



# SSHRC Management Response to Review of AMIS

The attached table provides a detailed management response to Deloitte's April 2006 review of the Awards Management Information System (AMIS). Background and Highlights are as follows:

## **Background and Contextualisation**

Deloitte's review of AMIS is part of an important series of evaluations into the performance, corporate role and governance of information management and information technology (IM/IT) at SSHRC. The past three years have presented unique challenges with respect to moving forward on recommendations of these evaluations because of the staffing situation, notably at the executive level. However, recent recruitment at the VP level in Programs is an opportunity to move forward on recommendations detailed in the report and detailed in the attached annex.

The report by Deloitte had a number of important findings summarized below with the key direction of the SSHRC management response.

## **Vision and Strategic Direction Line of Enquiry**

**Deloitte Finding:** *There is no documented Information Systems Division (ISD) vision and strategic direction to ensure AMIS is in line with the corporate business strategy and priorities.*

### **SSHRC Management Response:**

The SSHRC ESD Steering Committee approved the proposal that ISD maintain the AMIS application, in parallel to migrating to a new development platform. In so doing, we retain the legacy data and functionality of the current application while developing a replacement schedule with the Programs branch for an Awards Management Information System built on the new technology platform. The newly consolidated IM/IT functions have defined a work plan which has been endorsed and is currently being monitored by the Bi-Council IM/IT Steering Committee.

SSHRC's strategic plan provides a general context in which the new President's action plan and the agency's operational plan can provide business direction to IM/IT in reviewing its strategic priorities. With a focus on quality as a strategic objective, SSHRC's Programs Branch is prepared to take a leadership role in developing a corporate project to renew and review IM/IT business requirements related to IM/IT in the context of our renewed vision and strategic direction. This will involve working on two tracks, namely:

1. to maximise efficiency with respect to using the AMIS platform in the short term by undertaking business process and governance changes to increase quality control without dedicating substantial resources; and
2. to build a business case as of fall 2007 to acquire necessary resources to undertake a project plan, which would include a full business requirements definition, to migrate to a new IT platform within three to five years. Both these tracks will involve substantial consultation of all SSHRC Directorates.

## **Governance and Accountability Line of Inquiry**

**Deloitte Finding:** *The current governance structures for AMIS are ineffective at setting clear strategic direction for AMIS, for requiring accountability for performance in executing that direction, and for managing and monitoring the full AMIS lifecycle.*

### **SSHRC Management Response:**

For the purposes of leading a corporate project, the VP Grants and Fellowships and the VP Partnerships are prepared to take a leadership role in examining the governance and accountability of AMIS within the larger SSHRC review of governance led by the Executive Vice President. Programs-related examination of governance will be completed by December 2007. In the meantime, current practices will require approval by Programs Directors and VPs and other stakeholders as required until a new modus operandi is discussed, developed and approved.

## **Business Requirements Line of Inquiry**

**Deloitte Finding:** *The present business requirement change management process does not support the effective and timely capture, approval, and deployment of business requested changes for AMIS.*

### **SSHRC Management Response:**

A draft change management process has been drafted by IM/IT and will be reviewed by SSHRC management with their comments finalized by December 2007 at the latest. Once the new process is finalized, it will be reviewed for its applicability and use across the functional teams which maintain AMIS. In the meantime, the AMIS User Requirements Group (URG) will route change management requests for approval through the VPs of Programs.

## **System's Maintenance Line of Inquiry**

**Deloitte Finding:** *While AMIS' system maintenance processes have been effective at keeping AMIS reliable and available, the lack of an AMIS owner and of performance reporting on AMIS has not permitted an effective monitoring process.*

### **SSHRC Management Response:**

As part of an adequately resourced project to be proposed by Programs (VP Partnerships) in conjunction with the IM/IT team and subject to approval, a Service Level Agreement with IM/IT will be developed, approved and implemented to undertake effective performance reporting and monitoring.

## **Change and Problem Management Line of Inquiry**

**Deloitte Finding:** *The current change management processes adequately support effective problem management for AMIS. While processes around business requirement change management are currently inadequate, the enhancements proposed by ISD to the change management processes have been designed to address the identified weaknesses.*

### **SSHRC Management Response:**

Though SSHRC's performance in this area was rated as adequate, details in the report suggested that there was room for improvement with respect to involving a reconstituted URG in the change and problem management process. In conjunction with the proposed IM/IT change management process discussed earlier, this will be taken into consideration in the corporate project to examine the governance and accountability of AMIS and propose a new approach.

### **Conclusion**

Once the management response to the Deloitte review of AMIS has been endorsed by the Audit Committee, the VP Partnerships and the consolidated IM/IT team will propose a corporate project to review the IM/IT business requirements associated with program delivery and ancillary elements of SSHRC's mandate including reporting to Parliament and financial management. Assuming this project is approved, adequately resourced and made a corporate priority for the next several years, there is an opportunity to move forward significantly on a number of priorities identified by the Social Sciences and Humanities community, SSHRC staff and other stakeholders with respect to delivering state-of-the art electronic services.

## Annex 1 – Detailed Deloitte Recommendations and SSHRC Responses

Observations	Impacts(s)	Recommendation(s)	SSHRC Response(s)
<p><b>Strategic Direction</b></p> <p>There is currently no strategic planning for ISD that encompasses AMIS, and it is unclear how AMIS will evolve to support the strategic direction of SSHRC. It does not appear that AMIS can expand to support the Council's strategic direction; however, alternatives for replacing AMIS have not been formally assessed. AMIS' shortcomings are partly evidenced by its relatively dated technological platform, other systems developed at SSHRC (e.g. Chairs Information Management System (CIMS), and its shortcomings as an information management tool.</p>	<p>The lack of strategic planning by ISD in support of the overall strategic plan for SSHRC increases the risk of misalignment between the Council's strategic direction and the evolution of AMIS. Furthermore, AMIS is based on relatively dated client/server technology that does not easily extend to a web-based platform that would permit more interoperability with external stakeholders. Such interoperability and greater information management capabilities will further help the Council in its journey towards becoming a "Knowledge Council".</p>	<p>We recommend that ISD perform strategic planning to ensure it is aligned with the Council's strategic direction.</p> <p>We recommend to the AMIS owner that business requirements should be documented to support the strategic direction, and SSHRC should then assess what technological tools can best support these requirements, which could be an updated form of AMIS or alternatives. Alternatives could include Commercial-Off-The-Shelf (COTS) offerings, or custom development platforms such as ResearchNet for some requirements. SSHRC should also consider seeking input from other organizations that have recently implemented awards management systems to understand how recent technological advancements can better meet identified business requirements.</p> <p>As discussed in section, such business requirements should encompass both AMIS and ESD/Web Forms as both are integral parts of the same business process.</p>	<p>ISD in fact has a strategic technology plan and is currently in the process of aligning project work to newly defined Bi-Council strategic priorities and objectives and will be revisited in the next few months in light of the SSHRC strategic plan and the new President's action plan.</p> <p>Strategic priorities and objectives for all technology initiatives were defined and approved at the June 2006 inaugural meeting of the Bi-Council IM/IT Steering Committee.</p> <p>Business requirements were documented when AMIS was created. The requirements are due to be revised and will form the basis of a subsequent exercise to align our corporate toolkit to our business requirements.</p> <p>"Commercial off the shelf" (COTS), "Modifiable off the shelf" (MOTS), and "Government off the shelf" (GOTS) solutions are currently being investigated for inclusion into our toolkit or even as replacements to components of the existing toolkit.</p> <p>External organizations have been consulted over the past eighteen months. (NSERC, CIHR, FQRNT, FQRSC, FRSQ, UBC, UdeM, to name a few...)</p> <p>System-wide requirements are being considered – a new holistic approach has been sanctioned by the new Bi-Council IM/IT Steering Committee.</p>

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<p><b>AMIS Governance</b></p> <p>The current governance structures for AMIS are not centralized; do not have clearly defined and commonly understood roles and responsibilities; have authorities that are limited to AMIS and do not cover related elements such as electronic forms; and have not convened as regularly or with the appropriate quorum that was needed.</p> <p>Consequently, alternative approval and decision bodies, such as the Programs Coordination Committee (PCC) are used, and alternative approval processes, such as contacting AMIS developers directly, are used by the AMIS user community.</p> <p>In addition, due to unclear AMIS ownership, projects directly impacting on the future of AMIS such as ResearchNet developed by CIHR are not systematically discussed and approved in the AMIS governance structure.</p>	<p>The lack of one central decision making body for AMIS increases the risk that decisions will be taken affecting AMIS that are not coordinated across the organization and/or that are inconsistent with SSHRC's longer term vision.</p>	<p>We recommend that the SSHRC Management Committee designate an application owner for AMIS within the user community, ideally at the Vice President level. The Management Committee should clearly outline the AMIS lifecycle accountabilities, responsibilities, and authorities of the new AMIS application owner.</p> <p>We recommend that the new AMIS application owner work with the Director General of Common Administrative Services Directorate (DG CASD) to determine how AMIS lifecycle planning and performance reporting will be effectively and efficiently incorporated into the proposed new IM/IT governance framework for SSHRC and NSERC. The new AMIS application owner should chair any new governance body that will be tasked with oversight of AMIS and/or the replacement of AMIS based on strategic planning and business requirements definition exercises.</p> <p>We recommend that the new governance structure for AMIS also encompass Web Forms/ESD. The current segregation between AMIS and ESD is more a function of the different technological platforms and user community related to the two environments; however, both serve the same purpose of managing award-related information for SSHRC and its various stakeholders. A change in AMIS affects ESD and vice versa, and consequently, they should be managed integrally.</p> <p>We further recommend that the AMIS User Requirements Group (URG) be reconstituted with a new mandate and revised membership at a senior enough level to support its new delegated authority, which should include the prioritization and approval of business requirements change requests.</p>	<p>An application owner has been recommended within the above document.</p> <p>Accountabilities, responsibilities and authorities will be discussed within the context of a full governance review as part of SSHRC's review of governance and a project dedicated to following up to this review.</p> <p>Governance planning work is planned with the new owner.</p> <p>The new Bi-Council IM/IT Steering Committee is the appropriate first step towards governance oversight of our entire tool infrastructure. The IM / IT functions recognize that AMIS and the Web Forms engine must be treated as one system. The consolidated IM/IT function encompasses all things related to both IM and IT.</p> <p>The URG working group and its mandate have in fact been assessed and modified to promote a more efficient approach. Subsequent to the adoption of proposed governance recommendations outlined in this report, the role and composition of URG will once again be evolved.</p>

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<p><b>Data Ownership<sup>1</sup></b>  Roles and responsibilities for data ownership and administration are not communicated and commonly understood across SSHRC. For example, the Data Administration group of ISD is tasked with ensuring the currency and integrity of the institutional master data within AMIS. Additionally, interview participants commonly agreed that Finance owns all financial information relating to grant awards. It is not commonly understood, however, who within SSHRC owns the remainder of the data within AMIS.</p>	<p>This lack of clarity significantly increases the difficulty and resources required to maintain data integrity within AMIS and risks decreasing the reliability of the information and knowledge extracted from the system by users who conduct enhanced queries using the Business Objects application.</p>	<p>We recommend that the new application owner for AMIS, as de facto owner of AMIS data (<i>refer to Appendix D – Role and Responsibilities of Application Owner</i> in the original AMIS review) clearly delegates ownership of sub-sets of AMIS data to the appropriate parties, to ensure the currency and integrity of AMIS data.</p>	<p>Clarity and definition of data ownership will be brought forward to the Bi-Council IM/IT Steering Committee as part of internal process improvement initiatives proposed. Certain projects (i.e. Code Table Harmonization) have already been undertaken.</p> <p>As recommended in the Management Response, the new product owner will need to assign data ownership responsibilities across all data elements owned by Programs. In cases where data ownership resides within other directorates, ownership should be assigned to the directorate head as a first step towards complete data ownership of the entire content of AMIS.</p>
<p><b>Risk Management</b>  Largely due to a lack of clear accountability, risk management activities have not been integrated into the AMIS governance structure.</p>	<p>The lack of risk management activities increases the risk that AMIS-related risks will not be appropriately identified and mitigated, as required by TBS policies such as the Risk Management Policy, the Government Security Policy, and the Privacy Impact Assessment Policy.</p>	<p>The new AMIS application owner, in consultation with the SSHRC Management Committee, should clearly define responsibilities for AMIS-related risk management activities, such as the conduct of a Threat and Risk Assessment and a Privacy Impact Assessment for AMIS.</p> <p>As the AMIS database contains a significant amount of sensitive personal information, consideration should also be given to the identification of a privacy/security champion for AMIS.</p>	<p>Given that AMIS was modelled on an existing production product, NAMIS in NSERC, assessments did not need to be redone.</p> <p>In the near future, a Threat and Risk Assessment (TRA) for Network infrastructure is planned. This will ensure that potential subsequent assessment requirements are covered.</p>

<sup>1</sup> For the purposes of this report, data ownership refers to the ultimate accountability assigned to an individual or position to ensure controls are in place to appropriately manage and ensure the confidentiality, integrity and availability of such data.

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<p><b>Business Requirements Approval Authority</b></p> <p>There is currently a lack of a clearly defined process and authorities to capture, approve and prioritize AMIS-related business requirements.</p>	<p>This increases the risk that some business requirements will not be captured, that lower priority business requirements will be implemented in advance of higher priority requirements, or that requirements will be implemented that are not consistent with management’s intentions.</p>	<p>We recommend that the URG be given authority delegated by the AMIS application owner (or ideally that URG be chaired by the AMIS owner), within risk-based prescribed limits, to prioritize and approve business requirements change requests based on a cost/benefit analysis. For example, this could mean that only requirements that are assessed as having a “high” impact on AMIS would require approval from the IM/IT Steering Committee. All other requirement change requests would be approved directly at URG.</p> <p>We recommend that the new AMIS governance structure discuss and approve a revised business requirements capture, approval and prioritization process.</p>	<p>As previously mentioned, URG’s role and mandate will be evolved within the new proposed governance structure.</p> <p>Internal process definition and improvement initiatives have also been proposed. Roles and responsibilities of functional groups, working groups and committees will be clarified.</p> <p>The newly defined EBS (Electronic Business Solutions) team has an explicit mandate to define and manage business requirements.</p> <p>A more formal definition, approval and prioritization process is being developed within the consolidated IM/IT function.</p>
<p><b>Proposed Change Management Process Enhancements</b></p> <p>It does not appear that the proposed enhancements by ISD to the change management processes (refer to Section 2.3.2) have been formally approved by Senior Management.</p>	<p>The lack of a formal approval could result in changes to the process that are not consistent with management’s intentions. This risk is further increased by other governance-related changes that are concurrently being proposed at the Senior Management level that may impact AMIS and create a disconnect between the two sets of proposed changes.</p>	<p>We recommend that formal approval be obtained by ISD from the DG CASD and the reconstituted URG for the proposed enhancements to the change and problem management processes.</p>	<p>The Change Management Process has been proposed for use within the consolidated IM/IT function.</p>

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<p><b>Business Requirements List</b></p> <p>The current list of outstanding change requests for AMIS is not reflective of all of SSHRC's AMIS-related business requirements. For example, users go outside the current change request process and request changes directly from ISD staff, or use other systems (e.g. CIMS) to meet their business requirements.</p>	<p>This increases the risk that SSHRC will not be making AMIS planning and replacement decisions based on a comprehensive set of business requirements.</p>	<p>We recommend to the AMIS owner that a comprehensive exercise be conducted to gather all business requirements from the AMIS and ESD user community, including those that are currently fulfilled by other systems. These business requirements should be aligned with SSHRC's vision and strategic plan.</p>	<p>As part of an adequately resourced project, system-wide business requirements will be compiled as a collaboration between Programs, IM/IT and other directorates as required. An investigation into systems and processes which are common to similar institutions and funding agencies has also begun to possibly address common business requirements in a collaborative manner.</p> <p>As a first step in this exercise, IM/IT staff is being sent on the appropriate training courses to acquire the skills and an understanding of formal methods which will be used.</p>
<p><b>Performance Reporting</b></p> <p>ISD does not provide regular AMIS performance reporting to the AMIS user community or senior management of SSHRC, and no reporting requirement has been incorporated into the overall Service Level Agreement (SLA) between ISD and SSHRC/NSERC.</p>	<p>A lack of performance reporting does not allow the user community to effectively monitor compliance with the SLA and ensure an optimal use of resource.</p>	<p>We recommend that, once an AMIS owner has been clearly identified, performance reporting on AMIS be provided by ISD to the AMIS owner on a regular basis. The SLA should also be amended to clearly reflect performance reporting requirements. Reporting could include items such as:</p> <ul style="list-style-type: none"> <li>• Statistics on # of problems and change requests completed and outstanding (by order of priority);</li> <li>• Statistics on time to complete requests and related costs;</li> <li>• % of achievement of service levels; and,</li> <li>• Statistics on system uptime, etc.</li> </ul>	<p>Although performance of the system is currently monitored, it is not formally reported. Performance reporting has been proposed within the Key Performance Indicator definition exercise within CASD.</p> <p>ISD will be tasked with implementing an SLA for product performance monitoring to the new product owner. A draft has been completed and will be circulated to management in the coming months.</p>