



## **How to Write a DRMP Memo**

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### **Introduction**

There are many areas of skill and knowledge in decision and risk management that are difficult to test using multiple choice questions. These include the capability to quickly grasp a situation (including the non-technical aspects of politics, bias and so on), to understand how various principles, practices and appropriate terms apply to a situation, to synthesize this information into a supported recommendation and finally to communicate all this in a way that the audience will understand it. Testing these skills and knowledge is the purpose of the written “memorandum” (memo) part of the DRMP examination.

The memo part of the examination requires candidates to demonstrate not only communication skills but technical and non-technical insight regarding a challenging DRM workplace scenario. Candidates will select a scenario, study it, and then draft a memo to the appropriate recipient demonstrating the candidate’s ability to efficiently organize thought and communicate effectively while demonstrating their perception of the complexities of the scenario situation and optional responses.

### **Memo Development**

The word “development” in this section heading emphasizes that a memo (or its email or other equivalent) should be developed; i.e., planned, structured and outlined before committing words to paper or screen. Planning is not first nature to many experienced candidates who quickly scan a scenario and jump to conclusions without supporting their case. Perhaps this is because experts have seen similar situations many times before and don’t read the words and/or have earned the trust of their organization and have become accustomed to being taken at their word and not presenting options and so on. DRMP Candidates should not make this mistake; one must assume the memo situation is unique in some way and that they are being judged by the quality of the memo.

The first step in developing a memorandum is to read the scenario several times. Read each word. All scenarios will have both technical and non-technical situations, facts and circumstances; all of these that are relevant should be considered in the memo content.

The next step is to outline the memo. Use scratch paper. Do not jump into writing. The classic memorandum description in the literature applies to the DRMP exam; it typically has these components:

- Heading/Address Info
- Introduction or Purpose
- Body
- Recommendations (including options and supported as appropriate)

- Conclusion

Outlining this structure and annotating the outline with key points helps the candidate to build a logical, supported case and transition from one point to the next. The recipient will also be able to follow the candidate's thought process if the memo is well structured. Writing the memo should be a matter of fleshing out the outline. A memo that includes these components, and any depth of analysis, will generally require 300 words or more.

One may or may not put these or similar headings in their memo; transitions are a matter of the writer's style. However, the final memo should be "readable"; not solely an outline or list of facts or points. The memo components are described in the next section for the purposes of guiding typical business memo development.

## **Memo Content**

### Heading

A memo heading typically includes: To, From, Date and Subject. We all know the frustration of emails or memos with meaningless subjects. A recipient should not have to read the memo to have some idea of what it will be about; it is a courtesy to the recipient to be clear.

### Introduction

Memo introductions usually include one or more sentences stating the purpose which should be related to the subject line. It can be useful to briefly state the general recommendations without details; i.e., a "heads-up" to get their attention (e.g., "I will be recommending we significantly revise our process.")

### Body

The body of the memo should usually include several paragraphs analyzing the scenario including technical (process, practices, tools, organization, etc.) and non-technical (e.g., politics, bias, cultural, etc.) issues. The body may start with briefly summarizing the scenario. The analysis may cover the meaning and importance of the situation and its' potential impact if not addressed. To guide analysis, it is useful to ask yourself "what principle(s) come into play in this scenario?" and then "what practices best address that principle?" (which may not be the practice one is most familiar with).

### Recommendations

Next, a memo should include one or more paragraphs with recommendations that are tied back to the scenario situation and its analysis. Where applicable, recommendations should be supported or backed up by referencing applicable standards; use what you learned elsewhere in the Study Guide about AACB's TCM, Recommended Practices or other standards. Most scenarios have a main issue, and one or more side issues to address; cover them all as appropriate. Optional approaches should be covered as appropriate. Assume that you need to gain the audience's trust through demonstrating your knowledge; however, lists and dissertations of extraneous or irrelevant information are not advised.

### Conclusions

Wrap up the memo with a paragraph or two summarizing the recommendations or highlight those that should have priority. There should also be an appropriate closing sentence about how to contact the writer for follow-up information, actions or to answer questions.

## Example

### Example Scenario

Middling Company's Risk Manager, you have just received a copy of a contingency estimate prepared by a consultant for a strategically important project for your company (Project Alpha). It is the largest project your company, which has a weak project system, has ever done. The contingency estimate was initiated by the Alpha Project Manager without your awareness, but the business Project Sponsor has asked you to review it because company policy requires your sign-off on contingency estimates at the full-funding or sanction decision review gate 3 (Alpha project's current stage.)

The project base estimate was \$1.0 billion, and the consultant's probabilistic contingency estimate was \$50 million at a p50 level of confidence (the company's policy is to fund at p50.) The p10/p90 range of project cost was \$0.97 to \$1.12 billion. In your review you did not find any reference to the project's risk register that has been maintained throughout the current design phase. The contingency analysis was done by the consultant assigning ranges to estimate items and running a Monte Carlo Simulation.

The major risks in the register include the complex project's remote and environmentally sensitive location, a fast-track schedule and labor shortages for engineering and construction. Middling company's estimator has told you that based on her review the base estimate is consistent with AACE Class 4.

You have concerns about the contingency estimate methods and the results and are not prepared to sign-off on it; however the PM has made it very clear to you that he is very happy with the contingency estimate and is anxious to get this project through the decision gate without delay. Prepare a memo to the Project Sponsor about the situation including recommendations for disposition of the contingency estimate.

### Example Analysis

Read the words. Break down the scenario fundamentals into an outline of some sort. Then, ask yourself "what principle(s) come into play in this scenario?" and then "what practices address that principle?" Use these to put together and support your recommendations. The following is an example of a thought process to gather facts and supporting information:

The fundamentals, facts and observations of this scenario are:

- A strategic project (implies that failure will have material impact on the company profitability)
- A phase-gate process is being applied: project at the full funding decision gate (no going back)
- PM has not involved the company risk manager (you) for some reason
- Consultant's methods seem suspect (limited team input, unadorned ranging of estimate items with no reference to risk register, no mention of cost/schedule integration in risk analysis)
- There are major "systemic" risks (poor scope definition, weak project system, complexity, location, and environmental issues.)
- A contingency of 5% at p50 (funding policy) and worst case of 12% (do not know how the company uses low/high values in evaluating the business case for decision making)
- Given the above, you are not prepared to sign-off, but you must respond

The principles and practices involved (both technical and non-technical) are:

- Organizational: addressee is the *business project sponsor (with assumed decision authority)*
- Decision Making: Class 3 is typical definition at full funding, not Class 4 (RP 18R-97)
- Decision Making: Does the company employ sensitivity analysis in its profitability models (i.e., are they aware of the importance of the p90 value?) (TCM 3.3)
- Risk Management Process: this issue relates to the *quantitative risk analysis and contingency estimating step* in Risk Assessment (TCM 7.6 process map)
- Contingency Estimating Principals: recommended quantification methods should explicitly link risks and their impacts, should be based on input from those knowledgeable of the risks, and should integrate cost and schedule (RP 40R-08)
- Contingency Estimating Methods: For significant *Systemic* risks, empirically based parametric risk models are suggested (RP 42R-08)
- Bias: the scenario implies that the PM and possibly the Business Sponsor are just going through the motions and may not be receptive to more rigor in analysis; particularly if it counters the apparent optimistic analysis outcome (need to buttress the recommendation with industry best practices (e.g., RPs)
- Politics: relationship/trust between/among the contingency estimating consultant, the PM and the Project Business Sponsor (care needed in making personal challenges; note ways to do it better rather than too negative of an attack on what was done)

Now that one has noted points such as this on scratch paper (as can be seen, even in this short scenario, there are many issues), a memo can be fleshed out.

Example Memo (word count about 400)

To: (make up a name for Business Sponsor)

From: (make up a name for yourself: Risk Manager)

Date: (exam date)

Subject: Project Alpha Contingency Estimate Review for Gate 3

As requested, I have reviewed the subject contingency estimate. I am not prepared to sign-off on the estimate as-is. This memo summarizes my reasons and recommends best practices to improve the contingency estimate in a way that does not delay the gate review too much.

First, I note that Project Alpha is of strategic importance and as such it is critical that the cost distribution from the risk analysis and contingency estimate realistically reflect the range of cost outcomes from the identified risks so that there will be confidence in project success. It is assumed the range will be used in business case modeling (in that case, the business should test if the project is still profitable at the p90 level.)

For a strategic project, I think all would agree that best practices are in order. In that regard, it is not clear that the identified risks (see attached risk register) have been fully considered in the contingency estimate, particularly the systemic risks which are significant. AACE Recommended Practices, which we have used in the company in the past, indicate that we should make sure our methods explicitly link the contingency estimate to the identified risks. AACE further recommends parametric estimating for quantifying systemic risks which are significant for this project (i.e., Class 4 scope definition, weak project system, complexity, location, and environmental issues.)

I recommend that the risk analysis and contingency estimate be redone using AACE Recommended Practices. This includes parametric analysis for *systemic* risks (a model is available from AACE for this) and the Expected Value method with Monte Carlo Simulation which will leverage the *project-specific* risks already identified in our risk register. We should also assure that schedule risk analysis is integrated with the cost risks analysis; the methods above address this (a CPM-based risk analysis method is not advised given the quality of planning at this stage).

With the Board meeting coming shortly, I recommend that we meet ASAP with the PM to plan the work. The main tasks include a session with key stakeholders to rate the systemic risks and a workshop with team members to screen and quantify project-specific risks. Input from the consultant will be important and we should see if he can help facilitate these sessions if appropriate.

I am confident that if we apply these best practices, it will result in a much better basis for the business to make its investment decision. I can be reached anytime at myemail@middling.com or x-1234 to answer any questions.