



2000-643 Final Report

Regional Audit of Construction and A&ES Contracting - Western Region

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Executive Summary

Authority for the Project

This audit was included in the 2000/2001 Audit and Review Plan approved by the Audit and Review Committee (ARC).

Objective

To determine the extent to which construction and architectural & engineering services (A&ES) contracting practices and controls within Western Region comply with key Government Contracts Regulations, central agency policies/guidelines, departmental policies/guidelines, trade agreements and other applicable legislation, and approved sectoral/regional practices, thereby reflecting prudence and probity.

Scope

The scope of the audit included key contracting practices and controls employed in the Edmonton Office, Western Region, from the time contracting personnel were made aware of a construction or A&ES requirement until the time the project was completed and the contract file was closed. A total of 31 competitive and non-competitive construction and A&ES contracts were reviewed with a total combined final contract value of approximately \$20 million. The Detailed Examination Phase of the audit was conducted between October 30 and November 10, 2000.

Background

Periodic audits of construction and A&ES contracting

The objective of government contracting is to acquire goods and services, and to carry out construction, in a manner that enhances access, competition and fairness, and results in best value or, if appropriate, the optimal balance of overall benefits to the government and the Canadian people. Government policies, guidelines and processes have been designed to achieve this objective in a cost-effective manner.

Audit and Review Branch (ARB) conducted a review of construction contracting practices in 1999/2000 within the National Capital Area (NCA). Subsequently, ARC approved similar audits to be undertaken on a rotational basis in the regions. Beginning this fiscal year, A&ES contracting was added to the scope. Western Region was selected as the auditee for the current audit based on an analysis of regional contracting business volumes.

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Changes to delegated authorities

On July 17, 1998, the Delegation of Authorities instrument relating to construction and A&ES contracting was amended so that Real Property Services Branch (RPSB) staff may approve contract changes up to a cumulative aggregate of \$25K for competitive and \$10K for non-competitive contracts. These approval amounts also apply to contracts issued by Supply Operations Service Branch (SOSB) on behalf of RPSB. Amendments exceeding these cumulative amounts would be subject to approval levels within the regional Real Property Contracting (RPC) unit/SOSB, or higher, as per the limits outlined in the delegation instrument.

In an effort to maintain an efficient approval process, SOSB and RPSB jointly developed an implementation paper in February 1999 which allows for Pre-approved Amounts for Anticipated Amendments (PAAA). Recognizing that in many cases construction contract change orders (amendments) can be somewhat predictable, the procedure allows RPSB to seek approval, through the contracting officer at the time of contract approval, for an amount which estimates the value of anticipated change orders.¹ The PAAA estimate is based on a detailed risk analysis which breaks anticipated changes down into three categories: unscheduled work, work arisings, and design changes.

The above mentioned changes have created two approval scenarios:

1. Change orders which do not fall within the PAAA are subject to the normal authorities outlined in the Delegation of Authorities Instrument.
2. Change orders falling within one of the three PAAA categories are subject to the same RPSB approval authorities. However, PAAA amendments which exceed RPSB approval levels can be approved by RPC/SOSB personnel using the appropriate *non-competitive* contract entry approval authority, not to exceed the lower of the Director level or the original approval Authority.²

While approval of the PAAA does not amount to *pre-approval* of future change orders, it does allow for a more streamlined approval process should future change orders fall within the pre-defined categories. That is, such amendments which exceed RPSB approval authority levels can be approved by the appropriate departmental contracting authority no higher than Director.

¹ It is important to note that it is only the estimated dollar amount which is being approved, not the advance approval to issue amendments.

² Policy Notification 35 dated July 17, 1998, Section 2.

Key Findings

The content and application of certain Western Region Operating Instructions are inconsistent with the PWGSC Delegation of Authority instrument relating to the amendment of construction contracts.

Western Region's Contracting Operating Instructions dated March 10, 2000 were generally found to be useful and considered a positive initiative in providing direction to staff. However, an exception to this observation was noted in relation to construction contract change orders (amendments), specifically instruction 3.11. Instruction 3.11 allows Real Property personnel to issue certain types of construction contract change orders provided that one of two sub-elements of the instruction are met, specifically:

- that supply officers are notified in writing of the change and estimated cost; or,
- in urgent situations, that supply officers are notified verbally.

It was observed that the provision of notification to the contracting authority by Real Property personnel was not consistently done as per these operating instructions. More importantly, such written and oral notification of impending change orders does not amount to approval, as required by the current delegation of authorities instrument. As a result, in cases where the cumulative value of change orders exceeds the RPS approval authority limit of \$25K, instruction 3.11 is inconsistent with the established Delegation of Authorities framework in that it allows Real Property personnel to issue such change orders with minimal RPC involvement.

Overall, pre-award activities conducted appropriately.

Sourcing and the handling of contract award approvals were particularly well handled. The following exceptions relating to the solicitation and bid evaluation stages were noted:

- little or no documentation on file regarding site visits for construction contracts;
- minimal contracting officer involvement in conducting evaluations;
- absence of narrative to support evaluation scores.

Overall, A&ES contract change orders were appropriately approved and administered.

Opportunities for improvement include identifying whether change orders are subject to the PAAA, and ensuring that running totals are kept on file which would monitor the PAAA amount.

Construction contract change order administration requires strengthening.

A means of monitoring change orders, particularly those subject to the PAAA, is necessary to determine the appropriate approval authority levels involved. Construction contract files reviewed by the audit team generally did not indicate whether or not a change order was subject to the PAAA, nor were running totals kept on file which would monitor the PAAA amount.

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Moreover, change order logs, which facilitate the monitoring and administration of change orders, were not found on the contracting file and in many cases were not on the project manager's files.

It was also observed that the quality of the risk analyses associated with each PAAA varied. In most cases, there was little or no analysis of each risk item, and the descriptions of the various risks identified in the PAAA were often vague, making it difficult to determine whether future change orders were subject to the PAAA or not.

Conclusions

Instruction 3.11 is inconsistent with the established Delegation of Authorities framework. Adherence to the contracting authorities delegated by the Minister is essential to the integrity and effectiveness of financial administration in the department by ensuring an appropriate segregation of duties. It also is mandatory under the Financial Administration Act.

With respect to the specific A&ES and construction contracts reviewed, it was found that, overall, the contracting process was working appropriately. Increased attention in the following areas would improve the administration of such contracts and would help ensure transparency and consistency in the process:

- documentation of site visits, particularly for those which are mandatory as per the solicitation documents;
- increased contracting officer involvement in evaluating proposals;
- use of narrative support for evaluation scores;
- consistent use of change order logs to ensure proper tracking and control of the change order and PAAA process;
- development of more detailed risk analyses in support of pre-approved amounts of anticipated amendments.

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Recommendations

It is recommended that:

1. *The Assistant Deputy Minister, SOSB ensure that Western Region's operating instruction 3.11 is revised, and in addressing regional characteristics, ensure delegated authorities are respected. Such procedures should be preferably developed in consultation with other regions and SOSB.*
2. *The Director General, Western Region:*
 - *Direct the immediate revision of Western Region's operating instruction 3.11, and provide appropriate guidance to staff, to ensure that delegated authorities are respected.*
 - *Take action as required to ensure that all operating instructions used in the Region are fully consistent with policies and procedures established for the Supply Operations Service Branch by the Assistant Deputy Minister.*
 - *Inform the Assistant Deputy Minister, SOSB, when the required actions have been completed.*
3. *The remaining Regional Directors General:*
 - *Direct the review of operating instructions in use in their Regions, to ensure that they are fully consistent with policies and procedures established for the Supply Operations Service Branch by the Assistant Deputy Minister.*
 - *Inform the Assistant Deputy Minister, SOSB, when the required actions have been completed.*
4. *The Assistant Deputy Minister, SOSB:*
 - *Ensure Western Region's administration and monitoring of change orders is strengthened through up-front identification of PAAA change orders, use of detailed and complete PAAA risk analyses, and maintenance of change order logs for each contract.*

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1 Introduction

1.1 Authority for the Project

This audit was included in the 2000/2001 Audit and Review Plan approved by the Audit and Review Committee (ARC).

1.2 Objective

To determine the extent to which construction and architectural & engineering services (A&ES) contracting practices and controls within Western Region comply with key Government Contracts Regulations, central agency policies/guidelines, departmental policies/guidelines, trade agreements and other applicable legislation, and approved sectoral/regional practices, thereby reflecting prudence and probity.

1.3 Scope and Methodology

The scope of the audit included key contracting practices and controls employed in the Edmonton Office, Western Region, from the time contracting personnel were made aware of a construction or A&ES requirement through a requisition or other means, until the time the project was completed and the contract file was closed.

The Detailed Examination Phase of the audit was conducted between October 30 and November 10, 2000. A series of management and staff interviews were conducted within the Supply and Real Property units in Western Region's Edmonton Office. Using a compliance methodology, a total of 31 construction and A&ES contracts were reviewed with a total combined final contract value of approximately \$20 million. The construction contract sample consisted of contracts whose final values ranged between \$29K and \$5.4M and awarded between January 1, 1999 to March 31, 2000. The bulk of the A&ES sample consisted of agreements valued between \$30K and \$517K and issued after June 1999³. Both competitive and non-competitive contracts were included in the scope.

Each contract was reviewed in detail through examination of the associated contracting and project management files, as well as follow-up interviews with contracting officers and project managers where required.

³ The process used to contract for A&ES consulting services underwent a significant change in June 1999. One contract was reviewed prior to that date for comparison purposes.

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1.4 Background

Periodic audits of construction and A&ES contracting

The objective of government contracting is to acquire goods and services, and to carry out construction, in a manner that enhances access, competition and fairness, and results in best value or, if appropriate, the optimal balance of overall benefits to the government and the Canadian people. Government policies, guidelines and processes have been designed to achieve this objective in a cost-effective manner.

Audit and Review Branch (ARB) conducted a review of construction contracting practices in 1999/2000 within the National Capital Area (NCA). Subsequently, ARC approved similar audits to be undertaken on a rotational basis in the regions. Beginning this fiscal year, A&ES contracting was added to the scope. Western Region was selected as the auditee for the current audit based on an analysis of regional contracting business volumes.

Changes to delegated authorities

On July 17, 1998, the Delegation of Authorities instrument relating to construction and A&ES contracting was amended so that Real Property Services Branch (RPSB) staff may approve contract changes up to a cumulative aggregate of \$25K for competitive and \$10K for non-competitive contracts. These approval amounts also apply to contracts issued by Supply Operations Service Branch (SOSB) on behalf of RPSB. Amendments exceeding these cumulative amounts would be subject to approval levels within the regional Real Property Contracting (RPC) unit/SOSB, or higher, as per the limits outlined in the delegation instrument.

In an effort to maintain an efficient approval process, SOSB and RPSB jointly developed an implementation paper in February 1999 which allows for pre-approved amounts for anticipated amendments (PAAA). Recognizing that in many cases construction contract change orders (amendments) can be somewhat predictable, the procedure allows RPSB to seek approval, through the contracting officer at the time of contract approval, for an amount which estimates the value of anticipated change orders.¹ The PAAA estimate is based on a detailed risk analysis which breaks anticipated changes down into three categories: unscheduled work, work arisings, and design changes.

The above mentioned changes have created two approval scenarios:

1. Change orders which do not fall within the PAAA are subject to the normal authorities outlined in the Delegation of Authorities Instrument.
2. Change orders falling within one of the three PAAA categories are subject to the same RPSB approval authorities. However, PAAA amendments which exceed RPSB approval levels can be approved by RPC/SOSB personnel using the appropriate *non-competitive*

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contract entry approval authority, not to exceed the lower of the Director level or the original approval Authority.⁵

While approval of the PAAA does not amount to *pre-approval* of future change orders, it does allow for a more streamlined approval process should future change orders fall within the pre-defined categories. That is, amendments which exceed RPSB approval authority levels can be approved by the appropriate departmental contracting authority no higher than Director.

⁵ Policy Notification 35 dated July 17, 1998, Section 2.

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2 Issues Examined

Issues examined during the Detailed Examination Phase fall into two categories - assessment of key management controls and contract file reviews.

Assessment of Key Management Controls:

Key management controls were assessed in terms of their contribution to effective contracting that reflects both prudence and probity. Specific review areas included contracting/project management policies and procedures, the contract quality assurance process, and human resource initiatives aimed at ensuring an appropriate competency level among contracting staff (eg. training, staffing). These areas were assessed based on a series of interviews with management and staff associated with construction and A&ES contracting/project management and a review of relevant documentation.

Contract File Reviews:

For each construction and A&ES contract reviewed, the audit examined contracting practices relating to the entire procurement process. Therefore, the audit issues associated with contract file reviews pertain to the extent to which the various phases of the contracting process, from requisition to contract administration, were conducted appropriately and in compliance with government policy, trade agreements, and applicable legislation. In particular, the audit focused on sourcing, bid solicitation, bid evaluation, the change order (amendment) process, and use of delegated contracting authorities.

The audit findings are presented in the following section according to the above-mentioned categories.

3 Findings, Conclusions and Recommendations

3.1 Assessment of Key Management Controls

Key management controls were assessed by the audit team based on a series of interviews as well as the review of construction and A&ES files and other relevant documentation. The main findings are presented below:

3.1.1 The content and application of certain Western Region Operating Instructions are inconsistent with the PWGSC Delegation of Authority framework relating to the amendment of construction contracts.

In March 2000, subsequent to changes made to the delegation of authorities framework in July 1998, Western Region developed a set of operating instructions for real property contracting.⁶ While, overall, these were found to be useful and considered a positive initiative in providing direction to staff, exceptions were noted in the sections relating to construction contract amendments, specifically instruction 3.11. Instruction 3.11 allows Real Property personnel to issue construction contract change orders subject to PAAA beyond their delegated authorities, provided that one of two sub-elements are met (sections 3.11.2 & 3.11.3). ARB noted the following with respect to these instructions.

i) Instruction 3.11.2 calls for proposed changes, including estimated costs, to be forwarded to RPC personnel prior to or at the same time as such changes are submitted to the Contractor for pricing, or if pricing is already established, prior to any direction given to the Contractor. It was observed that the provision of such written notification to RPC by Real Property personnel was not consistently done. More importantly, it was observed that instruction 3.11.2 is a means of notification and does not amount to approval by the contracting authority, as required by the current delegation instrument.

ii) Instruction 3.11.3 states that, in urgent situations where written notification is not possible, RPSB officers are to discuss potential change orders with the RPC contracting officer. While the audit team found several instances where contracting files lacked copies of change order documentation, such files generally did not document whether urgent situations were applicable and if so, whether the required discussions took place between RPC and Real Property personnel. Nevertheless, notification, whether it be written or otherwise, does not amount to approval by the contracting authority as required by the delegation instrument.

⁶ Western Region Contracting Operating Instructions, Real Property Services Branch (RPSB) Interface dated March 10, 2000.

Conclusion

In cases where the cumulative value of change orders subject to PAAA exceeds \$25K, instruction 3.11 is inconsistent with the established Delegation of Authorities framework in that it allows Real Property personnel to issue such change orders with minimal RPC involvement.

Adherence to the contracting authorities delegated by the Minister is essential to the integrity and effectiveness of financial administration in the department by ensuring an appropriate segregation of duties. It also is mandatory under the Financial Administration Act.

Recommendation

It is recommended that:

1. *The Assistant Deputy Minister, SOSB ensure that Western Region's operating instruction 3.11 is revised, and in addressing regional characteristics, ensure delegated authorities are respected. Such procedures should be preferably developed in consultation with other regions and SOSB.*
2. *The Director General, Western Region:*
 - *Direct the immediate revision of Western Region's operating instruction 3.11, and provide appropriate guidance to staff, to ensure that delegated authorities are respected.*
 - *Take action as required to ensure that all operating instructions used in the Region are fully consistent with policies and procedures established for the Supply Operations Service Branch by the Assistant Deputy Minister.*
 - *Inform the Assistant Deputy Minister, SOSB, when the required actions have been completed.*
3. *The remaining Regional Directors General:*
 - *Direct the review of operating instructions in use in their Regions, to ensure that they are fully consistent with policies and procedures established for the Supply Operations Service Branch by the Assistant Deputy Minister.*
 - *Inform the Assistant Deputy Minister, SOSB, when the required actions have been completed.*

3.1.2 Contract Quality Assurance Process requires improvement.

Interviews with Western Region management and staff, and a review of contract files for both A&ES and construction contracting, revealed that contract quality assurance activity requires strengthening. Specifically, there was an overall lack of periodic spot checks, pre and post audit reviews, peer reviews, and other types of quality assurance activities that would help ensure contracts were being handled according to policy, legislation, and best practices. As of November 2000, the Manager of Contracting Services, Western Region, was implementing a quality assurance process with the assistance of the SOS advisory group that will address pre and post-audit reviews of contract files.

Conclusion

Contract quality assurance not only provides management with a level of comfort that contracting is being conducted effectively and in compliance with the policy framework, but it is also a key driver in organizational learning. Sharing results from such reviews is a key training opportunity, and is particularly important in this region given the recent departures of experienced staff in the area of real property contracting. Western Region's recognition of this issue and its proactiveness in responding to it are duly noted by the audit team and, consequently, no formal recommendation is required.

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3.1.3 Other key management controls are adequate

No major issues arose with respect to the remaining management controls assessed. A brief overview of the assessment is provided below.

3.1.3.1 Best Practices

Regional Directors have recently initiated a process for developing Best Practices for staff regarding contracting issues. These are in addition to those developed by NCA, which are applied in Western Region as appropriate.

3.1.3.2 Training

Training modules have been and continue to be developed in both the Project Management and Real Property Contracting (RPC) areas. This is considered a good initiative, particularly due to the amount of staff turnover underway. Based on our review of the files, more training could be done to ensure project management staff understand the need to keep contracting officers informed of developments in the project. Specific training requirements for RPC staff may also be identified from the file review findings of this audit.

3.1.3.3 Staffing

Staffing actions are in the process of being conducted to replace recent departures. The audit team also noted that a senior RPSB technical specifications writer has been assigned temporarily to the RPC unit to offer expertise to procurement staff re: specifications. This type of initiative seems to be working well, particularly as it provides RPC with real property technical expertise.

Conclusion

The above-mentioned elements of the management control framework appear to be working effectively and are considered adequate.

3.2 Review of Construction and A&ES Contract Files

A detailed review of 31 A&ES and construction contract and project management files was conducted by the audit team, which included follow-up interviews with relevant Real Property Contracting (RPC) officers and Real Property personnel. The main findings are presented below, according to pre-award and post-award activities.

3.2.1 Pre-award activity (sourcing, bid solicitation, bid evaluation, contract award)

3.2.1.1 Sourcing processes used appropriately

The audit team found that sourcing for both construction and A&ES contracts was conducted in accordance with the policy and procedures framework. Use of the Government Electronic Tendering Service - GETS (for electronic bidding requirements), SPEC (for A&ES contracts), and ACCORD (for construction contracts) was found to be appropriate.

3.2.1.2 Overall, bid solicitation processes used appropriately

The bid solicitation processes for both construction and A&ES contracts were conducted in accordance with the policy and procedures framework. The noted exception was the overall lack of documentation on file regarding site visits for construction contracts.

It was observed that, for both mandatory and optional site visits, little or no documentation was on file to indicate whether or not the site visits took place and who attended. In all cases, there was no record of questions & answers (Q&As) that would have arisen from such meetings, and in all cases, the RPC officer was not involved.

3.2.1.3 Evaluation process could be strengthened

For most A&ES contracts which involved an evaluation of proposals, Real Property personnel conducted the evaluations, with contracting officer involvement limited to the opening of cost envelopes and in adding the technical and cost scores. In all cases, no narrative support to the numerical rating scores was found on either the contracting or project management files. In approximately half of these cases, the consensus scoring sheet was not signed by all members.

Although narrative support for ratings was not provided, the audit team was informed that Evaluation Board Procedures are used by Real Property personnel in order to assist in differentiating between numerical scores. However, the

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numerical rating sheets found on file did not make reference to these procedures, which were found by the audit team to be generic in nature.

3.2.1.4 Contract award approvals handled appropriately

Overall, contracts were found to be awarded in accordance with the contract planning and approval documents.

Conclusion

Pre-award activities, particularly sourcing, bid solicitation, and contract approval, were found to be working effectively. Documentation of site visits should be improved, however, particularly for those which are mandatory as per the solicitation documents.

With respect to A&ES proposal evaluation, while it is recognized that contracting officers typically do not have the technical knowledge to rate the proposals, their involvement is beneficial in ensuring consistency and fairness in the process. Moreover, narrative support, along with board member signatures, would provide appropriate assurance to contracting officers that the evaluations were appropriately conducted. This is particularly key since contracting officers are not typically involved in such boards in this region.

Finally, while the Evaluation Board Procedures seem to provide useful guidance during the rating process, actual narrative which speaks to each proposal is suggested by the audit team, using the existing procedures as a guide. At the very least, such procedures should be attached to the rating scales on file, with specific references made where necessary.

3.2.2 Post Award Activity

3.2.2.1 Overall, A&ES contract change orders were appropriately approved and administered

Approval of A&ES change orders was appropriate, as was the extent of contract officer involvement. Opportunities for improvement include identifying whether change orders are subject to the Pre-Approved Amount for Anticipated Amendments (PAAA), and ensuring that running totals are kept on file which would monitor the PAAA amount.

3.2.2.2 Certain construction contract change orders not appropriately approved.

As mentioned earlier, Western Region Operating Instruction 3.11 allows for limited contracting officer involvement for construction contract change orders subject to PAAA. Review of construction contract files verified that, in the majority of cases, contracting officers were not involved in the approval of change orders which were subject to the PAAA. As a result, such change orders which exceeded the cumulative value of \$25K (ie. RPSB delegated authority) were not appropriately approved.

3.2.2.3 Administration of Change Orders requires strengthening

As with A&ES contracts, the construction contract files generally did not indicate whether a change order was subject to the PAAA, nor were running totals kept on file which would monitor the PAAA amount. In no case was there a change order log on the contracting officer's file. Similarly, in many cases, no change order log was found on the project manager's file.

The quality of the risk analyses associated with each PAAA varied. In most cases, there was little or no analysis of each risk item, and the descriptions of the various risks identified in the PAAA were often vague.

Conclusion

File reviews confirmed that certain change orders which exceeded RPS approval authority were being issued by Real Property personnel, under the guidance of Instruction 3.11. As mentioned earlier, the delegations of authority set by the Minister must be complied with in order to ensure the integrity of financial administration in the department.

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In terms of administering and monitoring change orders over the life of a contract, it is felt that a change order log would be beneficial to ensure proper tracking and control of the change order and PAAA process. Similarly, a sound and complete risk analysis which supports the PAAA instills discipline early in the planning of a contract and facilitates the management and control of change orders during its life cycle.

Recommendation

4. *The Assistant Deputy Minister, SOSB:*

- *Ensure Western Region's administration and monitoring of change orders is strengthened through up-front identification of PAAA change orders, use of detailed and complete PAAA risk analyses, and maintenance of change order logs for each contract.*