Answer to Question One

(a) (i) At present S pays the following each day:

- Landing charges = 4 x D$170 = D$680
- Parking charges = 4 x 14% x D$250 = D$140
- Passenger load = 4 x 130 x 90% x D$1.60 = D$749
- Security charges = 8 x 130 x 90% x D$1.20 = D$1,123

The present arrangement with S generates annual income of 360 x 2,692 = D$969,120.

The new arrangement will generate:

- Landing charges = 13 x D$140 = D$1,820
- Parking charges = nil
- Passenger load = 13 x 130 x 90% x D$0.80 = D$1,217
- Security charges = 26 x 130 x 90% x D$1.20 = D$3,650

The revised arrangement will generate 360 x D$6,687 = D$2,407,320, an increase of D$1,438,200.

Alternative sources:

Winning the bid from the Asian airline

- Landing charges – large aircraft = 2 x D$300 = D$600
- Parking charges = 2 x D$200 = D$400
- Passenger load = 2 x 300 x D$4.00 = D$2,400
- Security charges = 4 x 300 x D$1.20 = D$1,440

Thus, if the bid to secure this one agreement is successful, the airport will generate 360 x 4,840 = D$1,742,400.
The proposal would more than double the revenue from S, in return for a minor investment of only D$800,000 for the new lounge.

The revenue would rise substantially but the costs would not, the building is cheap, there will not be many other high costs as costs are being kept to a minimum. The baggage handling costs for example will not increase as the passengers are cabin baggage only.

S is presently a major customer, generating just over 8% of DEF’s aviation revenue. Those flights may be lost if S relocates all services to another airport. The airport would have a guaranteed source of income from S. S will establish DEF as its major hub and so it will be expensive for S to relocate to a different airport. The need to bear that cost will be an even more effective guarantee to DEF than a contract to work with DEF.

The agreement would limit the upside risk associated with winning further business. The airport would only have to secure one agreement from a major long-haul airline to generate even more additional revenue.

S’s passengers might not be willing to spend much at the airport’s retail outlets. They do not need to come to the airport to check in, so they will have less time to shop or to eat. They cannot check in hold luggage, so they will be restricted in terms of what they can buy from the retail outlets. They are travelling as cheaply as possible and so their budgets might not stretch to spending much at the airport.

Other airlines might discover this arrangement and start to put DEF Airport under pressure to reduce their charges in a similar manner. That could lead to a major distraction for the airport’s board in managing this threat. It could give competing airlines an opportunity to use the bad feeling that this might cause to take business away from DEF Airport.

Operating the airport's runways at full capacity means that there will be major disruption in the event of any problems. For example, bad weather or an emergency landing could create a backlog for arriving and departing flights. If that happens then the airport may get a reputation for being the cause of delays and that could deter passengers. It could also mean that airlines switch to more convenient or reliable airports.

The significant increase in passenger numbers could lead to delays in security. No airport can reduce the care taken in screening passengers, but large numbers of additional passengers, who will have no particular reason to arrive early, may cause long queues at security and that will inconvenience everybody.

The concession over parking may prove costly if an aircraft belonging to S is delayed on the ground. Aircraft can easily be grounded because of technical problems. Parking spaces are scarce, but S will have no particular incentive to expedite any repairs and so other airlines’ flights could be disrupted, costing goodwill and loss of revenue if the flights have to be cancelled or postponed.

DEF Airport’s reputation may be impaired by its association with low-cost and low-service travel. Traditional airlines may be unwilling to be associated with DEF because potential passengers may associate the airport with poor service and low status.

There is a risk of a conflict of interest between the operational needs and the security issues. The operations manager might be tempted to relax screening and scanning procedures in the interests of increasing the throughput of passengers. That could compromise the safety of flights, which would clearly be unacceptable in terms of ethics and the airport’s reputation.
It might be preferable to have the head of security report directly to the airport's board. That would enable the directors to discharge their responsibilities more effectively and it might enable them to demonstrate their direct involvement in security issues to, say, government agencies and the police service.

The advantage of placing the security section under the supervision of the head of operations is that security will have a major impact on the smooth running of the airport. It may be that the head of operations will start to see security as a source of competitive advantage (e.g. adequate resourcing will reassure passengers and reduce delays). Making the head of operations aware of matters such as staff absence or the serviceability of scanning machinery might make it easier to plan for the steps that will be required to deal with the effects, such as arranging public address broadcasts for passengers in the terminal to proceed through security immediately if there is likely to be a delay in processing them. Security arrangements might also be better linked to the flight schedules, perhaps by having larger teams on duty at times when passenger numbers peak. Security is also a major part of the airport's commitment to its airline customers and so having a single point of contact for all operational matters may improve communications.

(c)(i) Passenger numbers may be affected by the strength of the D$:

- Only 20% of passengers live in country D and travel within the country on internal flights. The remaining 80% will be exposed to currency movements that may make their trips more or less expensive. For example, a holidaymaker from country D will find a holiday in the Eurozone more expensive if the D$ weakens against the Euro and may choose not to fly from DEF. Similarly, passengers from outside country D may choose other destinations if the D$ strengthens against their home currency.

- The fact that most passengers are travelling on holiday means that they have a much wider choice than business travellers. An executive travelling on business may have to go to a particular country because that is where the head office or business contact is based. In theory, 90% of DEF's customers could change their plans to travel and that could massively reduce demand for the routes flown by DEF's airline customers.

- Movements in the value of the D$ could affect interest rates and that might also curtail holiday-makers' travel plans if the costs of their mortgages increase.

- The costs borne by airlines are determined largely in US$ and Euros. If the D$ weakens against the US$ or Euro then fuel and replacement aircraft will become more expensive. That could force them to raise prices and that could reduce passenger numbers. Alternatively, they may suspend operations until the currency strengthens.

(ii) The first step would be to consider whether there are any natural hedges already in place. For example, a strong D$ would give holidaymakers from country D more spending money when they travel abroad. However, that would also increase the airlines' costs when converted to their home currencies and so fares may increase. These tendencies could, therefore, offset one another.

Once the airport has established the overall impact of strengthening and weakening of the D$ the next step would be to find a way to hedge that risk. For example, if a strengthening is discovered to be bad then the airport might choose to borrow in terms of US$ to give a natural hedge.

It would also be worth diversifying the routes served if possible. It might be worth offering airlines that fly to popular destinations such as Florida a discount for flying from DEF Airport. The cost of the discount could be viewed as an investment in managing currency risk.
Answer to Question Two

(a) W is dependent upon a small number of third parties for the manufacture of critical components. If a supplier defaults on a delivery then W may run out of product to sell. The likelihood of this is impossible to predict, but it is a risk that is not under W’s direct control. The best safeguard against such problems would be to have more than one potential supplier for any given item. W should make sure that it owns the patents for any components or processes that it relies on or that it has a licence in place just in case it needs to move to an alternative supplier. Penalty clauses will not mitigate losses in the event of any disruption, but they may concentrate the attention of its suppliers.

W has no direct control over the quality of its products, which may lead to customer dissatisfaction. Parts are sourced from many different suppliers and so it will be difficult for W to ensure that every component is manufactured to the required tolerances. Manufacturing staff at the component and assembly factories will not feel that they are part of W and they may resent the fact that they do not enjoy the security of working for a large organisation. The owners and managers of the factories may not feel that there is a huge incentive to do much more than meet the minimum standards for quality and delivery because they may be replaced at the conclusion of their contract. W can control that risk by introducing quality checks on both components and finished goods. W could request samples on a random basis and check these thoroughly. W could also have a policy of rewarding reliable suppliers by retaining them and giving them as much work as possible so that they have an incentive to exceed expectations.

The global nature of W’s manufacturing process creates logistical problems for manufacturing. Manufacturing may be disrupted by delays in delivery, which could be outside the control of W and its suppliers. For example, electronic components are frequently transported by air freight, which can be affected by weather or industrial action. Goods crossing international borders can be delayed by customs inspections. One way round this would be to localise sources as much as possible, with suppliers for minor parts such as screws and plastic cases chosen for proximity to the assembly factories even if they are not necessarily the cheapest. W might use a specialist logistics company to manage the transport of parts and assemblies so that there is clarity as to who is responsible for any logistical problems. W might also have a policy of keeping safety stocks of all but the most expensive parts and assemblies to cover any disruption.

Note: Any three operational risks could be discussed.

(b) EDI is potentially more efficient than more traditional methods of communication. W has a very complicated manufacturing process and EDI makes it possible to break the task of ordering and paying for a batch of completed mp3 players much simpler. In theory, this system will reduce W’s staffing costs considerably. The system will place orders and will keep track of inventory as it is received. The bookkeeping will be done automatically because invoices will be received, recorded and passed for payment electronically.

The problem with W is that it does not really have a long-term relationship with all of its suppliers. It is possible that many of the suppliers it uses will be replaced in the medium or even the short term if a cheaper source becomes available. For example, a shift in currencies could make an alternative source of labour for fabrication tasks cheaper than the present supplier. Potential suppliers might not be prepared to install the necessary technology and that could restrict W’s sources.

Another problem is that W might find it difficult to manage the processing of invoices and payments. A supplier could invoice W for parts or fabrication work on sub-assemblies that are delivered to another third party. W will have no way of verifying that the goods being
invoiced were, in fact, delivered in good order and so the system will not be able to make payment. Suppliers could be reluctant to accept orders unless they are likely to be paid for promptly and efficiently.

On a related matter, the lack of human interaction could complicate the manufacturing process. Suppliers of even small parts could delay the completion of finished products if their IT systems accept electronic orders without any consideration of whether the requested delivery dates are feasible. A manager in the sales office could review incoming orders and ensure that the necessary capacity is available.
Answer to Question Three

(a) S is employed by a major shareholder, which is regarded as a problem for potential non-executives in terms of the guidance in the Combined Code. There is a risk that S will suffer a conflict of interest in that decisions that are good for P as a whole may not be ideal for C Pensions and vice versa. That problem could be overcome to an extent by recognising S’s interest as and when it becomes an issue and making sure that there are sufficient independent directors to compensate. S has no skills or experience that would be directly relevant to the strategic management of a manufacturing company. Having said that, it could be that S will bring a fresh perspective to board meetings and so the lack of direct experience could be an advantage. S also has a great deal of experience of managing investment portfolios and that could be valuable in terms of presenting arguments to the board from the perspective of institutional investors. S’s experience in that regard could be useful in areas such as financial reporting and so S may be a valuable member of the audit committee.

T is a qualified accountant and that will provide skills that will be directly relevant to the financial reporting and control aspects that are generally associated with non-executive directors. T has had a full and varied career and that will give a range of perspectives that may be valuable to P. T’s experience includes the manufacturing sector and that may give insights into the management of capital intensive businesses such as P. T has a range of contacts in banking that will undoubtedly be useful when it comes to negotiating with potential lenders. T is about to retire and so should have sufficient time to devote to this position.

U has had very little experience that is directly relevant to the management of P. U’s parliamentary career could, however, have provided skills that are of some value, such as assessing the interests of different stakeholders. That could be a major benefit in the management of a company that manufactures chemicals. U’s political contacts could also prove valuable, partly in terms of evaluating proposals that could affect P’s position and partly in terms of lobbying to ensure that any changes are not too damaging to the company. U’s reputation as a former senior politician will give an incentive to act with integrity and that will enhance P’s reputation for honest management. The fact that U appears keen to have a number of directorships is a worry because it implies that P will not necessarily have sufficient time and attention. Furthermore, lobbying for companies that have different issues may mean that U will not always be free to put P first when using former political contacts.

(b) One concern is that the bonus mechanism may encourage dysfunctional behaviour. The remuneration committee will have to determine bonuses in such a way that directors cannot improve their rewards by making decisions that are harmful to the company, such as cutting expenditure on discretionary areas such as training in order to improve short-term profit at the expense of the long-term.

Assessing the contribution of individual board members will be difficult because it may be difficult to identify the impact that an individual has had on the running of the company. Measuring contribution effectively requires speculation as to the performance that would have occurred in the director’s absence. That would probably involve discussion with the director, who is hardly objective under these circumstances. One problem with basing the bonus on the contribution of each individual director is that the executive board members may start to compete with one another for the sake of maximising their bonus. Individual directors may feel that it is in their personal interests to withhold information from the rest of the board and to avoid discussing ideas in case they do not receive full credit for their contribution.

The shareholders may feel that the system is a cynical attempt to extract more pay from the company. The remuneration committee members will have to ensure that they do everything they can to reassure the shareholders that any bonus payments are deserved otherwise the board as a whole may lose the shareholders’ confidence. There is even a danger that the shareholders may start to lose confidence in the ability of the non-
executives to act in an independent manner in their contribution to the oversight of the company.

The directors will have to receive a realistic reward for their services; otherwise they may feel disillusioned and demotivated. It probably makes very little difference that they are well paid in relation to P’s other managers and employees. They are likely to measure their rewards in relation to the directors of other quoted companies.
Answer to Question Four

(a)(i) The forward rate is essentially an implicit forecast = 2.121.

Differential interest rates imply the direction in which spot rates will move:
Forecast spot = (1 + r_c)/(1 + r_y) x 2.020
= (1.11)/(1.057) x 2.020
= 2.121

Differential inflation rates also imply the direction of movement:
Forecast spot = Current spot x (1 + i_c)/(1 + i_y)
= 2.020 x 1.08/1.02
= 2.139

Purchasing power parity implies that a product will cost the same whether it is priced in terms of Y$ or C$:
Forecast spot = 420/200
= 2.100

(ii) The rate implied by the differential interest rates is likely to be the most reliable. It is essentially the same as that offered by the forward markets because the rates offered by the forward market are set in relation to interest rates. If the forward rate starts to deviate from the figure determined by the differential interest rates then arbitrage opportunities will arise so that it becomes potentially profitable to buy one of the two currencies on the spot market, invest at the currency's prevailing interest rate and sell the currency forward so that there will be a balance remaining after the interest has been earned and the forward sale completed. Market forces would push the rates back into line very quickly so that this opportunity is eliminated.

The forecast implied by the forward markets is unbiased, but there is no guarantee that the Y$ will actually receive a spot rate of that amount if it waits because any forecast can prove unreliable. This is, nevertheless the most reliable prediction because the banks and other market participants are entering into positions with respect to both currencies and so they will lose money if those predictions are incorrect. They have a huge incentive to update and correct forecasts.

The economic forecasts that underpin the predictions for inflation are probably slightly out of step with the interest rate differences. Interest rates are tied to interest rates through the Fisher effect. Nevertheless, there could be imperfections in the operation of those models such as intervention by governments or by central banks and so interest rates might not lie at their true equilibrium. The reliability of this prediction depends largely on the competence of the economists who made the predictions.

The prediction based on the customer's selling price in the two markets draws on purchasing power parity. It is highly unlikely to hold with respect to a single product. Imperfections such as transport costs may make it possible to sell the same product in two different countries for two different real prices.

(b) Selling the C$ forward will yield 9m / 2.121 = Y$4,243,281
Exercising the option will yield 9m / 2.150 = Y$4,186,046
The option will cost Y$270,000 and that could have been invested at 5.7%, so it would be worth Y$285,390 in one year.
The net effect of buying and exercising the option is Y$4,186,046 – 285,390 = Y$3,900,656, which is substantially less than the proceeds of selling forward.

Buying the option would give V the ability to benefit from any upside. In the event that the spot rate exceeds 2.150 then V is free to enjoy the benefit. Having said that, none of the forecasts prepared by V's finance director suggest that there is a significant chance of
that occurring and so the upside is unlikely to be worth a great deal. It may be better simply to take the guaranteed alternative offered by the forward markets even if that is only very slightly higher.

(c) If V could insist on being paid in Y$ then the company would avoid the currency risks associated with agreeing a price in a foreign currency that could depreciate before payment is received. The nature of the business means that contracts appear to involve a delay between entering into an agreement and actually receiving payment, so the delay could lead to quite a significant exposure.

(d) In the present climate, it looks as if V’s home currency is appreciating and so it might not be beneficial to accept payments in foreign currencies that are likely to weaken against the $Y.

(e) If V invoices in its home currency then these transaction risks are passed over to its customers. Asking customers to bear the currency risk could be bad for business. On the other hand, V would have to incorporate some form of protection against currency fluctuations into its pricing and so foreign clients might feel that it would be cheaper for them to manage the currency risks and to leave V to focus on providing the best possible service.

The nature of V’s business reduces the likelihood that overseas customers will go elsewhere. V is a marketing consultancy and so foreign clients are paying for V’s expertise in its home culture. If currency risk is an issue then those clients might be able to go to a competing consultancy in V’s home country, but that is still a narrow range of competitors and if all refuse to invoice in anything other than $Y then it will not be a factor that will cost any of them business.
The Senior Examiner for Performance Strategy offers to future candidates and to tutors using this booklet for study purposes, the following background and guidance on the questions included in this examination paper.

**Section A – Question One – Compulsory**

**Question One**

This question is based on both the common pre-seen scenario and the unseen scenario. It draws on themes that have been discussed in the context of airport management and travel in recent years, most notably the changes that are being brought about by the encroachment of low-cost airlines and the impact of economic factors on the demand for leisure and business travel.

Part (a) draws mainly on section B of the syllabus (Risk and Internal Control). This part deals with the situation where a business has a large customer who is prepared to use the influence associated with that position to exert some pressure. In this case the entity is faced with a proposal that appears to offer considerable growth in turnover. However, some basic calculations establish that the proposed growth is not particularly attractive in itself and is going to leave the entity with very little scope to pursue any further opportunities that may come along.

Part (b) draws mainly on section A (Management Control Systems). This part asks candidates to think about the agency issues that might arise within an organisation if a manager has a remit that includes a range of competing objectives.

Part (c) focuses on section D (Management of Financial Risk). The P3 syllabus focuses on the international aspects of financial risk and so that will be a recurring theme throughout all diets. This requirement focuses on the economic impact of foreign currency risk for the entity described in the scenario. Paradoxically, all of the entity’s income and outgoings are in the local currency and so a superficial analysis might suggest that it does not face any currency risk, but a little more thought indicates that it is, indeed, quite exposed because demand will be influenced by currency movements.

**Section B – answer two of three questions**

**Question Two**

This question is loosely based on two common themes that underpin a great deal of modern business: outsourcing of manufacturing and the use of IT to manage relationships with a network of suppliers and customers. These themes are clearly interlinked in the real world and so the question has a degree of authenticity. The question is scenario-based and concerns a business that has a range of products for which demand constantly outstrips supply.

Part (a) draws mainly on section B (Risk and Internal Control). It deals with a design-led business that outsources its manufacturing operations.

Part (b) draws on section E (Risk and Control in Information Systems). It focuses on the use of EDI to manage and coordinate the complex manufacturing arrangements introduced in part (a).

**Question Three**

This question is based around a scenario concerning a quoted company that wishes to recruit some additional non-executive directors and remunerate the executive board in a manner that will align the directors’ interests with the shareholders’. These are clearly core issues in the ongoing corporate governance debate.

The question is in two parts, both of which draw on section C (Review and Audit of Control Systems).

Part (a) offers a shortlist of three potential appointments to the board with some biographical information about each. There are some clues that each has strengths and weaknesses,
reflecting the fact that appointing a non-executive director is often a difficult task because very few candidates will ever be entirely perfect.

Part (b) asks for a discussion of the issues associated with setting bonuses. That brings together many of the themes running through both management accounting and finance. By this stage, candidates should be able to reflect on the implications of rewarding a decision-maker in a particular way.

**Question Four**

This question is partly scenario based and partly theoretical. It presents a business that faces a major transaction risk and asks for some discussion of the issues associated with forecasting currency rates using the market relationships introduced by the syllabus. The whole question is from section D (*Management of Financial Risk*). The focus on transaction risk means that it complements the foreign currency material examined in question 1, which is on economic risk.

Part (a) asks for a range of forecasts using the models available in the syllabus. The different models produce different results and so candidates are asked to identify the most reliable.

Part (b) asks for a calculation to determine which of two risk management instruments to purchase. One is more expensive than the other, but it offers less potential upside risk. Thus, the question has both an upside and a downside risk.

Part (c) asks for a discussion of the merits of invoicing an overseas customer in local currency. Normally candidates are expected to reject this suggestion, but it is less relevant in this case because of the nature of the business. The scenario deals with a marketing consultancy that is being asked to advise on a local market. That makes it more difficult for the customer to threaten to appoint a competitor. At most, our consultancy competes only with other national marketeers.