at least four months. The penalty arising from this delay would have been of the order of \$660 million –

	<u>\$ million</u>
(a) Loss of revenue	500
(b) Cost of civil contractors' claims	126
(c) Cost of railway system contractors' claims	7
(d) Arbitration costs	<u>28</u>
Cost to KCRC of 4 months' delay	<u>661</u>

Seek to terminate the contract and re-tender

13. The status of the contract in November 2001 was that four out of seven subsystems were progressing. These were Fibre Optic Transmission System (FOTS), Metropolitan Area Network (MAN), Radio and Telephone. Considering the fact that these four subsystems would be heavily utilised by other railway operating systems, such as the Train Control and Signalling system, the Main Control system, the Automatic Revenue Collection system and the Corporate IT system, terminating the contract would have had the effect of compounding the delay to the opening of West Rail as a whole. Moreover, KCRC's management team was advised by its General Counsel that there were no grounds lawfully available to terminate the contract. If action had been taken to terminate the contract, Siemens would have been in a position to sue for loss of profits together with other costs.

14. Much more importantly, the corollary to terminating the contract would have been the sourcing, through pre-qualification and open tender, of a replacement contract. This would have entailed a delay of at least 14 months to the opening of West Rail, even on the optimistic assumption that KCRC could smoothly take over from Siemens whatever works KCRC had already paid for. The penalty arising from a delay of this magnitude would have been of the order of \$2,000 million –

	<u>\$ million</u>
(a) Loss of revenue	1,750
(b) Cost of civil contractors' claims	243
(c) Cost of railway systems contractors' claims	25
(d) Arbitration costs	<u>28</u>
Cost to KCRC of 14 months' delay	<u>2,046</u>

15. Clearly the option of allowing the contract to drift, or the option of terminating the contract and re-tendering, were courses of action to which the senior management team would not have wished to have recourse, unless there were no better options in sight. Quite apart from being commercially and legally imprudent, both options would have delayed the opening of West Rail.

The Two Proposals

16. No paper concerning Siemens was submitted to the KCRC's Managing Board in September 2001. The Managing Board considered, on 19 November 2001, a proposal to enter into ad referendum negotiations with Siemens.

17. On that occasion, the Managing Board noted the serious delays on this contract together with the risk that these delays would pose for the timely completion of West Rail. The Managing Board noted the conclusion reached by the KCRC management team that the best way to resolve the situation, whilst protecting the Corporation's interests, would be to try to reach a commercial settlement with Siemens. To this end the Managing Board noted the management team's proposal to send a negotiating team to negotiate with Siemens' top management in Germany. The team would endeavour to achieve the following objectives, namely -

- (a) removal of the relevant vice-president of Siemens from having any influence over contract DB-1500;
- (b) the appointment by Siemens of a Project Director and a project management team responsible solely for delivering all of the telecommunications systems to permit West Rail to open on time;
- (c) settle all extant claims and variations up to a current date; and
- (d) agree necessary delay recovery measures to meet re-established key dates with liquidated damages and interim payment schedules adjusted according to an agreed delay recovery programme.

18. The Managing Board noted that while such negotiations would require discussion of Siemens' entitlement to payment for settlement of claims, variations and delay recovery measures, the negotiating team would adhere to the fundamental principle that the negotiations were not intended to lead to Siemens being compensated for its losses as a result of submitting a low tender. With this in mind, the Managing Board noted that a ceiling of \$98 million had been set, made up of -

	<u>\$ million</u>
Settlement of claims and variations	35.05
Delay recovery measures	62.95
	———
	98.00
	———

19. Following the conclusion of negotiations, a paper was put to the Managing Board on 17 December 2001, proposing a Supplemental Agreement with Siemens in the sum of \$100 million. Details are provided in the answers to Questions (f) and (g).

Questions (f) and (g)

The memorandum submitted by the negotiating team after its final visit to Germany in November 2001.

The report presented to the KCRC Managing Board seeking authorization for the \$100 million payment.

Answer

On returning from Germany the negotiating team drafted a report on the outcome of the negotiations, in the form of a Managing Board paper. The draft was considered by the Corporate Tender Board, which endorsed the ad referendum outcome of the negotiations and approved a relevant submission to the Managing Board.

2. On 17 December 2001, the Managing Board was asked to consider whether or not to approve the ad referendum agreement reached with Siemens at the conclusion of the negotiations. The key aspects and results of the negotiations are summarised in the following paragraphs.

3. Negotiations took place in Germany between 23 November 2001 and 27 November 2001. The first key issue addressed in the negotiations was how to resolve the delays in software development work for the Public Address System, the Passenger Information Display System and the Closed Circuit Television System. Siemens had sub-contracted this work to a specialist company, Optical Network Limited (ONL). Siemens proposed to replace ONL with three separate specialist sub-contractors, namely -

- (a) for the Public Address Systems, AV Digital, which had undertaken similar work on East Rail in a timely and satisfactory manner;
- (b) for the Passenger Information Display System, Roctec Technology, which had undertaken similar work for the MTRCL and is currently employed as a sub-contractor on the MTRCL's Tseung Kwan O Extension; and

- (c) for the Closed Circuit Television System, COE, which has previous Hong Kong experience and has undertaken large CCTV projects internationally.

The negotiating team was satisfied that these sub-contractors had proven systems in operation and only a minimal amount of customisation would be required to meet the specifications for West Rail, Phase 1. AV Digital and COE made presentations to the team, both of which made a favourable impression. The team concluded that Siemens' proposal was the best way forward.

4. During the remainder of the first and second days of negotiations, the team also resolved a number of technical issues, particularly relating to programme and resources. Of particular importance was that Siemens agreed to replace its relevant vice-president with a new controlling officer, as well as to establish an appropriate chain of command and project management team with defined responsibilities and accountabilities.

5. The opening of contractual and commercial discussions on the third day revealed a significant difference in expectations and positions between the two sides amounting to about \$238 million, with the Corporation's contractual valuation of \$321.81 million, comprising the tender total of \$286.76 million plus the Engineer's assessment of variation and claim entitlements amounting to \$35.05 million, set against Siemens' expected "open book" costs of \$560 million.

6. Siemens' open book position included allowances for loss of profit and overheads to recover the impact of what is now known to be an unrealistically low-priced tender, plus an estimated cost for terminating ONL's employment. The team made it very clear to Siemens that these items were totally Siemens' responsibility and that the Corporation would never consider compensating Siemens for the consequences of its commercial misjudgement. The team stated that the Corporation was only prepared to accept contractual entitlements for variations and historic claims that had been certified by or would be instructed by the Engineer (\$35.05 million).

7. Negotiations reached an impasse on the third day, when both parties proved unable to agree upon the cost of delay recovery. On the fourth day, the negotiating team reported to the (then) Chairman, before resuming negotiations with the Siemens team. The Chairman endorsed the position taken the previous day, but gave the team the authority to round up the Corporation's offer to \$100 million on the condition that all objectives were achieved. Siemens finally accepted the offer of \$100 million. In order to ensure that Siemens would perform, the negotiating team imposed a condition that the \$100 million would be paid to an agreed schedule, subject to completion of specified milestones.

8. The Managing Board approved, on 17 December 2001, that a supplemental agreement be entered into with Siemens to settle all variations, claims and payment for delay recovery measures.

Question (h)

The factors taken into account by KCRC in deriving the liquidated damages (LD) and the documentation supporting KCRC's view that it is a common practice to set the level of LD's at 10% of the tender price;

Answer

Dealing with the second part of the question first, KCRC's key Conditions of Contract for use in construction contracts were approved by the West Rail Steering Committee (WRSC) of the Managing Board on 18 September 1997. At its meeting on 17 November 1997, the Corporation's Managing Board noted the apportionment of commercial and construction risks approved by WRSC to be adopted by contracting parties under construction contracts for West Rail. These included the liquidated damages (LD's) with a cap of 10% of the tender total.

2. The legal principles underlying LD's are well known. In the most simple terms, a genuine pre-estimate of loss is stipulated as LD's, and it is immaterial whether or not the loss can be proved or was even suffered.

3. The advantages and disadvantages of LD's are, however, not as well known. From the Employer's point of view, so long as it can demonstrate that the specified rate of LD's is equal to or less than a "genuine pre-estimate" of its likely loss in the event of the contractor's breach, the LD's will be recoverable from the contractor without the need to establish that a loss has actually occurred. From the contractor's point of view LD's establish, with certainty from the outset of the contract, its likely exposure in the event of delayed completion and the contractor can provide for such risk in its tender price.

4. Although unliquidated (or general) damages can be provided for in construction contracts, they are usually only provided for where the employer cannot determine LD's. Unliquidated damages are usually opposed by contractors, as they are unable to assess their risk and to make an appropriate provision in their tenders.

5. A cap of 10% is used on LD's in KCRC's contracts. This follows the precedents for the use of the same cap on LD's in the Government's ACP Contracts, and the Airport Authority and MTRCL contracts.

6. Addressing the first part of the question, i.e. what factors are taken into account by KCRC in deriving the LD's for a contract, the legal principle behind the concept of LD's effectively decides how LD's are derived. That principle, as stated above, is that LD's must be an agreed genuine pre-estimate of the loss or damage the employer expects to suffer as a result of breach of contract on the part of the contractor. LD's are usually confined to delays in completion of the whole or part of the construction works.

7. In deciding the level of LD's, KCRC in keeping with construction industry practice and legal requirements considered-

- (a) whether a delay by the contractor would be on the "critical path" to completion, and thus have the effect of delaying, in whole or in part, the opening of the railway for revenue service, thereby causing a loss;
- (b) whether delay would prevent other contractors on the project from completing their works on time, thereby entitling such contractors to seek financial compensation for disruption and/or prolongation of their contracts and extensions of time to complete their works; and
- (c) if in the event of a delay by the contractor giving rise to a delay in the opening of the railway for revenue service, the loss to KCRC in terms of the money value of that delay i.e. lost fare revenues, lost fixed operating costs increased financing charges, and prolonged project management and contract management costs.

Question (i)

Relevant provisions in the original contract and supplemental agreement entered into with Siemens, Particularly those on LD's.

Answer

The contractual provisions for liquidated damages are contained within the Corporation's General Conditions of Contract for Railway Operations Systems at Clause 48.1 to Clause 48.9. Amongst other things the provisions set out the procedures that must be followed so that when LD's can be taken they can be taken lawfully under the contract. They also set out how any LD's to which the Corporation would be entitled should be calculated.

2. Extracts from the General Conditions are-

"48.2 Appendix 1 to the Form of Tender attributes to each Key Date a sum which represents or is less than the Employer's genuine pre-estimate (at a daily rate) of the damages likely to be suffered by the Employer if the Works are not, or any Section is not, substantially complete, or any Stage is not achieved by the relevant Key Date. The sum shall constitute liquidated damages and not a penalty."

"48.3 The Contractor acknowledges that the liquidated damages have been estimated by the Employer on the basis of damages likely to be suffered as a result of failure to meet any relevant Key Date irrespective of and independently from any damages which are likely to be suffered as a result of failure to meet any other Key Date. Liquidated damages attributed to separate Key Dates may, therefore, run concurrently."

"48.4 If the Contractor does not achieve any Stage or substantially complete the Works or any Section by the relevant Key Date the Contractor shall pay or allow to the Employer liquidated damages calculated using the rates referred to in Clause

48.2 (as reduced by any certificate issued pursuant to Clause 48.5) until the date when the Works are or the Section is substantially completed or the Stage is achieved.”

“48.6 The total amount of liquidated damages for delay in respect of the Works, any Section and any Stage shall be limited in aggregate to the sum identified as such limit in Appendix 1 to the Form of Tender.”

“48.9 The payment of any liquidated damages pursuant to this Clause 48 shall not relieve the Contractor of any obligation or liability (including, without limitation, to complete the Works) save in relation to the payment of damages for delay in substantially completing the Works or any Section or achieving any Stage.”

3. The rates of LD's to be used in the payment calculation are included in Appendix 1 to the Form of Tender and are expressed as a daily rate set against each key date for completion. These are-

Liquidated Damages for Delay
(Clause 48.2 of the General Conditions)

<i>Key Date No. 1</i>	<i>:</i>	<i>HK\$92,000.00 per day for each day of delay</i>
<i>Key Date No. 2</i>	<i>:</i>	<i>HK\$92,000.00 per day for each day of delay</i>
<i>Key Date No. 3</i>	<i>:</i>	<i>HK\$92,000.00 per day for each day of delay</i>
<i>Key Date No. 4</i>	<i>:</i>	<i>HK\$92,000.00 per day for each day of delay</i>
<i>Key Date No. 5</i>	<i>:</i>	<i>HK\$95,000.00 per day for each day of delay</i>
<i>Key Date No. 6</i>	<i>:</i>	<i>HK\$98,000.00 per day for each day of delay</i>
<i>Key Date No. 7</i>	<i>:</i>	<i>HK\$105,000.00 per day for each day of delay</i>
<i>Key Date No. 8</i>	<i>:</i>	<i>HK\$89,000.00 per day for each day of delay</i>
<i>Key Date No. 9</i>	<i>:</i>	<i>HK\$105,000.00 per day for each day of delay</i>

4. The aggregate limit referred to in Clause 48.6 is also included in Appendix 1 to the Form of Tender which states

“Limit for Liquidated Damages for Delay

(Clause 48.6 of the General Conditions)
Ten percent (10%) of the Tender Total.

5. All the general provisions of the original contract in respect of LDs were preserved in the supplemental agreement.

Question (j)

The legal position as to whether the Corporation can claim damages from Siemens for all losses, such as loss of revenue, incurred for the delayed opening of West Rail (WR).

Answer

Common Law permits KCRC to claim damages from Siemens for all loss or damage suffered as a consequence of any breach on its part. Damages are either liquidated damages (LD's) if they are pre-assessed or unliquidated (general) damages if not.

2. LD's have been dealt with in the answer to question (h). If LD's have been agreed in respect to a particular head of damage, the innocent party cannot claim unliquidated damages. Consequently where LD's have been agreed in respect of time related breaches on the part of the contractor, as is the industry norm in construction and system related contracts including KCRC contracts, the employer cannot claim unliquidated damages for time related breaches.

3. Nevertheless KCRC can claim unliquidated damages where the breach is not time related, for example, if Siemens is negligent and as a consequence KCRC suffered loss, including profit arising from loss of revenue.

4. The legal "rules" relating to unliquidated damages have been, subject to refinement, in existence for some 150 years. Essentially the innocent party, as far as money can do it, is to be placed in the same position as if the breach by the other party had not occurred, provided that the actual loss is ascertainable and that the innocent party has taken all reasonable steps to mitigate or minimise its loss.

5. At common law, KCRC would have been able to recover general damages under the heads of damage as are included in the routine calculation of liquidated damages for each of its contracts. However, because the contracts provide for LD's for late completion, the law prevents the Corporation from recovering general damages for delayed opening.

Question (k)

Detailed breakdown of the 27 Supplemental Agreements, including the original contract sum, the SA values vis-a-vis the original contract sum, and the basis on which the SA's were approved by the KCRC Managing Board.

Answer

Annexed is a table that details the contracts for which supplemental agreements have been executed by the Corporation, the values, the tender total against which the agreement may be measured and the grounds under which the values can be classified.

Classification of grounds for values

2. The grounds for the respective values have been classified and described as follows-

Delay recovery measures

3. Where the contractor has a valid case for extension of time, the Corporation may ask the contractor to utilize more resources to recover time lost and to bring progress back to meet original milestone dates. The amount of money to be paid for such recovery measures has to be agreed between the Corporation and the contractor, together with the timing of such payment. This mechanism allows the Corporation to buy back delays and hence preserve the programme for completion of West Rail by the end of 2003.

Unforeseen ground and other conditions

4. The Corporation's contract strategy is based upon an equitable form of contract that fairly apportions risk between the Corporation and the contractor. Where the contractor's progress is disturbed, resulting in delay and/or extra cost due to matters beyond his control, he is entitled to be compensated, provided he can demonstrate a valid case. Were these provisions not to be included in the contract, the contractor would then have to allow for all risks which would significantly inflate tender prices. Examples of matters that would result in extra time or work are unforeseen

physical conditions or artificial obstructions, variations and delays occasioned by third parties, such as Government Departments, public bodies or other contractors.

Remeasurement

5. Re-measurement provisions are contained in the West Rail contracts to cover items where the exact scope of the work involved is difficult to accurately determine at the time of tender. Examples are the final depth of piles, which depends upon the actual geological conditions, the amount of filling material in embankments and the quantity of reinforcement placed in structures. In such instances, the work will be re-measured upon completion of the item and valued at agreed unit rates, in accordance with the contract.

Basis for Managing Board approval and summary of values

6. Despite the fact that claims and variations could be determined by the Engineer under the contract, there are certain circumstances where it would be beneficial for both parties to come to a full and final settlement, up to a point in time, to avoid claims becoming legal disputes and where delay recovery becomes imperative. This is because supplemental agreements-

- (a) are a means by which both parties could stop outstanding issues from accumulating and festering, to the detriment of the project;
- (b) provide certainty for the Corporation as to both programme and cost, on the one hand, and preserve such contract “sanctions” as liquidated damages, on the other; and
- (c) obviate the need for any costly dispute resolution after contract completion.

Supplemental agreements have been used on the West Rail project because, legally, changes to the terms of a contract must be agreed between the parties and it is industry practice to do this by way of a supplemental agreement.

7. In approving supplemental agreements, the Corporation’s Managing Board has taken the view that it is better to expeditiously

resolve disputes and secure the project programme by way of delay recovery. In this context it is worth noting that executing these agreements has removed a risk amounting to over \$4,250 million of contractors' claims, and the works are progressing generally to plan.

8. Procedurally, supplemental agreements for amounts exceeding \$50 million require Managing Board approval. Where agreements were for \$50 million or less the Managing Board has delegated authority to the Chief Executive Officer.

West Rail Phase I - Supplemental Agreements
Status at 31 January 2002

No.	Civil/ ROS	Contract No.	Contract Description (Contractor)	SA No.	Authority	Tender Total (\$ million)	Value of SA (\$ million) (A+B+C)	Breakdown of SA Values (\$ million)		
								Delay Recovery Measures (A)	Unforeseen Ground & Other Conditions (B)	Re- measurement Items (C)
1	Civil	CC-201	Viaduct-Kam Sheung Rd to TSW <i>Maeda-Chun Wo JV</i>	1	MB	1,212.94	42.00	42.00	0.00	0.00
2	Civil	CC-201	Viaduct-Kam Sheung Rd to TSW <i>Maeda-Chun Wo JV</i>	2	MB	As above	188.10	0.00	115.10	73.00
3	Civil	CC-202	Yuen Long and Long Ping Stations <i>AMEC-Hong Kong Construction JV</i>	1	MB	1,761.57	89.20	29.50	59.70	0.00
4*	Civil	CC-203	Tin Shui Wai Station <i>Chun Wo-Fujita-Henryvicy JV</i>	1	DP	1,125.64	0.00	0.00	0.00	0.00
5	Civil	CC-203	Tin Shui Wai Station <i>Chun Wo-Fujita-Henryvicy JV</i>	2	MB	As above	62.00	13.30	48.70	0.00
6	Civil	CC-211	Viaduct-Tin Shui Wai to Siu Hong <i>Maeda-Chun Wo JV</i>	1	MB	904.46	42.00	42.00	0.00	0.00
7	Civil	CC-211	Viaduct-Tin Shui Wai to Siu Hong <i>Maeda-Chun Wo JV</i>	2	MB	As above	69.90	0.00	62.00	7.90
8	Civil	CC-212	Siu Hong Station <i>HK-ACE JV</i>	1	MB	1,385.74	175.00	117.00	58.00	0.00
9	Civil	CC-213	Tun Mun Station <i>HK-ACE JV</i>	1	MB	1,352.69	255.00	174.00	81.00	0.00
10	Civil	CC-300	Tsuen Wan Station <i>Penta-Ocean-Kier JV</i>	1	MB	1,778.79	11.40	0.00	11.40	0.00
11	Civil	CC-402	Nam Cheong Station <i>Balfour Beatty-Zen Pacific JV</i>	1	MB	2,237.81	150.00	35.00	102.70	12.30
12	Civil	CC-403	Tunnel-Mei Foo to Nam Cheong <i>China State-Zen Pacific JV</i>	1	MB	651.04	1.00	1.00	0.00	0.00
13	Civil	CC-403	Tunnel-Mei Foo to Nam Cheong <i>China State-Zen Pacific JV</i>	2	DP	As above	4.70	0.00	4.70	0.00
14	Civil	CC-404	Mei Foo Station <i>Kier-Zen Pacific JV</i>	1	MB	1,242.87	103.00	55.00	48.00	0.00
15	Civil	CC-601	Pat Heung Maintenance Centre <i>Zen Pacific-China State-Ngo Kee JV</i>	1	DP	948.35	43.30	2.80	39.60	0.50
16	Civil	CC-602	Kam Sheung Road Station <i>NECSO Entrecanales Cubiertas, SA</i>	1	MB	494.66	0.50	0.00	0.50	0.00
17	Civil	CC-602	Kam Sheung Road Station <i>NECSO Entrecanales Cubiertas, SA</i>	2	DP	As above	1.90	0.00	0.00	1.90
18	Civil	CC-602	Kam Sheung Road Station <i>NECSO Entrecanales Cubiertas, SA</i>	3	MB	As above	2.90	2.90	0.00	0.00
19	Civil	CC-602	Kam Sheung Road Station <i>NECSO Entrecanales Cubiertas, SA</i>	4	DP	As above	47.80	0.00	47.80	0.00
20	Civil	CC-604	West Rail Building <i>Costain-China Harbour JV</i>	1	DP	693.00	42.00	0.00	37.00	5.00
21	Civil	DB-320	Kwai Tsing Tunnels <i>Dragages-Zen Pacific JV</i>	1	DP	1,903.38	24.50	16.50	8.00	0.00
22	Civil	DB-350	Tai Lam Tunnels <i>Nishimatsu-Dragages JV</i>	1	MB	1,789.79	6.70	0.00	6.70	0.00
23	Civil	DB-350	Tai Lam Tunnels <i>Nishimatsu-Dragages JV</i>	2	DP	As above	8.10	8.10	0.00	0.00
24	ROS	CC-1820	Permanent Way (North) <i>Chun Wo-Henryvicy-China Railway Const. Corporation-Queensland Rail JV</i>	1	MB	430.61	35.20	27.00	0.00	8.20
25	ROS	DB-1500	Telecommunications <i>Siemens Limited</i>	1	MB	286.76	100.00	65.00	35.00	
26	ROS	DB-1700	Platform Screen Doors <i>Nissho Iwai-Nabco Consortium</i>	1	DP	180.76	27.30	0.00	0.00	27.30
27	ROS	SI-1120	Escalators <i>Constructions Industrielles De La Mediterranee</i>	1	MB	255.03	3.20	0.00	0.00	3.20
Total						20,635.89	1,536.70	631.10	765.90	139.70

Notes-

MB means approved by the Corporation's Managing Board

DP means authorised by the Chief Executive Officer under powers delegated by the Managing Board

* This SA relates to earlier payment, and does not affect the overall contract sum.

Question (l) Terms of reference of KPMG's investigation.

Answer

KPMG has been asked to conduct its investigation and make recommendations having regard to the following terms of reference.

In respect of the DB-1500 contract with Siemens and 27 other Supplemental Agreements

- (a) Were KCRC's procedures and practices in the compilation of contract tender evaluation, contractual performance monitoring, and processes and procedures by which supplementary agreements were reached appropriate having regard to the industry practice and the nature of the work envisaged?
- (b) Did KCRC follow these procedures and practices?
- (c) Did KCRC carry out a detailed evaluation of the tenders?
- (d) What measures are now in place to ensure that the contractors shall meet their obligations under the original contracts and supplementary agreements?
- (e) Has KCRC contemplated making payments over and above those set out in the supplemental agreements and original contracts and, if so, on what basis have such payments been justified?

Specifically, in respect of the DB-1500 contract with Siemens:

- (f) What information was made available to KCRC's Managing Board under the process by which the Siemens bid was selected for the DB-1500 contract and when was this provided? How did this information differ from the information available to employees of KCRC West Rail Division?
- (g) Was KCRC's Managing Board aware that the tendered bid for DB-1500 was unusually low?
- (h) Was KCRC's Managing Board aware of the risks and implications of accepting an unusually low tender?

- (i) Having accepted a very low bid, what measures did KCRC take to ensure that Siemens would perform in accordance with its contractual obligations?
- (j) When did KCRC become aware of the fact that Siemens was adversely under-performing and what steps were taken at that time?
- (k) What information was made available to KCRC's Managing Board in respect of the problems with Siemens' performance on the DB-1500 contract and the measures being taken, and when was this information provided to KCRC's Managing Board? How did this information differ from the information available to employees of KCRC West Rail Division?
- (l) What factors were taken into account by KCRC in coming to a conclusion that Siemens should be paid additional monies? Did KCRC give due consideration to other alternatives?
- (m) What was the rationale for KCRC deciding to enter into a supplemental agreement with Siemens on the DB-1500 contract on the terms that it did, and what were the negotiation and approval processes leading to the acceptance of those terms and how did they reconcile internal engineering and other assessments as to the value of supplemental terms with what was eventually agreed in the supplemental agreement. When did KCRC determine that a supplemental agreement with Siemens was appropriate?

In addition to the investigation, the Corporation has appointed a Steering Committee to ensure the independence and impartiality of investigation, comprising the KCRC Chairman and four independent persons namely-

- (a) Sir John Swaine, Senior Counsel and a former President of the Legislative Council;
- (b) Professor Lee Chack Fun, Professor (Chair) in Geotechnical Engineering and Pro-Vice Chancellor, University of Hong Kong;
- (c) Mr Thomas Brian Stevenson, a senior accounting professional and a former President of the Hong Kong Society of Accountants; and
- (d) Mr Denis George Levett, a senior quantity surveying professional and a former Chairman of the Royal Institution of Chartered Surveyors Hong Kong Branch.

The Steering Committee's terms of reference are-

- (a) to oversee and guide the KPMG investigation;
- (b) to ensure that the KPMG investigation covers all aspects of its instructions as set above; and
- (c) to study KPMG's report and, in the light of KPMG's findings and recommendations, to recommend acceptance of the recommendations or alternative actions to the KCRC Managing Board.

Questions (m) and (n)

Details of other WR contracts awarded to Siemens; and

**Details of East Rail Extensions contracts awarded to Siemens and the
contractors of 27 SAs**

Answer

The annexed tables set out the answers to each question.

Kowloon-Canton Railway Corporation
West Rail, Phase 1

Summary of Contractors awarded ERE contracts
with West Rail Supplemental Agreements (LegCo questions (m) and (n))

East Rail Extensions			West Rail, Phase 1		
Contractor	Ref	Description (Contract sum-\$ million)	Ref	Description	SA aggregate value (\$ million)
NECSO (in JV with China State)	TCC200	Tai Wai to Shek Mun (1,383.0)	CC602	Kam Sheung Road Station	53.1
Ditto	TCC300	Shek Mun to Wu Kai Sha (1,926.0)			
China State (in JV with NECSO)	TCC200	Tai Wai to Shek Mun (1,383.0)	CC403	Tunnel Works-Mei Foo to Nam Cheong (in JV with Zen Pacific)	5.7
Ditto	TCC300	Shek Mun to Wu Kai Sha (1,926.0)	CC601	Depot civil and infrastructure works (in JV with Zen Pacific)	43.3
Maeda Corporation	TCC400	Tai Wai Station (687.0)	CC201	Viaduct-KSR to TIS (in JV with Chun Wo)	230.1
			CC211	Viaduct-TIS to SIH (in JV with Chun Wo)	111.0
Nishimatsu (in JV with Gammon)	HCC300	East Tsim Sha Tsui Station (1,561.0)	DB350	Tai Lam Tunnels (in JV with Dragages)	14.8
Ditto	HCC302	Pedestrian subway to MTR TST station (354.0)			

Kowloon-Canton Railway Corporation
West Rail, Phase 1

Summary of Contractors awarded ERE contracts
with West Rail Supplemental Agreements (LegCo questions (m) and (n))

East Rail Extensions			West Rail, Phase 1		
Contractor	Ref	Description (Contract sum-\$ million)	Ref	Description	SA aggregate value (\$ million)
Chun Wo	HCC400	Hung Hom Station modifications (118.0)	CC201	Viaduct-KSR to TIS (in JV with Maeda)	230.1
			CC211	Viaduct-TIS to SIH (in JV with Maeda)	111.0
Chun Wo, Henry Vicky,CRCC JV	CC1850	Permanent Way (370.0)	CC1820	Permanent Way (North) (in JV with Queensland Rail)	35.2
Siemens Ltd (in consortium with Barclay Mowlem)	DB1450	Traction Power Supply and Overhead Line (120.0)	DB1500	Telecommunications Systems	100.0
Siemens Ltd	DB1552	Station and Depot Communications Systems (133.0)			

Kowloon-Canton Railway Corporation
West Rail, Phase 1

Summary of Siemens' Contracts (LegCo questions (m) and (n))

West Rail			East Rail Extensions		
Ref	Description	Contracting entities and type (Contract sum- \$ million)	Ref	Description	Contracting entities and type (Contract sum- \$ million)
DB1400	Traction power and overhead line	Siemens, CITIC consortium (137.0)	DB1450	Traction power and overhead line	Siemens, Barclay Mowlem consortium (120.0)
DB1500	Telecommunications	Siemens Limited (287.0)	DB1552	Station and depot communications system	Siemens Limited (133.0)
DB1510	Main control systems	Siemens Limited (164.0)			
DB2010	LR telecommunications	Siemens, ONL, KML consortium (79.0)			
DB2040	LR signalling	Siemens Limited (237.0)			