

## System under development audit of the eBusiness project 2004 Management (Action Plans) Responses

Management Responses completed by: Christiane Villemure, Director eBusiness Initiative  
 As of: 2004/06/14

Audit Recommendation		Management Response	Responsibility Centre	Due Date
<b>Follow Up on Previous Assessments</b>				
<b><i>3.1 System Under Development Audit , September 2002</i></b>				
3.1.1	The overall issue of sharing of information and coordination of effort at multiple levels should continue to be addressed by Internal Audit in future audits, but at a more specific level to facilitate concrete improvements.	It is our experience that issues surrounding communications and governance resurface periodically during the course of a project of the magnitude of eBusiness. We agree that such issues need to be addressed on an ongoing basis. While the Audit Report does not provide any specific lines of inquiries, the eBusiness Initiative will prepare a short report outlining the governance model for eBusiness, established formal communications channels and suggestions for an action plan for concrete improvements. This will serve as the basis for the next Audit.	eBusiness Initiative	August 2004
3.1.2	The eBusiness Initiative should complete and update all Project Charters, ensuring coverage in sufficient detail to avoid ambiguity, especially in benchmark deliverables and changes.	Project Charters are prepared for all eBusiness projects and are presented to the Steering Committee for approval. However, the Audit Report is right that the Charters have not been all kept up to date, because on most occasions, other mechanisms have been used to communicate changes.	eBusiness Initiative	May 2004

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		<p>eBusiness will put in place a standing agenda item for the monthly meeting of the Steering Committee to report on progress, including scope, timeline and deliverable changes; additional information about projects as it becomes available; and adjustments made to projects. All this information will be maintained in the Project Charters, which will be updated and recirculated as needed.</p>		
3.1.3	<p>The eBusiness Initiative should ensure that approved changes are implemented as approved and not subsequently altered without approval.</p>	<p>A sign-off process by all project stakeholders was introduced at the beginning of the eBusiness initiative with the goal of obtaining a better control on project scope and deliverables. The observations of the Audit Report are correct in saying that in several instances, requirements have been changed or expanded after having been approved. The source of this problem is not due to a lack of the proper control mechanisms (proper escalation thresholds have been identified as part of the Project Management Framework), but rather to a lack of understanding of the impacts of changing the requirements after sign-off.</p> <p>A more detailed procedure and proper expectations will be formulated for staff to report changes officially in the future. The challenge in this is not the development of the procedure itself but in sensitizing staff about the fact that requirements definition is a defined task in projects with a defined timeframe that must be respected to maintain the ability to meet the deadline. A carefully-developed communication</p>	eBusiness Initiative	Sept 2004

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		<p>plan will accompany the new procedure to highlight the greater benefits and the requirements associated with this procedure.</p> <p>This is related to recommendation 5.2.1.2</p>		
<b>3.2 eSubmission Project Post-Mortem, April 2003</b>				
3.2.1	The Project Management Framework should be implemented.	<p>The Project Management Framework has been in use since its development in February 2003. Its implementation involves introducing many project management principles which are new at NSERC. Implementation has been gradual since February 2003 and will continue until fully completed.</p> <p>Done to date:</p> <ul style="list-style-type: none"> <li>- Templates have been developed for all documentation aspects associated with the Framework, except for the “completion report,” to ensure consistency in reporting on all relevant aspects of a given project. These are all currently in use.</li> <li>- A pre-defined project work breakdown structure (WBS) is used as a basis to develop all project plans. Once project plans are developed by the individual managers, they are automatically rolled-up into the Master Plan by the Project Integrator.</li> <li>- Cost tracking, including actual time spent on projects by team members and capital versus non-capital costs.</li> </ul> <p>To be completed:</p> <ul style="list-style-type: none"> <li>- Develop the Project Completion Report template, and implement its use, including</li> </ul>	eBusiness Initiative	Oct 2004

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		<p>proper sign-off by project stakeholders.</p> <ul style="list-style-type: none"> <li>- All projects need to adjust to the formal project plan WBS structure and be kept up-to-date by project managers. Proper dependencies and critical path need to be recorded.</li> <li>- Implementation of the phase gate approval process.</li> <li>- Full implementation of the progress reporting process, for all projects.</li> </ul>		<p>End-Aug 2004</p> <p>End-Aug 2004</p> <p>End-Aug 2004</p>
3.2.2	NSERC management should be kept informed of implementation progress and should follow up as appropriate.	Agreed. Management Committee will be kept informed of progress via formal reporting to the eBusiness Steering Committee.	eBusiness Initiative	Ongoing
3.2.3	The eBusiness Initiative should ensure that estimates are prepared for all eBusiness project components, kept up-to-date and made available to the Project Scheduler.	This is currently being carried out and will need to be conducted on an ongoing basis throughout the project.	eBusiness/ISD	Ongoing
3.2.4	The eBusiness Initiative, based on the experience of the pilot, should implement cost tracking as soon as possible.	This has been done as of April 1 <sup>st</sup> , 2004, to coincide with the beginning of the fiscal year.	eBusiness Initiative	complete
3.2.5	The eBusiness Initiative should ensure that all staff doing process transformation are adequately trained.	<p>There are two components to this recommendation. First, sufficient time needs to be allocated to conduct process transformation activities and second, expertise needs to be available.</p> <p>In December 2003, a new project manager was hired and given the specific mandate to lead the business process redesign. With the goal of</p>	eBusiness Initiative	Oct 2004

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		<p>developing resident expertise in the matter, this individual has received the following training so far:</p> <ul style="list-style-type: none"> <li>- Change management (along with the entire eBusiness Initiative)</li> <li>- Work Improvement through Process Redesign and Simplification (two-day course).</li> </ul> <p>More advanced training is planned in business process redesign and specialized expertise will be brought in to conduct specific portions of the work when necessary.</p> <p>Another important mechanism to develop internal expertise is to foster the exchange of staff between the eBusiness division and other divisions of NSERC. This ensures a transfer of knowledge about the eBusiness transformation requirements and provides divisions with individuals who have previous involvement in transforming processes.</p>		
3.2.6	<p>The eBusiness Initiative, in close collaboration with ISD, should establish a policy regarding the recording and resolution of requests, including notifications of complaints, problems and issues. This policy should be unambiguous as to objectives and responsibilities, and should be brief. This policy should not be limited to eBusiness but extend to all NSERC IT applications.</p>	<p>A user group has recently been formed to ensure the management and maintenance of the eSubmission service. This group will use criteria for categorizing requests, which have been defined and approved by the Steering Committee. This group will also review the helpdesk log (complaints, frequent problems/issues and suggestions for enhancements). Preliminary roles and responsibilities have been drafted for review by the user group. In the first stage of operations, the user group will:</p> <ul style="list-style-type: none"> <li>- finalize its mandate, including roles and</li> </ul>	eBusiness Initiative	Sept 2004

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	<p>responsibilities;</p> <ul style="list-style-type: none"> <li>- define a process for recording, prioritizing and resolving requests;</li> <li>- determine a schedule for timely resolution of requests; and</li> <li>- determine proper linkages with other existing processes (see below).</li> </ul> <p>All this will be modeled against the NAMIS user group management process, which is established and has proven its effectiveness. This will also be applied to other eServices as they are delivered.</p> <p>Procedures developed to date:</p> <ul style="list-style-type: none"> <li>- The Remedy Call Tracking system tracks and logs the external support calls (or e-mails) and assists in ensuring the closure of all calls. Calls which require the system or a process to be addressed are then forwarded to the QA team for entry into Rational where it will be prioritized and tracked.</li> <li>- Calls which are “notification of complaints” are generally addressed and followed-up by senior project management staff. A formal process on management of complaints would further strengthen the existing model.</li> </ul>		

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3.2.7	ISD should establish, publish and implement effective practices to ensure that the above-mentioned policy is carried out effectively and efficiently.	<p>Agreed.</p> <p>Practices have been documented and accompanying workflows are published on the Intranet workgroup segments. The materials will also be reviewed during ramp-up training this summer.</p> <p>In collaboration with the eBusiness Initiative, a review of the materials will be conducted to ensure alignment with the eSubmission user group operations and the new “complaints management” procedure.</p>	ISD / eBusiness	Sept 2004
3.2.8	NSERC Management should follow up on the above-noted policy and practices, to ensure that they get done in a timely fashion.	Agreed. Proper reports will be provided to Management.	Steering Committee	Ongoing
3.2.9	ISD should a) review and update its documentation policy and practices; b) ensure that practices are effective, i.e. balance level of effort with payback in terms of reduced effort in maintenance and enhancements; and c) ensure that practices are carried out according to updated policy.	<p>Agreed. The ISD teams have developed template standards for business requirements, functional specification, technical specifications and QA test plans (scripts). Each is tied to a phase within the system development life cycle. Signoff of the business and functional specifications act as milestones and “gates” to the next phases of the life cycle. All completed documentation is recorded in a standard project segment on the Intranet. All ISD team members are familiar with the materials and how to use them – the practice has been integrated into the project cycle.</p> <p>Upon finalization of the project documentation it will be released from the workgroup segment to the public domain of the Intranet.</p>	ISD	Sept 2004

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<b>Post-Mortem of the 2003 eSubmission Cycle</b>				
<b>4.1 Progress on Project Deliverables</b>				
4.1.1	The eBusiness Initiative should ensure that project scheduling be done continuously and effectively. This means that the eBusiness Initiative should have the resources necessary to maintain the project schedule at all times, and that the project schedule accurately reflect all components of the eBusiness Project to the lowest level of detail needed for effective control.	<p>Agreed. The responsibilities associated with project planning, scheduling and updating is under the full-time project integrator.</p> <p>Project managers have the responsibility to develop and maintain their own plans and schedules and submit them to the project integrator for incorporation into the Master Plan.</p> <p>A project planning and scheduling tutorial has been developed and used to provide training to all project managers. This tutorial will be formalized into a procedure as soon as we have enough experience with the process to guarantee its effectiveness. This tutorial specifies the level of detail project managers need to include in their plans and schedules.</p>	eBusiness Initiative	Sept 2004
4.1.2	The eBusiness Initiative should ensure that the project management software utilized should have the capability of nesting layers of detail, that the schedule should exploit this capability and that this nesting capability should be utilized in reporting the project to various audiences.	<p>Agreed. This is in progress.</p> <p>MS-Project is the software chosen for the eBusiness Master Plan. The eBusiness Initiative is in the process of establishing and improving a comprehensive Master Plan according to established standards to be followed in all aspects of the eBusiness Initiative. This process was started with the appointment of the project integrator in the Spring 2003. The Auditor has seen an earlier version of the Master Plan, which has been significantly improved since then. The</p>	eBusiness Initiative	end-June 2004

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		Master Plan includes proper levels of detail, with roll-up capabilities that can be used as a function of the intended audience.		
<b>4.2 Progress on System Performance</b>				
4.2.1	ISD should establish and implement a policy of tracking a limited number of key performance indicators. The suggested number is three, but this number could be higher or lower depending on the need by NSERC management to be informed. The suggested indicators are a) System Downtime – Elapsed, b) System Downtime – Incidents, and c) Complaints Received from External Users.	<p>This was addressed prior to publication of the final report. Due to the nature of the architecture and the need to interpret system generated messages of “downtime,” a manual process was implemented to record both system downtime incidents (Production and Pilot environments only) as well as elapsed time.</p> <p>“Complaints received from External Users” will (must) be tied to Recommendation 3.2.6.</p>	ISD	Complete
4.2.2	The eBusiness Initiative should track and report two additional performance indicators: d) Percent Complete – overall project, including individual components where appropriate; and e) Overall Cost, when cost data become available.	<p>Agreed.</p> <p>Point “d” will be addressed once the Master Plan is completed and fully functional.</p> <p>Point “e” is already in place.</p>	eBusiness Initiative	Aug 2004
4.2.3	NSERC senior management, with input from the Management Committee, should review the suggested indicators, substitute as desired and request that the approved set be tracked and reported on a regular basis.	This recommendation will be addressed through the regular progress reporting process to Management. A new format for the progress report, which accounts for those measures, has been in use since April 1, 2004. Feedback from Management will continue to be monitored to ensure the reports address Management’s needs.	Steering Committee	June 2004

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4.2.4	ISD and the eBusiness Initiative should devise the means for tracking the indicators for which they are responsible, and report results to management on a regular and routine basis. The suggested reporting frequency is monthly.	See 4.2.3. A two-week Management reporting cycle has been in place since the inception of the eBusiness Initiative in May 2001. This process, under the responsibility of the project integrator, will be adapted to include reporting on proper indicators.	eBusiness Initiative	Aug 2004
<b>New / Ongoing Risk Factors</b>				
<b>5.1 Governance</b>				
5.1.3.1	The eBusiness Initiative should provide <b>XXXXXX Exempt Privacy Act</b> with a full range of training and coaching in the practice of project scheduling and in the specific use of MS Project, which is NSERC's chosen scheduling software.	In progress.  This is a recognized need which is addressed through a mix of general and personalized training. <b>XXXXXX Exempt Privacy Act</b> . This program was selected because of its strong eBusiness component. This has been recognized as professional development for this employee and costs have been defrayed by NSERC. <b>XXXXXX Exempt Privacy Act</b> also received a two-day personalized training by a professional project manager on the project management techniques in use by the eBusiness Initiative. Another one-day personalized training session is planned and will cover the details of project scheduling and progress indicator measurements with the eBusiness Master Plan as a test case.	eBusiness Initiative	Personalized training in scheduling: end-June 2004
5.1.3.2	NSERC management should require all project participants – including the eBusiness Initiative, ISD and program branches – to provide reasonably accurate estimates of the time and resources they plan to use in the project. Note	Agreed. In progress.  See 4.1.1. Each project charter and the fiscal year planning process involve presenting estimates of time and	eBusiness/ISD	End-June 2004 but with continuous improve-

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	that this is the only realistic way that one can estimate the level of effort and duration of project components.	resources required on a per-project basis. Projects will not proceed until approval is obtained from the Steering Committee. Note that this is a relatively new process at NSERC. Proper emphasis needs to be put on the importance of collecting this data regularly from all participants, of keeping the plans up-to-date and revising/confirming our estimates regularly. It is expected that our methodology for determining time and resource allocation will be improved significantly through collecting and analysing this data.		ments
<b>5.2 Project</b>				
5.2.1.1	NSERC management should commission the preparation of an eBusiness Master Plan. This Plan should scope the work remaining to complete the implementation of the original eBusiness vision, updated as appropriate with work completed to date (including the Project Blueprint), as well as changes in the business environment, and developments in technology since the original Plan was created. The Plan should also be time-scaled and costed, so that NSERC management can allocate financial and other resources to ensure completion.	<p>While this recommendation is valid, we are of the opinion it has been at least partially addressed throughout the life of the eBusiness Initiative.</p> <p>While the detailed Master Plan schedule is currently being worked on, Management has received high-level Master Plans since the beginning of the project. A high-level schedule and costs were included in the eBusiness Strategy developed by Accenture in May 2001. This plan was refined through the IT implementation planning exercise (Project BluePrint) delivered in Fall 2002, and each fiscal year's planning included a revision of the project objectives, work accomplished and work remaining. High-level costing is presented each time. Considering the recent software and hardware acquisitions and the changes in NSERC's strategic direction (mainly as a result of the new NSERC Vision), the eBusiness Vision has been updated and an exercise to update</p>	eBusiness Initiative	<p>High-level planning: in place.</p> <p>BluePrint revisions: Dec 2004</p>

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		<p>the former BluePrint is on the plan for 2004-05.</p> <p>It is not clear why the Auditor reported that a Master Plan is needed (i.e. is missing). We suspect that he may be referring to the importance of the next BluePrint revision exercise which we agree is needed. Also, proper communications will be strengthened on this aspect.</p>		
5.2.1.2	<p>The eBusiness Initiative should establish procedures for changing project scope; for documenting scope changes; for naming those persons who are authorized to originate scope changes and others who are authorized to approve them; and for defining the work involved in a particular scope change, including lists of work items, schedule and effort. ISD should collaborate in this undertaking because such procedures should be adopted for all large CASD undertakings.</p>	<p>We agree with this recommendation. This responsibility will be assigned to the project integrator, who will work in collaboration with eBusiness Initiative colleagues and ISD.</p>	eBusiness Initiative	Sept 2004
5.2.4.1	<p>ISD should take appropriate steps to reduce the backlog of outstanding issues, and to keep the backlog to a minimum.</p>	<p>This is related to 3.2.6 and will be carried out after proper prioritization of issues by internal clients.</p>	ISD/eBusiness	Sept 2004
5.2.4.2	<p>With reference to recommendations on page 11, ISD management should ensure that the referenced practices are closely adhered to.</p>	<p>Agreed. ISD will enforce its participation in the processes discussed on page 11:</p> <ul style="list-style-type: none"> <li>- Reporting to Management</li> <li>- Baseline Plan Revision Process</li> <li>- Change Management Process.</li> </ul>	ISD	Ongoing