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# Answers

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**Note**

*It is not always possible to publish suggested answers which comprehensively cover all the valid points which candidates might make. Credit will be given to candidates for points not included in the suggested answers, but which, nevertheless, are relevant to the requirements.*

*In addition, in this integrated case study examination points made in one question may be re-introduced or fully developed in other question(s) as long as these are made in the specific context of the requirements of the part of the question being answered.*

*The suggested answers presented below may give much more detail than would be expected from most candidates under examination conditions; they may also have used a particular approach or model which should not be taken as the only approach or model which could have been used. Different approaches and structuring of the answers are expected and full credit will be given for relevant and appropriate solutions to the tasks given. The answers provided here are therefore intended to support revision and tuition for future examinations.*

*Finally, it should be noted that candidates will not get full professional skills marks in a task requirement if they have not presented their answers according to the format asked for. For example, if a task is to be completed using a report and evaluation skills are tested, even if the answer has met the specifically stated evaluation criteria, candidates will not be able to earn all the professional skills marks available if they have not used the report format.*

**1 (a) Briefing paper**

**Betal road construction contract**

The contract appears to be of the type which CC is aiming to win, a large project with potentially strong profits and cash flows. It offers an entry into the market in Betal at a time when it is being opened up to foreign firms. Successful completion of the contract could result in CC being given favoured status by the Betal government, enhancing its competitive position and giving it opportunities to win further major contracts in Betal.

The project is much larger than any CC has undertaken before, \$20 billion compared with \$10 billion for the ring route in Omegland. CC will be making a substantial commitment of resources and finance, limiting its ability to undertake other projects and diversify its portfolio. The Betal government's emphasis on its requirements to minimise time and cost bring into question the margins which CC will earn on the project and whether the contractual terms will be advantageous for CC.

The following financial and non-financial issues will have to be considered before the final decision is taken to accept the contract.

**Financial issues**

Directors and shareholders will clearly be concerned with the financial acceptability of the project. The forecast profit is \$2 billion, offering a profit margin of 9.5% on \$21 billion revenues. This is above the chief executive's target of 8%. These figures should be viewed in the light of the magnitude and the profit margins of other contracts which are currently around.

For shareholders, the contract may offer good opportunities to enhance the long-term value of CC through making an acceptable profit itself and through follow-on opportunities in Betal. However, shareholders may be worried about the possibility of losses, given the recent losses on the project in Alpha, and the reliability of CC's planning and budgeting and they may also need to be satisfied that lessons were learned from that project. CC's finance team may have been able to use what it has learnt from the project in Alpha to develop more reliable cost forecasts for this project, but this project is over mountainous terrain, where CC lacks previous experience. If, for example, the expenditure on tunnels was underestimated by more than \$320 million, 6.5% of current estimated total cost, the project would not achieve the required profit margin.

Shareholders may also be concerned about the project timetable slipping, as failing to meet deadlines may jeopardise the timing and amount of revenue.

The project will tie up considerable working capital over its lifetime. Shareholder expectations may have been raised by the recent increase in dividends, and they may well be unhappy if the increase is just a one-off. Shareholders may also be worried about the liquidity of the project and the adequacy of short-term bank facilities which CC has available if required, particularly if they feel that the timetable may slip and progress payments be delayed.

Shareholders may also be concerned about the extra long-term finance required. If CC needs to make a share issue, shareholders may be worried about the outlay or the dilution of their interest if they do not subscribe. If the project is financed by extra debt, shareholders may have concerns about the extra financial risk and potential variability of earnings, and hence dividends.

CC could not also take on extra debt if it breached the requirements in the covenants laid down by current lenders. CC will be looking to refinance some current debt in the next three years. Potential lenders may be wary of prior and substantial commitments to the providers of the finance for this contract, which could make refinancing debt more problematic.

**Non-financial issues**

The project will also involve operations in a new country, with the probable use of local suppliers and labour, and CC having to cope with potential cultural problems. CC's previous projects have taken place in the flat countries of Omegland and Alpha, and it appears to have little experience of the mountainous terrain which the road will go through. The government believes that it will be possible to construct a road which is not significantly affected by problems with the terrain but this may be

over-optimistic. It may not be possible in some areas to construct new stretches of road which give shorter journey times than the current road network.

Other resources which the project requires may be difficult to obtain. CC may have to bring in new suppliers based in Betal to reduce the risk of supply delays. It will also have to recruit manpower locally and the tight timetable may mean labour will have to be paid a premium. It will also need specialists who can oversee construction through challenging terrain. It may need to recruit them externally as it has not operated in a mountain landscape before.

CC may also currently lack the operational systems required to support a project of this size and location. The *SiteSmart* development is planned for the next two years, but this may cause disruption while it is happening, and perhaps be delayed, all during the contract. Arguably, it would have been better if this contract had begun in two years' time, when the *SiteSmart* system should be fully operational.

More generally, CC may lack the central management resources to oversee the project effectively. The audit committee and risk and health and safety managers all have significant current responsibilities and may be stretched too far to undertake the additional monitoring which the project will need.

## **(b) Issues for CC**

The difficulties which CC will face are how Betal's government has defined its requirements, potential conflicts between different requirements, and outcomes by which the contract will be judged but CC can do little to influence.

### **Cost**

If CC is awarded the contract, it will be at least partly because it has quoted a low price. This will limit its profit margins and may make its position very difficult if cost overruns occur, as there will be considerable government and media scrutiny. The need to keep costs down may also lead to CC's decisions on the road being influenced, for example, whether it chooses a route which will cost less to construct at particular points rather than a route which is best for traffic flow.

### **Timescale and disruption**

Completing the road quickly may indicate that CC is being efficient. However, problems may arise if the timetable is unrealistically short. CC may have to employ extra, possibly more expensive, labour to meet deadlines, jeopardising cost control. Also taking less time may mean the period of disruption is shorter, but that does not mean that the amount of disruption will be less. There may be considerable disruption caused to nearby existing roads by construction being undertaken hurriedly. CC may also end up taking less care to minimise the disruption of natural habitats, which was been a concern noted by the minister.

### **Environmental footprint**

CC will be judged on whether it minimises the permanent environmental impacts of the new road. However, what the government wants here is not clear. The new road will inevitably increase noise and air pollution, which CC cannot control.

Local geography may mean that the road will inevitably cause permanent disruption to some human and animal communities, as it cannot be routed anywhere else. In other places there may be a choice of routes, so CC could choose a route which minimises the negative impact on local communities and has positive impacts such as taking traffic away from the centre of villages. The introduction of road ecology measures, such as wildlife crossings, can minimise the impact on local species.

However, all of these choices and additional measures will have cost implications and possibly require more time. It is unclear how far the government would be flexible on contract terms if it meant better outcomes for the environment.

### **Outcomes and performance measurement**

When Betal's government decides whether the quality of CC's work is good enough for CC to be paid in full, it will consider whether the roads and supporting features such as drainage and bridges have been well-constructed. These are, of course, important but they are not the outcomes which the transport minister emphasised and with which CC will therefore be associated.

Even if failure to meet the outcomes which the transport minister stated does not affect the revenue CC obtains from the contract, it may face damage to its reputation.

Some of the expectations for the new road which the press release has encouraged may be unrealistic. It is not clear, for example, how the figure of reducing journey time by almost half was estimated. Natural constraints in the Isnardi mountains may mean that it is impossible for CC to build a road which can produce that level of reduction. Both the road and CC will also be judged by how much the road alleviates traffic jams. CC may be able to do nothing about this, as traffic on existing roads switching to the new road may just transfer the problem of congestion onto the new road.

**2 To: Oliver Wesonga**  
**From: Jo Issa**  
**Subject: Project initiation document**  
**Date: XX/XX/XX**

Thank you for taking responsibility for preparing the contents of the project initiation document (PID) and providing a summary of the section you have prepared on operational issues. There are a number of issues which I want to raise about what you have done, but I realise that you have not had experience of major projects like this and you should have had more help.

#### **General comments**

The contents appear to be well-organised and flow logically. The PID covers a number of significant elements.

#### **Omissions**

However, the PID also needs to include a number of other elements which are important enough to be covered under separate headings.

These include the following:

#### **Purpose**

The project background needs to define the overall purpose of the project, to build a road which is resilient and as straightforward as possible to drive. This will be what the project focuses on throughout.

#### **Objectives**

The PID should detail the financial and non-financial objectives for the project, which CC's board will use to determine whether in the end the project has achieved all its outcomes successfully. The financial objectives will be centred on achieving the forecast profit margin and keeping costs within budget. The section also needs to include the non-financial objectives of both CC and the government of Betal. Remember for CC that this project is vital in establishing the company's presence as a significant player in the construction sector in Betal. The PID also should include what the Betal government hopes to achieve by its investment – a road which is able to cope with the volume of traffic and deliver reduced journey times.

#### **Assumptions**

The detailed forecasts of benefits, costs and timings included in the detailed PID will have to be based on a number of relevant assumptions. The PID must explain what these are and the basis on which the assumptions are made. For example, the PID needs to explain assumptions about supply delivery times based on problems caused by the difficult terrain in which some of the construction will take place. The PID also needs to explain whether assumptions about completion dates are based on work being continuous or how many days will be assumed to be lost due to bad weather. Financial assumptions will also be important, particularly about cash and working capital. Certain stages of the project are due to overlap and we need to be sure that sufficient finance will be available at those times particularly.

#### **Stakeholders**

Linking in with objectives, the PID also needs to state which the most important stakeholders in the project will be, indicating their levels of influence over, and interest in, the project. Betal's government will obviously be a key stakeholder. The media and the communities along the route which may be affected will be other important stakeholders.

#### **Constraints**

The operational sector of the PID also needs to include a section on resource constraints. Manpower constraints may be significant, as CC may have to do quite a lot of recruiting in a short space of time. This will include recruiting in Betal, which may be more complicated since we have not undertaken significant projects there before, and recruitment of specialists for key project stages such as the construction of the tunnels. The PID also needs to consider whether the project will be affected by any internal constraints, such as resource demands of other current projects.

#### **Project personnel**

You have only mentioned the project sponsor and manager, although they will certainly be important members of the project team. This section should start with the overall project management structure which brings together who has authority and the lines of reporting. You also need to state who will be on the project board which will be overseeing the project, who the other members of the project team will be, and summarise their responsibilities.

#### **Project monitoring and quality**

Review and monitoring will be an integral element to provide assurance to CC's board that we are fulfilling the Betal government's requirements. The PID will need a separate section detailing the reviews which project team members and senior management will carry out, and the timetable for these reviews. There is a risk that any timetabled reviews will not pick up problems quickly enough. An important part of project management will therefore also be identifying trigger points for management to be informed immediately if, for example, construction is delayed by problems with the natural environment.

#### **Communication**

Project monitoring links in with communication, but the importance of internal and external communication warrants a separate section in the PID. Internal communication will include regular financial and progress reports, as well as one-off reports if required. External communication should link in clearly with the analysis of stakeholders, since it will be a vital part of stakeholder management. Again, it should include regular reporting as well as protocols for responding to shareholder concerns.

## **Operational issues**

### **Time constraints**

The time constraints section is a summary of the project milestones, which need to be supported by an extended project timetable in the body of the PID. Strictly, perhaps, the deadline details would be better included under a separate heading of deliverables. Time constraints should include important limitations in the timetable where we cannot do much, for example, not being able to do certain work during the rainy season or having to wait upon certain events to occur before particular project stages can begin.

### **Cost constraints**

Cost constraints appear to be no more than total budgeted figures for each stage. This appears to be repeating information which would already be included in the financial budget and funding section of the report. The summarised budget should contain more detail, even though it is a summary, than a single figure for each stage. As a minimum, it needs to give a breakdown into categories of the most significant costs. The cost constraints section should include major costs which are unavoidable, for example, commitments to suppliers which we will have to make.

### **Risks**

The risk section should link to significant risks identified in the annual report. It should include, for these risks, a summary of their likelihood, backed up with justification in the body of the PID.

The sections on health and safety and supply risks appear to be thorough, but the PID needs to say more about environmental risks. You have included measures to manage some specific important environmental risks, but CC will also need to carry out a general environmental risk assessment. You also need to say specifically what measures CC will be taking to minimise disruption to affected communities and wildlife, as Betal's transport minister has emphasised this as being important.

I appreciate that I have raised a lot of points, but I hope all my comments are helpful. Thanks again for doing this work while there was no project manager. I am very happy to discuss any aspect of this memo with you.

Jo Issa

## **3 (a) Confidential memo**

**To:** Imena Bhudia

**From:** Pat Singh

**Date:** XX/XX/XX

**Subject:** Burton Vadher's comments

I am replying to your request for my views on the comments during the meeting. I appreciate that I may not be in possession of all the facts. However, I can understand why a number of the comments have caused you concern for legal, ethical and reputational reasons.

### **Ethical concerns**

#### **Making a statement**

Our lawyers have advised against us making a statement admitting responsibility for the injuries to the protesters, and we should follow their advice. Equally, however, Burton should not rush into making a statement placing all the blame on the protesters. Not only could this be embarrassing if there is successful legal action against us, it also shows a failure to establish what happened before making a statement. Burton's desire to protect CC's staff is understandable, but this should not extend to making false or unfounded statements should staff be found guilty of misconduct at a later date.

#### **Ethical leadership**

As chief executive, Burton is responsible for taking a lead on ethical issues and establishing an ethical environment within the company. CC's annual report stresses the importance of its approach to ethics as embodied in its ethical code and its commitment to honesty which avoids false claims and misleading statements. Burton's comments and conduct appear to be short of these ideals.

#### **Attitude to health and safety**

Burton's comments appear to suggest that he is insufficiently worried about securing the safety of anyone on the site. Burton has not highlighted health and safety issues in his report at board meetings. Although he has ultimate responsibility for health and safety, he has not yet taken any steps to fill the gap left by Li Kurata's absence. His plan now to remedy problems on site seems more to do with a desire to protect CC's legal position and reputation than a concern about dangerous conditions.

#### **Actions on site**

Burton's planned actions to oversee the 'clearing up of the site' could be considered dishonest. The police and the health and safety authorities will not be getting an accurate picture of conditions on site at the time of the break-in, and Burton could be accused of tampering with evidence as a result of the actions which he intends to take.

#### **Meetings with staff**

The proposed meetings with members of staff, again, could be seen as a way of misleading the authorities by encouraging staff to make untrue statements. The proposed bonus for 'hardship' could be considered to be a bribe to make sure staff say

the right things. There may also be an implied threat to any staff whose evidence is contrary to the story which Burton wants to present.

#### Transparency with board

Burton appears to have kept from the board a critical report which Li Kurata made about the site. Not only is this evidence of his poor attitude to health and safety, it also may raise questions about whether he is providing the board with full information, not just about health and safety issues, but other problems as well. This is clearly contrary to what is acceptable behaviour from the chief executive of CC.

#### Reputation concerns

##### Consequences of accidents

CC is already subject to media attention as a result of the protests against the new road. This is likely to worsen as a result of what happened last night. CC may suffer bad publicity if health and safety failings are found to have contributed to the accident and this may be greater because of the recent legal action taken against CC for other health and safety failings. Damage to reputation will also be greater if CC is found to have misled the authorities. The government of Betal may even seek to end the contract immediately because of misconduct. Being found guilty of dishonesty may also threaten CC's ability to win other contracts.

##### Attitude towards protesters

By taking this contract on, CC has inevitably associated itself with a project which is controversial and many dislike. However, Burton's failure to meet the protesters appears to be increasing the bad publicity CC is suffering, by giving a clear impression that it does not care about stakeholder concerns. This goes against what Burton has said recently in the annual report about addressing stakeholder concerns about impact upon the environment. The impression that CC has no time for the protesters will be reinforced if Burton emphasises that the accidents are their fault. Many would consider it to be poor taste for Burton to criticise strongly anyone who has been injured.

I hope these comments are helpful. I am happy to discuss them further if you have got time.

#### (b) Summary of control weaknesses

	Weakness	Consequence	Recommendation
Health and safety manager	No effective oversight of health and safety due to Li Kurata's absence and no-one to whom staff and sub-contractors can communicate concerns.	Health and safety problems are not being addressed as no-one is ensuring inspections are adequate and problems are being remedied.	Appoint interim health and safety manager until Li returns from absence and ensure there is full cover when Li is absent in future.
Security presence	Inadequate number of staff on duty, demonstrating that contract specifications with Sholin Security are not detailed enough.	Security staff are unable to deal quickly and effectively with disturbances.	Discuss with Sholin Security amending contract terms to ensure adequate minimum number of staff on duty at all times.
Contact with security firm	Previous break-in was not reported to CC, demonstrating communication channels are not being used effectively.	CC was not alerted to the need to take steps such as stronger fencing and having more staff on site to prevent break-ins.	Instruct Sholin Security that all attempted security breaches should be reported directly and immediately to CC's risk manager.
Oil	Failure to clear up the oil shows failure to follow internal procedures and inadequate inspections by site management.	Increased risk of on-site accidents due to managers and staff not remedying dangerous conditions, and risk of legal penalties for failing to act.	Issue instructions to staff on all sites that health and safety instructions must be adhered to, and managers must carry out regular inspections which are evidenced.
Lighting	Failure to respond to the health and safety manager's instruction to improve lighting shows that follow-up procedures when health and safety breaches identified are inadequate.	Increased risk of on-site accidents due to personnel on site not being able to see hazards clearly, and risk of legal penalties for failing to take action.	Give site management deadlines to make improvements specified and require them to report they have done so, with follow-up health and safety visits as necessary.
Internal audit visits	Internal audit's failure to visit the site so far and the fact that the visit is scheduled rather than unannounced indicates that the programme of monitoring sites is inadequate.	Health and safety weaknesses may not be identified for some time. If staff know when the visit will be, they can make sure the site complies when the auditors are there, but are lax at other times.	Internal audit to visit sites, where health and safety risks are particularly high, more frequently and on a surprise basis.

**(c) Briefing paper**

**Advantages of establishing a separate risk committee**

This paper considers the advantages of establishing a separate risk committee.

**Mix of membership**

The current audit committee must fulfil governance requirements and therefore consists of independent non-executive directors. A separate risk committee will not need to fulfil this requirement. It would be advantageous for it to consist of a mix of executive and non-executive directors. Executive directors can contribute knowledge of how the risks the committee is reviewing affect CC operationally. They may also have more time to commit to the risk committee's activities. Non-executive directors will be able to take a wider perspective and look at the overall risk picture CC is facing. They may also have expertise in managing specific risks such as contract management or health and safety which are important for CC.

**Breadth of risks**

Again, the audit committee is constrained by governance requirements to spend sufficient time on financial accounting and auditing concerns. The expertise of the committee would appear to be in the areas of accounts and audit. Collectively, the current committee may lack experience of dealing with other types of risk. A separate risk committee should have enough time to spend on other important risks and look at risks more widely, as it will not need to cover the accounting risks which the audit committee is considering. Focus on risks connected with the accounts may also mean that a lot of the audit committee's work is focused on historic issues, whereas the risk committee can have a much greater focus on dynamic risks which may have a major impact in the future.

**Leadership**

The audit committee has a number of responsibilities concerned with monitoring, review and auditing. They may lack the time to play a proactive role in risk leadership. In any case, it will be difficult for non-executive directors, who are not involved in day-to-day operations, to give a lead. A dedicated risk committee can feed through to the board as appropriate, to ensure that risk is considered carefully when making key strategic and operational decisions. A risk committee, in conjunction with the risk manager, can focus on ways of promoting risk awareness throughout the company.

**Communication**

The current system of quarterly meetings of the audit committee may handicap effective communication. The committee may be too slow to act to deal with important risks. Having a risk committee which meets more frequently should speed up communication and including executive directors will provide clear points of contact for internal communications about risk concerns. It may also simplify the risk manager's reporting lines, as the risk manager can report directly to an executive director on the risk committee.

**Reassurance to shareholders**

Establishment of a separate risk committee can help persuade shareholders that CC is taking risk management seriously by going beyond the requirements of governance best practice. Shareholders will welcome this reassurance, because as CC's risk report demonstrates, CC faces significant risks in areas such as health and safety and project delivery. More generally, the fact that CC is taking steps beyond the minimum requirements of governance best practice, because these are appropriate for its circumstances, shows a proactive attitude to governance and risk management which shareholders should welcome. This may be particularly important if CC suffers further adverse publicity arising from the injuries to the protester.

**Conclusion**

A risk committee, with membership and terms of reference tailored to CC's needs, could be a valuable part of CC's corporate governance which helps enhance performance and avoid problems.

**4 Slide 1**

**Big data investment**

- Available data
- Use in existing operations
- Use for infrastructure management opportunity
- Costs

**Supporting notes**

– **Available data**

Big data analytics can provide information about the amount of traffic and peaks and troughs in road usage. It can also provide information about the state of the roads. This includes where there are delays at any particular time, areas which may be seriously affected by bad weather, and the condition of the road surfaces and supporting features like drains and bridges.

- **Use in existing operations**

Additional data about wear on the roads should help CC to be able to forecast where and when maintenance will be required, which will be particularly useful for long-term maintenance contracts. Data about areas particularly affected by bad weather will help CC plan what work it needs to do, for example, improving drainage. Data about volume of traffic at different times or dates may help CC plan to carry out maintenance when roads are quieter.

- **Use for infrastructure management opportunity**

If CC is managing roads, big data will be helpful not only in informing CC of current conditions on the roads but also keeping road users informed. If there are problems and delays, CC should have the information to be able to deal with them as quickly and efficiently as possible and to pass information onto road users, for example, reduced speed limits and areas to avoid or alternative routes to take.

- **Costs v benefits**

Costs will not only include set up and security costs, but also the costs of expertise to interpret the data. Any investment in big data capabilities will also need to be compatible with the current *SiteSmart* initiative. CC must also consider whether data about particular roads is only useful in the context of work on those roads, or whether it can be used elsewhere in the business. CC also needs to determine whether a large investment in big data will only be justified if it can gain infrastructure management contracts, because at present the number of opportunities and CC's chances of winning this type of contract are uncertain.

**Alternative acceptable style for answer to first of the four points above as actual notes, representative of what is likely to be produced in an exam by a candidate:**

**Available data**

Analytics provides data on

- Traffic peaks and troughs
- State of roads including delays
- Areas affected by bad weather
- Condition of road surfaces, bridges, drains, etc

**Slide 2**

**Infrastructure management opportunity**

- Service development
- Long-term income source
- Fees or tolls
- Reliability of cost estimates

**Supporting notes**

- **Service development**

Providing the infrastructure support would be a new service in existing locations. CC has been trying to enhance its presence in Alpha and is trying to gain a presence in Beta, so providing a new service could help it in both countries. It may help CC win construction contracts if it can also offer to provide infrastructure management of roads after they are built.

- **Long-term income source**

Infrastructure management contracts are likely to be for a number of years and therefore provide guaranteed income for some time. They can help finance the requirements of major construction projects.

- **Fees or tolls**

Certainty of income will depend on the mix of funding decided by the governments. Fees may be jeopardised if there is a change of government. The level of income from tolls could be much more uncertain, however. If existing roads become toll roads, traffic may use alternative routes to avoid paying the toll. If new toll roads are built, traffic may continue to use existing, free, roads.

- **Reliability of cost estimates**

CC will be committed to carrying out maintenance on the roads which it manages and the costs of maintenance should depend on the state of those roads. A much greater volume of traffic than expected may mean more maintenance is required, but there would also be greater income from tolls. The costs of operating traffic control and signage systems should be easier to predict, as these do not depend on traffic volumes, but they will depend on whether investment is required in upgraded systems which can take full advantage of the data available.



- 1 (a) Up to 2 marks for an analysis of each issue which is relevant to the assessment of the opportunity.  
The following are some of the issues:
- Financial**
- Acceptable profit margin
  - Sensitivity of figures, uncertainties in estimates
  - Liquidity/working capital doubts
  - Extra long-term finance (government guarantee, gearing levels, covenants)
- Non-financial**
- Cultural problems in new country
  - Difficult terrain, where CC lacks experience
  - More/new resources (labour, suppliers, expertise)
  - Insufficient current operating and management systems
- (Up to a maximum of 18 marks)
- (b) Up to 2 marks for a discussion of each difficulty for CC of fulfilling the criteria stated by the transport minister.  
Difficulties may include:
- Meeting low cost targets – affect construction choices
  - Fulfilling unrealistic timetable – increased costs and environmental disruption
  - Fulfilling environmental objectives – road inevitably cause harm, minimising impact costly and time-consuming
  - Reducing journey time – unrealistic due to natural constraints, CC cannot control use when road open
- (Up to a maximum of 8 marks)

Professional skills may be additionally rewarded as in the following rubric:

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
1 (a) Analysis skills in identifying relevant information	<i>The candidate has demonstrated very limited or no analysis skills. The candidate has failed to identify most of the data which is important to the decision and has failed to present the analysis in a structured way.</i>	<i>The candidate has demonstrated limited analysis skills. The candidate has identified some of the data which will be considered in making the decision. The answer has some structure, but the structure is not very clear. The importance of the data discussed is not clearly explained.</i>	<i>The candidate has presented a briefing note and has demonstrated good analysis skills. The candidate has identified most of the data which will be relevant to the decision. The candidate has structured their analysis. The structure used helps the candidate explain why the data discussed is significant.</i>	<i>The candidate has presented a briefing paper which has demonstrated excellent analysis skills. The candidate has identified the most important data which will be relevant to the decision. The candidate has clearly structured their analysis. The structure used helps show clearly the importance of the data being discussed.</i>
Example	<i>This is the type of big contract abroad which CC needs to win to maximise profits.</i>	<i>This is a large contract which could generate high profits. It will give CC an initial opportunity in Betal and further opportunities if the contract is successful.</i>	<i>The contract appears to be of the type that CC is aiming to win, a large project with good profits and cash flows. It offers an entry into the market in Betal at a good time for foreign firms. Successful completion of the contract could result in CC being chosen for further contracts by the Betal government.</i>	<i>The contract appears to be of the type that CC is aiming to win, a large project with potentially strong profits and cash flows. It offers an entry into the market in Betal at a time when it is being opened up to foreign firms. Successful completion of the contract could result in CC being given favoured status by the Betal government, enhancing its competitive position and giving it opportunities to win further major contracts in Betal.</i>
	0	1	2	4

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
1 (b) <i>Commercial acumen skills in identifying difficulties for CC with the criteria stated by the transport minister</i>	<i>The candidate has failed to demonstrate commercial acumen skills. The candidate has made no reference to the criteria stated by the transport minister, nor the implications for CC.</i>	<i>The candidate has shown limited commercial acumen skills. The candidate has made some reference to the criteria stated by the transport minister, but has not clearly explained why trying to fulfil the criteria will be difficult for CC.</i>	<i>The candidate's briefing paper has shown good commercial acumen skills. The candidate has given some explanation of the criteria stated by the transport minister and given some reasons which are relevant to CC's business why fulfilling the criteria will be difficult.</i>	<i>The candidate's briefing paper has shown excellent commercial acumen skills. The candidate has clearly explained the significance of the criteria stated by the transport minister and shown clearly why fulfilling all the criteria will be difficult when CC constructs the new road.</i>
<b>Example</b>	<i>CC will need to be efficient when it is constructing the road. Efficiency is one of the 3Es. It means getting the highest possible output out of inputs. It can alternatively mean achieving output, here the new road, with the minimum inputs, here the minimum amount of labour time. If CC fulfils the deadlines it has been set, it will have been efficient.</i>	<i>The transport minister wants CC to progress the road as quickly as possible, to be efficient, which is one of the three Es. This may be difficult because of the countryside. CC will also need to employ enough staff to get the job done on time.  CC will have to decide whether it employs local staff, meaning there may be cultural problems or it gets its current staff to work more overtime, which they may not want to do, and which will be expensive.</i>	<i>The transport minister wants CC to progress the road quickly and this will be taken to be a sign that CC is being efficient. However, CC may not be able to be as quick as the transport minister wants. To meet deadlines, CC will need to employ more labour, which will be expensive. Taking less time may also mean that CC causes more disruption while work is taking place.</i>	<i>Completing the road quickly may indicate that CC is being efficient. However, problems may arise if the timetable is unrealistically short. CC may have to employ extra, possibly more expensive, labour to meet deadlines, jeopardising cost control. Also taking less time may mean the period of disruption is shorter, but that does not mean that the amount of disruption will be less.</i>
	0	0.5	1	2

- 2 Up to 2 marks for discussion of each significant area omitted from the PID, up to a maximum of 10 marks. Up to 2 marks for comments on each area covered in the summary of operational issues, up to a maximum of 6 marks.

Points to include:

#### Omissions

- Purpose – resilient road, driven easily
- Objectives – financial and non-financial
- Assumptions – basis for financial and weather/terrain
- Stakeholders – influence/interest, government, media and communities
- Constraints – manpower, specialists, other resource demands
- Personnel – management structure and responsibilities, project board, team members
- Monitoring – regular reviews and triggers for immediate action
- Internal communication – financial and progress
- External communication

#### Operational issues

- Time constraints – detailed timetable and deadlines
- Cost constraints – more detail of significant costs
- Risks – community/wildlife disruption

(Up to a maximum of 14 marks in total)

Professional skills may be additionally rewarded as in the following rubric:

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
2 Scepticism skills in identifying shortcomings with the outline contents and summary of operational issues in the PID and recommending improvements	<i>The candidate has demonstrated no scepticism. The candidate has failed to identify important omissions from the list of contents. The candidate has not challenged the summary of operational issues provided. The tone of the memo is not appropriate.</i>	<i>The candidate has demonstrated limited scepticism. The candidate has identified some of the omissions from the contents of the PID but failed to identify some important omissions. The candidate has mostly failed to identify areas missing from the summary of operational issues, or limitations of data given in the summary, or recommend improvements. The candidate has mostly failed to link the omissions or shortcomings identified with data in other exhibits. The tone of the memo is not appropriate.</i>	<i>The candidate has presented a memo which has demonstrated good scepticism. The candidate has identified most of the important omissions from the contents of the PID. The candidate has identified some operational areas which the summary of operational issues has not discussed and has identified shortcomings with the operational areas summarised. The candidate has provided some recommendations for improvements. The candidate has attempted to link the omissions and shortcomings identified with data in other exhibits. The tone of the memo is constructive.</i>	<i>The candidate has presented a memo and demonstrated excellent scepticism. The candidate has identified the major omissions in the content and the summary of operational issues, and has identified limitations with the areas which have been included. The candidate has linked the explanations of why the omissions and limitations are significant and recommendations for improvements to CC's business context and data in other exhibits. The tone of the email is constructive and the memo will be helpful for Oliver, the team member.</i>
Example	<i>You have included the assumed benefits, timings and costs, which is good. The project chart shows clearly what is happening and what you have assumed.</i>	<i>You have included the forecast benefits, costs and timings, which are all important. You will need to state what the assumptions are somewhere in this section.</i>	<i>The detailed forecasts of benefits, costs and timings included in the detailed PID will have to be based on assumptions. The PID will need to set out in a separate section what the assumptions are and how you have made them.</i>	<i>The detailed forecasts of benefits, costs and timings included in the detailed PID will have to be based on a number of relevant assumptions. The PID must explain what these are and the basis on which the assumptions are made.</i>
	0	1	2	4

- 3 (a)** Up to 2 marks for discussion of each ethical and/or reputational issue, up to a maximum of 10 marks.  
Ethical and reputational issues include:
- Ethical**
- Environment – ethical code and annual report statements, Burton not providing leadership
  - Blaming protestors – unfounded/not true
  - Lax attitude to health and safety – no replacement for H&S manager, not reporting on H&S to board
  - Tampering with evidence on-site
  - Pressurising staff to make untrue statements, bribery
- Reputation**
- Bad publicity if H&S failings found
  - Threat greater – previous failings/found out for misleading authorities
  - Threat greater – uncaring attitude to protestors, contradicting annual report statements
- (Up to a maximum of 10 marks in total)
- (b)** Up to 3 marks for each control weakness explained, its consequences identified and recommendations for improvements made and may include the following
- No cover for H&S manager
  - Inadequate security staffing
  - Not reporting previous attempted break-ins
  - Not clearing up oil
  - Not implementing recommendation to improve lighting
  - Inadequate internal audit monitoring
- (Up to a maximum of 14 marks).
- (c)** Up to 2 marks for each relevant advantage of establishing a risk committee which is separate from the audit committee.  
Advantages may include:
- Include executive directors who contribute operational knowledge/time and non-executives who contribute wider/specialist risk expertise
  - Focus on risks other than accounting and auditing
  - Provide risk leadership, give board information required
  - Meet as frequently as required
  - Reassurance to shareholders/stakeholders
- (Up to a maximum of 8 marks).

Professional skills may be additionally rewarded as in the following rubric:

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
3 (a) Scepticism skills in challenging comments	<i>The candidate has failed to demonstrate any scepticism. The candidate has not challenged the comments made at the meeting and has therefore been unable to identify relevant ethical problems or threats to reputation.</i>	<i>The candidate has demonstrated limited scepticism. The candidate has challenged some of the comments made at the meeting, but has not explained clearly their ethical implications or linked the threats to reputation to information provided in the other exhibits.</i>	<i>The candidate has presented a memo which has demonstrated a good level of scepticism. The candidate has identified and clearly explained the ethical implications of the comments, and linked the threats to reputation to information in other exhibits.</i>	<i>The candidate has presented a memo and demonstrated an excellent level of scepticism. The candidate has identified, clearly explained and linked the main ethical implications to data in other exhibits, particularly the discussion of business integrity and reputation risks. The candidate has clearly explained the threats to reputation and established their significance in the context of information in the other exhibits.</i>
Example	<i>Protesters do not like CC anyway because the road goes through villages and wildlife habitats. Although Burton is trying to sort things out, he may fail because the protester got injured. If there are more protests, CC will have a poor reputation with government and shareholders, and the shareholders will sell their shares.</i>	<i>CC is already facing a lot of protests because of the road. Its reputation is likely to get worse because of the protester getting injured. CC's situation is likely to get worse if it is found to have had poor health and safety. Although Burton is trying sort things out, he may make a bad situation worse if he acts illegally and disobeys the ACCA's Code of Ethics, particularly integrity and professional conduct. This may diminish CC's reputation.</i>	<i>CC is already getting bad comments in the press because people are protesting against the road. Media coverage may get worse because of what happened last night. CC may suffer bad publicity if health and safety failings are found to have contributed to the accident, because health and safety is important for CC. Although Burton is trying to sort things out, he may make the situation worse if he tells lies to the authorities and then gets found out.</i>	<i>CC is already subject to media attention as a result of the protests against the new road. This is likely to worsen as a result of what happened last night. CC may suffer bad publicity if health and safety failings are found to have contributed to the accident and this may be greater because of the recent legal action taken against CC for other health and safety failings. Damage to reputation will also be greater if CC is found to have misled the authorities.</i>
	0	0.5	1	2

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
3 (b) <i>Evaluation skills in basing explanation of significant control weaknesses on information provided and recommending appropriate improvements</i>	<i>The candidate has failed to demonstrate evaluation skills. The candidate has omitted the most significant control weaknesses. The candidate has shown no professional judgement in explaining the importance and consequences of the control weaknesses identified and making recommendations to remedy them.</i>	<i>The candidate has demonstrated limited evaluation skills. The candidate has shown limited professional judgement in explaining the importance of the control weaknesses identified. However, the candidate has omitted some significant control weaknesses, has not explained their consequences clearly, and has not made reasonable recommendations to remedy them.</i>	<i>The candidate has demonstrated good evaluation skills. The candidate has shown good professional judgement in identifying most of the significant control weaknesses and explaining their importance and what their consequences are. The candidate has made some reasonable recommendations which are proportionate and may remedy the weaknesses discussed.</i>	<i>The candidate has demonstrated excellent evaluation skills. The candidate has shown excellent professional judgement in identifying and explaining all of the significant control weaknesses and has clearly shown the consequences of the weaknesses. The candidate has provided recommendations which are proportionate and will effectively address the weaknesses discussed.</i>
<b>Example</b>	<i>Internal audit has not visited the site yet and should do so.</i>	<i>Internal audit does not visit the site often enough and consequently health and safety weaknesses exist for some time. Internal audit should visit the site monthly until the health and safety weaknesses are all cleared up.</i>	<i>Internal audit's failure to visit the site so far indicates that the programme of monitoring sites is inadequate. Health and safety weaknesses may not be identified for some time, as staff will only try to remedy them when an audit is due. Internal audit should visit sites, where health and safety risks are particularly high, more frequently.</i>	<i>Internal audit's failure to visit the site so far and the fact that the visit is scheduled rather than unannounced indicates that the programme of monitoring sites is inadequate. Health and safety weaknesses may not be identified for some time. If staff know when the visit will be, they can make sure the site complies when the auditors are there, but are lax at other times. Internal audit to visit sites, where health and safety risks are particularly high, more frequently and on a surprise basis.</i>
	0	1	2	4

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
3 (c) <i>Commercial acumen skills in identifying benefits that will apply to CC in establishing a separate risk committee</i>	<i>The candidate has not shown commercial acumen. The candidate has not linked the benefits given to CC's circumstances.</i>	<i>The candidate has shown limited commercial acumen. The candidate has made some attempt to link the benefits given to CC's situation, but the candidate has not given good and clear reasons why establishing a risk committee will benefit CC.</i>	<i>The candidate has presented a briefing paper which has shown good commercial acumen. The candidate has explained the reasons given for establishing a separate risk committee in terms of what is advantageous for CC.</i>	<i>The candidate has presented a briefing paper which shows excellent commercial acumen. The candidate has strongly justified the reasons given for establishing a risk committee in terms of what is advantageous to CC and the candidate has made good use of data in the exhibits to support their arguments.</i>
<b>Example</b>	<i>CC must operate a risk committee to fulfil corporate governance requirements like Sarbanes-Oxley. Like the audit committee, the risk committee must consist of independent non-executive directors who do not have any links with CC. It is right for non-executive directors to be involved as Risk is one of the four Higgs report requirements, along with Strategy, Scrutiny and People. The risk committee of CC will be able to oversee risks, carry out risk management and employ a risk manager. They can use their different experiences when they are on the committee. It will be best if the non-executive directors on the audit committee and those on the risk committee are the same, to ensure risks are managed in CC and the same systems are used.</i>	<i>A risk committee will help CC fulfil the corporate governance requirements to manage risk effectively. Like other board committees, the risk committee should consist of non-executive directors, to preserve its independence from executive management. Non-executive directors will not have day-to-day responsibilities and can therefore look from the outside at the risks CC is facing, as they have knowledge of the business from an external perspective. They may have experience of risks which they can use at the risk committee. The non-executive directors who are on the risk committee may be different from those on the audit committee.</i>	<i>CC is required by the Sarbanes-Oxley requirements and other guidance such as the UK code to operate an audit committee consisting of independent non-executive directors. This requirement does not apply to the risk committee. It is likely to be best if the risk committee had both executive and non-executive directors. Executive directors have day-to-day knowledge of CC's operations and can look at risks regularly. Non-executive directors can look at risks 'from the outside' with a wider perspective. Non-executive directors may also know a lot about dealing with specific risks, such as contract management and health and safety which are important for CC.</i>	<i>The current audit committee must fulfil governance requirements and therefore consists of independent non-executive directors. A separate risk committee will not need to fulfil this requirement. It would be advantageous for it to consist of a mix of executive and non-executive directors. Executive directors can contribute knowledge of how the risks the committee is reviewing affect CC operationally. They may also have more time to commit to the risk committee's activities. Non-executive directors will be able to take a wider perspective and look at the overall risk picture CC is facing. They may also have expertise in managing specific risks such as contract management or health and safety that are important for CC.</i>
	<b>0</b>	<b>0.5</b>	<b>1</b>	<b>2</b>

- 4 Up to 2 marks for each relevant item included on each slide and discussed in the supporting notes, up to a maximum of 6 marks per slide.

The following are points which may be included under investment in big data and opportunities for undertaking infrastructure management:

**Big data investment**

- Maximise use of available data about traffic, road conditions, weather impact
- Use data to forecast road problems and traffic usage, to determine maintenance programme
- Use data to inform road users of delays and prompt actions by CC
- Costs – set-up, security, data interpretation
- Internal systems – compatibility with SiteSmart, other uses of data

**Infrastructure management**

- Service development opportunity
- Enhances geographical development (Beta)
- Enhances chances of winning contracts (Alpha)
- Long-term, smooth income source
- Income uncertainties – fees and tolls
- Uncertainties over maintenance costs

(Up to a maximum of 8 marks in total)

Professional skills may be additionally rewarded as in the following rubric:

How well has the candidate demonstrated professional skills as follows:	Not at all	Not so well	Quite well	Very well
4 Communication skills in presenting concise slides and clear supporting notes	<i>The candidate has demonstrated poor communication skills. The candidate has failed to present the information clearly in an unambiguous way. The candidate has not presented the answer in an appropriate slide and notes format, or tone for the board.</i>	<i>The candidate has demonstrated some basic communication skills. The candidate has presented two slides and supporting notes. However, the candidate's slides contain too many or too few points. The candidate's notes fail to explain the main points adequately for the board, and do not link clearly to the slides. The candidate's notes are not in an appropriate tone for the board.</i>	<i>The candidate has demonstrated good communication skills. The candidate has presented two slides and supporting notes in appropriate formats. The candidate's slides and notes are mostly concise and generally clear, and most of the supporting notes would be helpful for the board.</i>	<i>The candidate has demonstrated excellent communication skills. The candidate's two slides and notes are effectively and clearly structured. All of the supporting notes add value to the points made in the slides and would be helpful for the board. The candidate has used an appropriate tone for the board.</i>
Example	<i>The Ansoff matrix shows why we should provide this service.</i>	<i>Providing the infrastructure support would be a new service in existing locations, equivalent to product development in the Ansoff matrix.</i>	<i>Providing the infrastructure support would be a new service in existing locations equivalent to product development in the Ansoff matrix.  As well as providing new services, CC may be able to gain construction contracts if it can offer infrastructure management as well once the contracts are completed.</i>	<i>Providing the infrastructure support would be a new service in existing locations, equivalent to product development in the Ansoff matrix. CC has been trying to enhance its presence in Alpha and is trying to gain a presence in Beta, so providing a new service could help it in both countries. It may help CC win construction contracts if it can also offer to provide infrastructure management of roads after they are built.</i>
	0	0.5	1	2