SECTION A

Answer to Question One

Rationale
This question is based on both the common pre-seen scenario and the unseen scenario. Part (a) deals with the reputation risks arising from reporting inaccurate information concerning the quality of the company’s service. Part (b) deals with the IT risks associated with shared service providers. Part (c) deals with the risks arising from the need to maintain satisfactory relationships with foreign governments.

Part (a) draws mainly on Section B of the syllabus (Risk and Internal Control). This part discusses the risks arising from reports published in the national press that the company manipulates reports concerning the punctuality of its services. This is an important commercial and political matter because the operation of rail services has significant implications for customers, many of whom have no alternative means of travelling to work.

Part (b) draws mainly on section E (Risk and Control in Information Systems). The company depends on a shared service provider to operate its IT function. As is common in such arrangements, the company is unable to conduct its own tests on the operation of the system and that will have implications for the ability of management to ensure that their responsibilities for safeguarding assets and accurate record keeping are discharged properly.

Parts (c) and (d) draw mainly on section D (Management of Financial Risk). A rail operator located in a neighbouring country plans to build a new line that will reduce T Railway’s revenue. The rail operator is concerned that T’s government will retaliate in some way, which could prove disruptive because the rail operator will still wish to route its services via T Railways’ lines.
Suggested Approach

Part (a) asks candidates to think about the significance of the revelation that a railway company is not responsive to the needs of its customers, particularly commuters who depend on the rail service. The operation of public transport is a major political issue in most countries and so the implications of these reports will require careful consideration. There is, for example, a risk that the government will impose new regulations.

Part (b) requires some thought about the implications of being unable to observe the operation of the IT system directly. That arises in both the context of checking on day to day operations and also the selection of a service provider (either retaining the same firm or finding a replacement) when the present contract comes to an end.

Parts (c) and (d) require practical suggestions in order to defuse a potentially costly dispute before it gets out of hand. The railway operator must find some practical ways to prevent a dispute that will make it difficult to continue to operate through Country T. The key issue is to recognise that there is no need to harm T Railways and it may be possible to offer some concessions that will lead to a mutually advantageous outcome.

(a) The punctuality of public transport will be an important and emotive matter for customers, particularly those who rely on public transport to get to work. T Railways is evaluated on its ability to minimise customer complaints. The Ministry of Transport will be unhappy if the newspaper stories encourage customers to file formal complaints about timekeeping.

The suggestion that TCL has rescheduled journeys to times that solve the timekeeping problem at the cost of convenient travel times will create the impression that TCL has no genuine interest in customer satisfaction. Presumably many customers will now be forced to arrive at work much earlier than before and before the start of the working day. This will make TCL appear unconcerned with customers’ needs. It may also create the impression that TCL is choosing its own convenience over eliminating the errors and inefficiencies that were causing the delays in the first place.

Restating the official arrival times will be perceived as a cynical response to TCL’s poor timekeeping. Customers are not particularly concerned about the statistics published by T Railways, they simply wish to have a reliable service to get them to work on time. Rescheduling the official arrival time may lead to those services slipping further behind and so there is no guarantee that the arrival times will now be consistent. The overall impression is that TCL does not care about passenger service.

The publication of misleading facts is a dysfunctional response to the problem of poor timekeeping and will further annoy customers. It is unlikely that any railway service can ever eliminate delays but most customers would prefer a relatively high risk of a brief delay to a smaller risk of a much longer delay because a late train has lost its priority. Customers do not wish to feel that their delay no longer matters to TCL because it is effectively “sunk” in terms of counting as a delay and no longer matters.

The fact that the company’s staff feel that they have to resort to making anonymous statements to journalists will create the impression that T is an uncaring and bullying employer. The fact that staff are so disloyal as to make such statements will create the impression that there are poor labour relations.

(b)

(i) The directors of T Railways are responsible for the control environment, regardless of whether the controls are operated by the company’s own staff or by an outsourcing company. The operations within the IT facility are an important aspect of T Railways’ system of internal controls. Any errors or weakness in the systems at the IT facility are likely to affect the bookkeeping arrangements between the railway companies and could
lead to T Railways receiving an incorrect share of the proceeds of long-distance ticket fares.

The fact that T Railways cannot readily check the occupancy of trains on other companies' networks means that there is no practical means of checking the information provided by the IT facility. There is a higher risk because of the fact that T is outside of the eurozone and so there are translation issues associated with dealing with all of the other railway companies. The other companies will have less at stake with respect to translation if they are located in the eurozone and so there could be a greater risk that those aspects of the bookkeeping arrangements receive less attention within the IT facility.

The IT facility will be gathering personal information about T Railways’ customers that may be compromised if security is weak. These customers will hold T Railways responsible if there are any leaks or other weaknesses in security. It will not matter that T Railways does not have direct control over the IT facility and customers will not accept any argument based on that fact.

T Railways’ external auditor will wish to form an opinion on the controls affecting the company’s financial statements and that will include those controls handled by the IT facility. The auditor will need to be satisfied that the arrangements in place to monitor and report on systems are adequate. If the auditor cannot evaluate the operation of the controls within the IT facility then there is a risk that T Railway's audit report will be modified.

T Railways' directors may also find it difficult to ensure that they are not being put at a disadvantage to the other companies who are competing for long-distance services. For example, it will be difficult to check that the system has not been programmed to bypass T on international services so that customers travel on different companies' trains.

(ii) Ideally the IT company should have considerable experience in managing shared IT services, not just outsourcing. Managing a system that has to process data from independent clients and reconciling their figures is more complicated than the traditional arrangements involving individual clients working in isolation. Ideally, the IT company should be able to provide references from a number of satisfied clients who have complementary requirements to those of the railway companies.

The IT company will also have to be able to demonstrate that it has the necessary expertise in the hardware and the specific software environment used by the railway companies. The system itself is already in place and any supplier of expertise will have to demonstrate the ability to keep it operating properly. The backgrounds of the members of the management team which will be put in place for this assignment should be requested and should demonstrate sufficient and relevant experience and qualifications.

The IT company should also have a clear plan for staffing the facility, bearing in mind that the location of the centre itself has already been established. It would be disruptive for the railway companies to physically relocate the IT facility, so the IT company will have to provide assurances that the management team will live within a realistic distance. They will also have to demonstrate the ability to find and retain suitable operating staff who live within the centre’s catchment area.

The IT company will have to be willing to work for a reasonable and realistic price. The railway companies will not wish to spend any more than necessary, but the system cannot be allowed to fail because the IT company is forced out of business because it has under-priced the assignment. The railways companies should not necessarily choose the cheapest supplier.

(c) It is unlikely that T’s government will be able to block the development of this line without causing retaliation from F. T is a small country and it may be possible for other countries to route their primary rail networks round rather that though so that T Railways loses revenue and T’s citizens lose access to services.
T's government might decide to seek some concession in return from F or from F Railways. T is a small country and it may be possible for T Railways to build a line of its own that would link to F's new line and thereby improve its services at minimal cost. Alternatively, it may be possible to change the fare structure on T Railways' services so that it is possible to offer cheaper fares to customers who choose to travel through T.

(d) Firstly, F-rail should start by consulting with T Railways so that both companies are clear about the implications of the new line for T. T's government is more likely to take action against F-rail if there is uncertainty about the possibility of services and revenues being lost by T Railways.

It may be sensible for F-rail to offer some opportunities to T Railways, such as the possibility that there could be stronger cooperation on timetabling to enable any disruption to T Railways to be compensated. For example, the new line may provide an opportunity to offer T Railways the chance to develop new routes in collaboration with F-rail with passengers from T making some use of the new high speed line to reduce their journey times.

Secondly, F-rail should seek the support of its own government. Any threats of sanctions against F-rail by T could be matched by similar threats against T Railways by F. The fact that F would be responding to T's actions would mean that the government of T would be far more open to criticism and would, hopefully, withdraw its threats. This strategy could be effective because T is a small country and T Railways is likely to be more vulnerable than the railway companies operating in its larger neighbours.

Thirdly, F-rail could lay some groundwork by establishing the benefits that the integrated rail network creates for the population of T. That could involve advertising or other promotions to raise customer awareness. The new line could be announced as part of this activity, with emphasis being placed on the potential benefits so that customers in T view the new line as a positive development. F-rail could also stress the environmental benefits, including the possibility that the new line will replace some air or road travel.
Answer to Question Two

Rationale
Question 2 draws on section B (Risk and Internal Control).

Part (a) deals with the benefits that might be obtained from mapping risks using the TARA framework.

Part (b) asks candidates to comment on the manner in which reflect four risks have been mapped using TARA.

Suggested Approach
Part (a) requires candidates to think about the benefits that can be obtained from a management team taking time to formally list and comment on the risks that are faced by the entity. It would be worth considering the nature of the risks faced by this particular type of entity.

Part (b) asks candidates to consider the results of a mapping exercise and to comment on their agreement or disagreement with the placing of particular risks. It is perfectly acceptable to disagree with the suggestions that have been made provided that disagreement is justified by a sensible argument. Having said that, the risks are already classified in a credible and defensible manner. The fact that some of the risks cannot be reduced or avoided should be taken into account in this evaluation.

(a) The risk-mapping exercise is not an objective process and so the resulting diagram is not an objective or “correct” representation of the risks faced by the practice. The dentists should not risk relying too heavily on the map itself to determine their overall risk-management strategies.

The main benefit to be had from this exercise is that the dentists will have the opportunity to discuss the risks facing the practice.

This communication will mean that each of the dentists is made aware of the threats that have been identified by each of the others. That should mean that each of them will have a more comprehensive understanding of the risks faced by the practice as a whole.

The discussion will also ensure that there is an opportunity to address colleagues’ understanding of identified risks. It may be that some dentists are devoting too much time and effort to managing trivial risks. Conversely, potentially serious risks could be misunderstood and overlooked. The discussion will enable the dentists to reach some agreement as to the most appropriate response to each risk. A consensus opinion is more likely to be balanced and logical than any individual view.

The fact that the risks have been identified and discussed can be recorded for future reference. In the event that the practice is ever accused of negligence then the fact that a risk was discussed and a response put in place may enable the dentists to argue that they acted with reasonable skill and care. That, of course, implies that an appropriate response has been put in place for any identified risks.

(b) Dental implants
It is logical to state that the probability of occurrence is high if this is a relatively common procedure. Presumably the failures are caused by random factors that are out of the
dentist’s control, such as the patient’s overall health or dental hygiene and so the laws of probability will mean that failures will occur from time to time.

It is natural for a patient who has spent a significant amount of money on a procedure to be aggrieved if that procedure fails and so the practice may be accused of malpractice. Patients may discount the risk of failure when agreeing to the implant because the probability seems reasonably remote when looking ahead and making plans.

The impact of a claim will be low because it is a known risk that the patient has agreed to accept. It will be both difficult and expensive for a patient to pursue any formal claim for a refund or a repeat procedure.

Cross infection
It is important to be clear about whether the likelihood is expressed in terms of gross risk or net. Every dental procedure puts the dental staff in close proximity to the patient and will involve contact with body fluids. The gross risks are, therefore, high. The net risks of cross infection can, however, be minimised through good hygiene, such as the dentist and the nurse wearing disposable gloves that are changed between patients and also face masks to reduce the risk of transmitting respiratory infections.

The impact of causing an infection will be high. This is a preventable problem and so there is a risk that any failure will constitute medical malpractice. In the event that a patient complains to the health authorities or the dentists’ professional body there could be a significant penalty. There could also be a serious threat of adverse publicity, with patients choosing to use another dental practice.

Spiral staircase
The staircase could prevent disabled or infirm patients from obtaining access to the practice. It may be that a potential patient will choose to make this a matter of principle and complain that the practice has not made adequate provision for the disabled. Legally, the practice is not under any obligation to do more than make reasonable provision for access and there is no practical solution that could be offered.

It is unlikely that the impact will be significant. The practice is already well established, so it has already attracted a viable number of patients who can cope with this access problem. Any complaints can be addressed by a polite comment to the effect that the practice is located in a building that cannot accommodate a lift or a conventional staircase.

Given that there is no viable response to this risk, it really has to be accepted in almost any case. Dealing with it would require an extreme and potentially disproportionate response, such as moving to new premises.

Allergies
The probability that a patient will suffer an allergic reaction is low. Pharmaceutical products are tested to ensure that they do not generally cause reactions. Patients will, hopefully, be aware of most allergies that they suffer from and the dental practice can record those in patient files.

The impact of an allergic reaction is probably not high for the practice, despite the fact that it could be a serious matter for the patient. Provided the dentist has prescribed the antibiotic in good faith there is very little risk that the practice will be in trouble for prescribing a relevant drug to treat an infection. The dentist should always check that the patient’s medical history is up to date in order to ensure that there is no reason to avoid any particular medication. Provided that has been done, any reaction will be viewed as an unfortunate accident rather than medical negligence.
Rationale
Part (a) of question 3 draws mainly on section A (Management and Control Systems). It deals with the motivational issues arising from intra-group transfer prices that lead to individual companies reporting artificially inflated or deflated profits. Part (b) draws on section C (Audit and Audit of Control Systems) asking how the internal audit department might pre-empt a tax investigation by reviewing transfer process for compliance with tax law.

Suggested Approach
Part (a) requires some thought about the natural concerns that a management team might have when reporting very small profits. Even setting aside the possibility of profit-related pay and bonus, there is a natural tendency for managers to wish to report substantial profits. Local boards may be concerned that their role in the company is undervalued if they are required to manufacture parts for resale at little more than cost.

Part (b) asks for some thought about the risks associated with the objectives of the audit. Auditors are generally keen to identify the areas which are most likely to have an impact on the audit’s findings. They counter those risks with the most cost-effective evidence that is available. All audits are planned on the basis of understanding the issues and then using common-sense to evaluate the possible responses.

(a) Dysfunctional behaviour is a potential problem because transfer prices are, effectively, imposed from outside the group. A subsidiary company will not necessarily be able to recover all of its costs and generate a realistic profit when selling to a fellow group member. For example, a component manufacturer in a low-cost environment may be able to charge intra-group transfers at a higher price than the prevailing arm’s-length market price. That will leave the component manufacturer with an artificially high profit, whereas the buyer may be aggrieved that the purchase from a fellow group member costs as much as, or even more than, buying the same component on the open market from a third party.

Managers will have very little control over their reported performance if these transfer prices are used. For example, a local increase in the cost of labour could coincide with a worldwide reduction in the cost of the product (e.g. electronic components) and so the subsidiary responsible for manufacturing a component could be forced to reduce transfer prices at the very time that its cost base is increasing.

These arrangements could lead to dysfunctional behaviour with subsidiary company boards attempting to reduce prices in a sub-optimal manner in order to report higher profits. For example, a subsidiary with high input prices may attempt to reduce local costs in order to boost added-value. That could result in short cuts being taken over health and safety or maintenance in order to inflate profit and such savings may prove to be uneconomic in the long run.

Management time could be wasted because of constant internal arguments about transfer pricing. Staff time could be spent tracking and monitoring market prices in order to ensure that any favourable changes are implemented immediately.

Managers may be demotivated if profit-related bonuses or staff evaluations are based on these externally imposed transfer prices.

Subsidiaries could even attempt to disrupt internal transfers of generic parts in order to justify buying from third parties from whom a discount can be negotiated.
The risk of dysfunctional behaviour could be avoided if M invests in an appropriate management accounting system. The subsidiaries could report on the basis of value added for internal management accounting purposes. The fact that alternative figures are used for external reporting to national tax authorities need have little or nothing to do with the basis upon which management teams are evaluated. Indeed, M will have to produce such information anyway in order to ensure that the company is making the correct decision with respect to make or buy.

(b)

(i) The board has to provide the Head of Internal Audit with a very clear objective for this audit. This is a very specific task that could prevent the company from being tied up in a number of investigations around the world. The board should identify the problem areas that are likely to prompt a tax investigation in one or more of the subsidiaries and brief the internal auditor accordingly so that the group is aware of the “worst possible case”.

The Head of Internal Audit should be briefed on the extent to which evidence should be gathered. This could be a desk-based audit carried out from head office or it could involve local teams visiting subsidiaries. The Head of Internal Audit should be given a detailed budget of the time and resources that are to be invested in this study.

If the audit team is to visit subsidiaries and engage with local management then the audit staff will have to know how much they are permitted to reveal about the investigation. Transfer pricing is clearly a very controversial matter for M and local managers may be unsettled by any suggestion that pricing policies may be changed.

The timetable should be established. If the board requires the findings quickly then it will either have to accept a less detailed investigation or it will have to reallocate internal audit resources from other areas.

(ii) Examiner’s note: Any four factors would be accepted provided they were relevant.

National tax rates
The countries that are most likely to investigate transfer prices are those that have the highest tax rates. Ranking tax rates and import tariffs will provide the internal audit team with an indication of the subsidiaries that are at greatest risk of being the subject of an investigation.

Credibility of tax charge
The manipulation of transfer pricing is associated with the underpayment of tax. The internal audit team should calculate the tax paid by each subsidiary as a percentage of accounting profit. A subsidiary with a very low effective rate of tax is more likely to be investigated for the distortion of transfer prices. Alternatively, the authorities may relate the tax charge to other statistics. For example, a company that has a healthy reported revenue and a very small tax liability may be suspected of manipulation.

History of tax investigations
The history of individual countries may also be relevant. For example, the UK government was concerned about the potential underpayment of tax by some multinational companies and so any UK subsidiaries may be more at risk of an investigation by the tax authorities.

Visible market prices
The nature of the products being supplied may also affect the risk of an investigation. For generic items such as nuts and bolts or spark plugs, there will be a readily observable market that is visible to the tax authorities. If M’s transfer prices are close to the observable market prices for such items then there is very little risk that a tax investigation will occur and so there is less point in conducting an audit investigation. If the pricing implications are complicated because there is no meaningful comparison then any tax investigation will be more disruptive and it could be useful to pre-empt that with an audit investigation so that M has its defence ready.
Answer to Question Four

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<th>Rationale</th>
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<td>Question 4 draws on section D (Management of Financial Risk). Part (a) deals with the calculation of a speculative profit from the use of a futures contract to exploit an overpriced currency. Part (b) deals with the risks associated with such speculation. Part (c) deals with the advantages of using derivatives to gear up speculative investments.</td>
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<td>Part (a) requires some basic calculations, albeit in an unusual form. It is important to understand the operation of the main types of financial instrument listed in the syllabus.</td>
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<td>Part (b) requires some thought about the risks that this speculative investment might involve. The instrument is exchange traded and so there are no real counterparty risks. There is every chance that the investment will fail to show a profit.</td>
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<tr>
<td>Part (c) is looking for the ability to explain the uses of derivatives for investment purposes.</td>
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(a) The margin requirement means that S can write futures contracts worth a maximum of EUR 100,000 /15% = EUR 666,667.

The USD value = 666,667 x 1.3004 = USD 866,934.

S can write 866,934 /125,000 = 6 contracts = USD 750,000.

S will have to pay a margin of USD 750,000/1.3004 x 15% = EUR 86,512.

If she deposited that sum for three months she would earn interest of EUR 86,512 x 3% /4 = EUR 649.

If her predictions prove accurate, the cost of closing out her position will be 750,000/1.350 = EUR 555,556 for the USD 750,000.

The counterparty’s cost will be 750,000/1.3004 = EUR 576,746.

The overall position will be settled by a net payment of EUR 576,746 – 555,556 – 649 = EUR 20,541 in favour of S.

(b) The most obvious risk is the upside risk that she will earn a significant return from her ability to identify an anomaly in the market. If she is confident then she must compare the possibility of a capital gain of EUR 576,746 – 555,556 = EUR 21,190 against the opportunity cost of interest foregone of EUR 649. This seems like a relatively small risk, provided S has not overstated the probability of success.

The downside risk is that the gain will not materialise and she will have tied up her finances needlessly. The market’s expectation is that the spot rate will match the rate implied by her future contract. The currency markets for the USD and the EUR are both highly visible and are the subject of intense scrutiny. It would possibly be easier to develop better insights into smaller economies that do not attract the same degree of study. The financial loss is very limited in this case.

It is possible that the USD will strengthen further than the market’s expectations, in which case she will be faced with the prospect of a loss when she closes out her position. For example, if the USD strengthens to 1.2 then closing out her position will cost a net EUR 576,746 – (750,000/1.2) = EUR 48,254. In theory, this speculative loss could be substantial. In practice, it is to be hoped that there will not be a massive movement of the EUR against the USD.
There could be a problem if the exchange rates move against her because S may be required to deposit additional margin. The fact that she could only write a whole contract would mean that she will have some of her EUR 100,000 left to meet such a contingency, but her position may be abandoned if she cannot keep up with margin requests. The fact that the exchange requires margin deposits will indemnify S against any default by the counterparty.

(c) It would probably be difficult for S to exploit her expectations in any other way. She appears to be based in the eurozone. She could borrow USD in order to finance a EUR deposit, which would yield a profit when the USD loan was repaid using weakened currency. Doing so would almost certainly involve fairly disproportionate transaction costs.

Borrowing and investing directly would also limit her ability to profit from her insight. Using a derivative such as a future makes it possible to gear up her position. If she borrowed, say, EUR 100,000 worth of USD (to match her savings) then she would benefit from a position worth that amount. She can create a position with an exposure of USD 750,000 by investing only EUR 86,512 in margin.

Futures contracts make it possible for S to speculate via a regulated market, where the exchange will protect parties’ interests. That would also make it relatively easy to close out her position in the event that she started to feel uneasy about the prospects of success.

Realistically, the downside is limited to the extent to which the USD could strengthen. If she invested in some other instruments, such as options, she could lose everything if the option expired out of the money.