Ministry of Health
Contract Issue Note

Division	**HSIMIT/DS**	**STOB Number:**	**60**
Branch	**Assistant Deputy Minister's Office**	**New or Extension:**	**New**
Total Dollar Value of Contract: (If applicable, separate value of extension)	**$175K**	**Time Commitment Period:** (If applicable, separate time period of extension)	**December 1, 2015 to March 31/16**

Approval Required by (Provide actual date): Immediate (Walk-In process in this instance)
Anticipated Contract Start Date: December 1/15
Description of Service(s):

In response to the Office of the Auditor General (OAG) audit of the contract held by Ministry of Health for the Panorama project, and building on the governance work undertaken in other key initiatives, the Contractor will:

1. Using two case examples, assess against best practices the effectiveness of the internal governance, project management and contract management processes of the HSIMIT/DS Division, Ministry of Health;
2. Provide a set of detailed recommendations concerning how the HSIMIT/DS Division is best positioned to strengthen and modify current practices in the areas of internal governance, project management and contract management, and provide a high level roadmap for implementation;
   Examine the current working relationships with the business areas within the HSIMIT/DS Division and made recommendations to increase effectiveness and collaboration.

Explanation of Necessity: X Urgent Operational ☐Required, could be deferred
In their audit, the OAG recommended the Ministry of Health review its governance, project management and contract management process, and take steps to immediately improve them.

The Division is taking immediate pro-active steps to meet the spirit and intent of the audit by engaging expert advice to develop concrete steps for improvement, and a roadmap and timetable to implement them.

If required to fulfill legal or formal provincial commitment please indicate:	N/A
Procurement Method	Call to Market from RFQHL052

Why could staff resources not fill the need:
Personnel with this expertise are not available in-house.

Implications if not approved:
The ability of the Ministry to meet the spirit and intent of the results of the audit performed by OAG on the contract for the Panorama project, held by the Ministry of Health, does not allow this work to be performed in an objective and timely manner without the support of a contracted service provider.

Reviewed:

Assistant Deputy Minister

Approved by:

Deputy Minister/Associate Deputy Minister

Michell, Jennifer HLTH:EX

From: Shera, Deborah HLTH:EX
Sent: Saturday, October 31, 2015 6:05 PM
To: Brown, Stephen R HLTH:EX
Cc: Schmidt, Tracee HLTH:EX; Kendall, Perry HLTH:EX; Stevenson, Lynn HLTH:EX; Feulgen, Sabine HLTH:EX
Subject: Re: PAC binder contact info

my responses below

From: Brown, Stephen R HLTH:EX
Sent: October-31-15 4:55 PM
To: Shera, Deborah HLTH:EX
Cc: Schmidt, Tracee HLTH:EX; Kendall, Perry HLTH:EX; Stevenson, Lynn HLTH:EX; Feulgen, Sabine HLTH:EX
Subject: Re: PAC binder contact info

Hi Deborah and Tracee
Have now been through all the material and have a more specific request which I appreciate may not be possible given the time frame but at least will be the structured way I want to lead the discussion tomorrow so I can better assist the committee understand current status:

TRACEE PLEASE HAVE YOUR TEAM TAKE THIS SECTION ON

1) that we create a basic table with the seven modules listed down one side with five headings across the top - deployed (yes/no, when); module functionality (list all of the functional elements in the module and color code deployed, to be deployed with date in parenthesis, unusable/problematic/being worked on with likely date of resolution in parenthesis), potential additional functionality (list new functionality that is being considered with likely date of deliverable), stability (give me a metric that gives some sense of improvement over a period of time ending now); usability (any assessment we currently have of usability and any specific initiatives underway with deliverable dates to improve usability). This will provide an overall status report that will also be useful to us as we look at shaping up the business plan.
2) an item by item assessment of Exhibit 1 in the OAG report

Re # 3 - I don't think that they will care about how we have divvied this up between branches so at a high level (and with the branches referenced for your purposes)

*** within HSIMIT we have undertaken a number of steps to strengthen the complete project lifecycle including:**

- ***consolidating experience on leading large complex projects - experience partnering with the business, change management, requirements definition etc. Keeping the experience within one place allows us to leverage from one project to another (SPB) - so right now this group is leading the surgicial waitlist solution as one example and home health monitoring as another***
- ***a core aspect of effective delivery is the discipline of project management and project controls - we have staffed up this area (within Brads branch) and this is the group that did the internal evaluation and has developed our action plan***

s.13

- ***So the external expertise we are bringing in is to take two projects as examples and review and make recommendations on how:***
    - ***we govern large projects and adhere to governance disciplines after the initial euphoria of contract signing - governance was a core problem on Panorama***
    - ***how we manage projects and controls - in this instance a review and confirmation of our PM plan and/or further recommendations***
    - ***how we manage large vendors and contracts in a delivery context - extending the initial review***
    - ***how we partner with the business and addressing the most effective balance between IT leadership and business***
    - ***the call for proposals for industry expertise has been signed by Sabine and needs to clear Manjit - when it does it will go to a prequalified list and close one week later***
    - ***the tie to CST in my view although Sabine may add more is that it shows the value of an external review AND ongoing external project assurance as its hard to see the forest for the trees when you are into the details of hard projects***

s.13

An overall key task for tomorrow is to help me get to plain language understandable to a layperson of what I know is a highly technical issue
I think I can help with this so for this part of the conversation we could probably free up Tracee and team to deal with the work listed above

Thks Steve

On Oct 31, 2015, at 10:26 AM, "Shera, Deborah HLTH:EX" <Deborah.Shera@gov.bc.ca> wrote:

> Will be there in person
>
> Sent from my iPhone

On Oct 31, 2015, at 10:26 AM, Brown, Stephen R HLTH:EX <Stephen.Brown@gov.bc.ca> wrote:

> Office at 10 works for me with respect to questions these will be more about translation and meaning of some of the technical aspects of the answers and a little more clarification on budget and on assessment of functionality (exhibit 1 in OAG Report vs your assessment) so no need for work in advance. Thks Steve
>
> Sent from my iPhone
>
> On Oct 31, 2015, at 10:20 AM, Schmidt, Tracee HLTH:EX <Tracee.Schmidt@gov.bc.ca> wrote:
>
> > I will set up a con call but will be in the office if anyone wants to gather in person. I welcome any questions in advance so we can start to prepare or we can wing it tomorrow. I will also see if Silas is available.
> >
> > Talk soon
> >
> > Tracee
> >
> > Sent from my BlackBerry 10 smartphone on the Rogers network.
> >
> > **From:** Brown, Stephen R HLTH:EX
> > **Sent:** Saturday, October 31, 2015 9:29 AM
> > **To:** Schmidt, Tracee HLTH:EX
> > **Cc:** Kendall, Perry HLTH:EX; Stevenson, Lynn HLTH:EX; Feulgen, Sabine HLTH:EX; Shera, Deborah HL
> > **Subject:** Re: PAC binder contact info
> >
> > Hi Deb and Tracee
> > I have spent three hours this
> > morning going through the material you provided. It is going to take me a couple of hours longer to complete and then I want to focus on the likely Q&As. One of the challenges is going to be my answering the committee in plain understandable language which is tricky given the technical complexity and length of this project and the short time you have had to prepare me for Monday. My ask is that you set a call up for tomorrow at 10 for up to two hours rather than trying to rush this at 7.30 on Monday. I will have some specific questions by then and would also like to walk through the potential Q&As. Minimally the two of you and Jonathan if he is available. Lynn, Sabine, and Perry you are welcome to join if you think it helpful. Sorry for breaking into the your weekend. Steve
> >
> > Sent from my iPhone

On Oct 30, 2015, at 6:15 PM, Schmidt, Tracee HLTH:EX <Tracee.Schmidt@gov.bc.ca> wrote:

> If you have questions over the weekend, here is the contact info for project team.
>
> Deborah 250-415-7462
> Tracee 250-217-7279
> Jonathan 250-507-3798
>
> Sent from my BlackBerry 10 smartphone on the Ro gers network.

Michell, Jennifer HLTH:EX

From: Kislock, Lindsay M HLTH:EX
Sent: Tuesday, July 21, 2015 12:36 PM
To: Bellringer, Carol OAG:EX
Cc: Brown, Stephen R HLTH:EX; Riddell, Sarah OAG:EX; Sydor, Morris OAG:EX; Hamilton, Pam OAG:EX; Feulgen, Sabine HLTH:EX
Subject: Ministry of Health Response - Final
Attachments: Panorama Response_FINAL.DOCX

Carol,

Please find attached the final Ministry of Health response to your office's audit of Panorama. Our apologies for the delay in this response. We had hoped to get it to you last evening but it took us a bit longer than expected to streamline the response. We would also note that we have partially accepted your first recommendation.

We look forward to meeting with you later today.

Lindsay Kislock | Assistant Deputy Minister
Phone: +1 2509522791 | Fax: +1 2509522109 | Mobile: +1 2502176958
Ministry of Health | Health Sector Information Management & Technology Division
1515 Blanshard | Victoria, BC

Panorama

The SARS outbreak in 2003 identified the need for a national public health information system to support an effective response to infectious disease threats. In British Columbia, the public health information systems in use at that time ranged from purely paper-based systems to multiple, separate, outdated, functionally limited information technology systems.

Panorama was envisioned as an integrated public health information system to support public health professionals in the effective management of vaccine inventories, immunization programs, communicable disease investigations and outbreaks across Canada. British Columbia initiated an additional module within the Province to support family health services.

A National Steering Committee, including BC health authority and public health representatives, was formed to oversee the development of Panorama. Due to its experience developing the Integrated Public Health Information System (iPHIS) – which had been in use in several BC health authorities – BC co-led the Panorama initiative on behalf of the country in conjunction with Canada Health Infoway (CHI), the project funding organization.

IBM was selected as the successful vendor in the fall of 2005 with a budget of $37.7 million based on using a commercial off-the-shelf (COTS) solution. When it was determined that the COTS solution could not be adapted to meet the national jurisdictional needs, the contract was amended to provide for a custom-built solution, requiring a contract extension of approximately one year. CHI approved a revised budget of $47 million to reflect this required change to support the development of the national infrastructure phase of Panorama.

Initially all provinces and territories were fully engaged, as was the Public Health Agency of Canada (PHAC). Over time, however, in the face of economic challenges, smaller jurisdictions and Alberta opted out of the national process and PHAC itself declined a central support/coordinating role.

The national product was delivered to provinces to customize for their unique regional needs. In British Columbia, the national version was customized to meet the needs of both British Columbia and Yukon.

Today Panorama provides the basis of a comprehensive tool in BC and across most of the country that will help public health personnel successfully identify and respond to public health outbreaks.

Panorama also allows better management of immunization programs, reduces vaccine wastage and better serves citizens by ensuring a complete health record is available. An evaluation of the benefits of the vaccine inventory management module indicates the province can expect to save approximately $2 million annually in reduced wastage, returns and improved productivity. Further, according to an evaluation of the family health/immunization modules, the extent of data being collected by health authorities has improved and is expected to contribute to an increase in appropriate immunization rates, which is the first line of defense against infectious disease outbreaks.

> *"Panorama's immunization database is critical for comprehensive, seamless care for tracking patients needing vaccinations to inform clinical decision making in community*

care settings." Dr. Mitchell Fagan, family physician, Langley Division of Family Practice and Medical Director, Langley Memorial Hospital

Panorama has also enabled the BC Centre for Disease Control to consolidate information from some 80 different databases developed for tracking and managing communicable diseases, data not previously directly accessible by the health authorities.

Panorama protects the health of British Columbians and Canadians through up-to-date clinical information and, where and when required, provides a single source of comprehensive and standardized communicable disease surveillance data and improved provincial outbreak coordination capabilities leading to better management of public health care spending.

Panorama was an important support tool during British Columbia's recent response to the recent Ebola threat. Its value in directly protecting Canadians was recently demonstrated by supporting the containment of a school measles outbreak in Ontario, allowing public health personnel to quickly and efficiently access non-immunized student records.

"News of a positive measles test came at 4:45pm. Public health staff were able to use Panorama to find all students whose records were either incomplete or had a Statement of Conscience. They immediately phoned the parents and had them excluded from school. An up to date list of these excluded kids was in the principal's hand before the opening of school the next day. The health unit was then able to have discussions with parents about the importance of immunization resulting in more children immunized. This timely and accurate information would not have been possible previously." Dr Valerie Jaeger, Medical Officer of Health for Niagara Region Health Unit

BC's First Nations Health Authority already reports significant improvements in access to clinical information within First Nation communities, helping to address a systemic gap in public health care delivery.

"The use of Panorama by FNHSO [First Nation Health Service Organization] nurses has had a marked positive impact on direct service delivery to our clients. Having timely access to immunization information results in less frustration on the part of nurses and their clients and ensures a higher quality of service (less over or under-immunizing). In addition, the functionality of Panorama in terms of validating doses and providing decision support helps nurses practice more safely." Cathryn Aune, Community Nurse – eHealth Programs, First Nations Health Authority

The Ministry of Health believes that the benefits now being realized in BC and other jurisdictions are not articulated in the Auditor's report. The pan-Canadian value of the program is also not fully represented as, in partnership with Ontario, Quebec, Manitoba, Saskatchewan and Yukon, Panorama will cover 82% of the Canadian population.

"Under the BC Ministry of Health's leadership, much progress has been made across the country, providing a foundation for continued efforts to optimize the use of digital health

solutions to support public health practice, and Panorama will continue to evolve based on the continued feedback of public health professionals." Trevor Hodge, Executive Vice President, Canada Health Infoway

The Ministry of Health believes that the timing of this audit was not optimal in accurately assessing the value of this program. The audit commenced in the midst of the BC implementation of the Family Health and Immunization module and continued during the deployment of the Communicable Disease Case Management and Outbreak Management modules. This is typically the period during which issues related to stability and items that need to be remediated are commonly identified, and user frustration with learning a new system is highest. Not unexpectedly, Panorama experienced stabilization challenges, which are being actively addressed.

"Overall I see that although Panorama is far from perfect, it is leading us towards a more comprehensive approach to client care which has led to a decreased risk in patient safety when compared to our past documentation practices." Christine Davidson, Clinical Information Specialist, Interior Health

As a program, Panorama is the first of its kind globally, and the partners involved were aware from the outset that a project of this size and scope would present challenges. The Ministry fully acknowledges that there have been significant challenges and lessons learned with this project. The ten-year cycle-time that this project has taken, for a variety of reasons, is obviously sub-optimal. Cycle-time in technology now occurs in cycles of three to five years or less. Over the timeframe of this project, electronic medical record functionality has advanced significantly, and over the past few years there is an increasing emphasis on the value of achieving application interoperability. Data sharing between clinical and public health settings is a critical part of this development. The developments in Northern Health reflect this direction and the evolution of thinking in light of current best practice.

The report correctly identifies the significant challenges of achieving inter-jurisdictional coordination of a project of this magnitude. The complexities of developing a single standardized system to meet the needs of multiple Canadian jurisdictions were more difficult than anticipated. Achieving this goal required jurisdictional and inter-jurisdictional trade-offs. As these challenges emerged, the project partners assessed options and the Panorama national governance committee decided on prudent courses of action. This affected project requirements, extended schedules, and increased budgets.

The Ministry's responses to the issues raised in this audit are as follows:

System Quality

BC is the first province to fully implement Panorama, and as such has led the way in addressing implementation issues. As other provinces come on board, enhancements required for their business practices will be available to BC. As this report goes to publication, there are two upgrades underway to add treatment and management functionality for sexually transmitted infections and tuberculosis clinical care. More enhancements at the national level are planned for the future, such as mobile solutions and usability improvements.

Planning to extend Panorama access to doctors is also underway. This access will provide them with important clinical support data to ensure they are delivering the right immunization to the right patient at the right time, and allow them to enter information on immunizations performed in their offices so that the patient record is always current and complete. Panorama can be used with the recent development in health information technology to support this through an open, two-way secure messaging between Panorama and electronic medical records of all types.

The audit is critical of the increased data collection in Panorama, leading to longer appointment times as well as excessive scrolling required by the system. While the Ministry does not dispute these concerns, it should be noted that these are two examples of specific business requirements requested by the Canadian public health community. The implementation of Panorama provided an opportunity to mandate consistent collection of minimum public health data requirements for family health and immunization services and to support effective outbreak management.

All large-scale custom developed systems are expected to have defects at the outset and Panorama is no exception. The Ministry's assessment is that the initial number of defects was not out of line with industry norms. At the time the final product was accepted in 2008, there was one severity level 2 defect, which was included in the remediation plan and subject to a hold back payment of $500,000. Upon successful resolution, this holdback was released. It should be noted that the contract was adjusted to reflect the higher risk of a custom-build solution and the defect penalties cited in the OAG's report did not apply at the time of acceptance.

Timeline

As noted earlier, the Panorama contract was amended when it was determined that a COTS solution could not be adapted to meet the jurisdictional needs. Based on the amended contract, IBM delivered the national Panorama system on time. Difficulty accessing much-needed public health expertise during critical project timelines also resulted in delays. That noted, the Ministry of Health clearly acknowledges that a ten-year cycle is not optimal and this is a key area of focus in strengthening its project and contract management practices.

Budget

In 2005, the budget estimate for the Panorama national build using a COTS solution (excluding family health) was $37.7 million. In 2007, the decision was made to shift to a custom solution and CHI approved a project budget of $47 million. The actual cost of the national build was $44.5 million. The OAG total cost of $66 million includes on-going operational costs for an additional two years after the build was complete.

Early budget estimates for BC were limited to Ministry system development costs and did not include health authority expenses. In 2012, it was recognized that budgeting solely for the IT aspects of the project omitted other important costs that were critical to project success, such as change management and training. As such, in 2012, the Ministry changed its approach to budgeting and developed a "total cost of ownership" approach to incorporate a fuller recognition of costs associated with the project. The

total cost of ownership now included costs incurred by health authorities, operating costs for the in-production system, and integration.

Ministry Response to the Recommendations:

The development of custom-built IT systems is complex, particularly when it involves multiple stakeholders and interests. In the case of Panorama, decisions were made by national, provincial and regional representatives. The diverse range of current systems held by the stakeholders, combined with the need to agree on standardized data, business process and naming conventions, added to the project's complexity. The project was further complicated in British Columbia by the need for Panorama to be a fully interoperable system integrated with the provider registry, client registry, the provincial laboratory information system, Vancouver Coastal Health Authority's community-based care system PARIS (Primary Access Regional Information System), and BEST (the provincial audiology system), and soon to be interoperable with the Integrated Community Care Information System (ICCIS) in the Northern Health Authority.

Recommendation 1: The Ministry does not support this recommendation in its entirety. Public health experts across Canada agree there is no other system currently available that can provide the comprehensive solution supported by Panorama. Panorama offers core functionality and a substantive part of a pan-Canadian immunization and communicable disease information system. While there may be systems that provide aspects of what Panorama provides - they do not have the capability to provide a fully integrated, province-wide solution or integration with other provinces' systems – a key tool in managing infectious diseases. Looking forward, public health outcomes will be further advanced through ongoing improvements to Panorama and the onboarding of innovative health information technology applications facilitated through Panorama's interoperability design. However, the Ministry is always cognisant of ensuring best practices are reflected in its decisions and would be open to other options should they present themselves.

Recommendation 2 and 3: The Ministry accepts these recommendations, as it is already actively engaged in reviewing its IT project and contract management practices to ensure future projects are managed in accordance with good practice. In addition, the Ministry has already created a unit to better deal with large-scale transformational projects such as Panorama. This unit consolidates in-house expertise to better ensure that the Ministry conducts appropriate oversight of vendors and contracted resources, provides necessary financial oversight and ensures adherence to Ministry and government policy. Furthermore, in recognition of the importance of effectively managing change to ensure the success of large-scale projects, the Ministry has invested in additional change management training and certification for information technology staff.

Recommendation 4: The Ministry accepts this recommendation noting that building the necessary consensus to develop a single solution across any sector is inherently challenging when a variety of organizations are involved in a large-scale project. However, the Ministry also recognizes that there has been strong feedback on the need to better ensure and enable open feedback that is welcomed and not interpreted as user reluctance to change. To this end, the Ministry continues to pursue activities that will support more collaborative and effective governance structures. The recently released IM/IT enabling

strategy recognizes the need to continue to work on governance and to collaborate on all IM/IT projects that are of a common and shared interest.

Michell, Jennifer HLTH:EX

From: Shera, Deborah HLTH:EX
Sent: Saturday, November 28, 2015 8:40 AM
To: Brown, Stephen R HLTH:EX
Cc: Feulgen, Sabine HLTH:EX; Benbow, Nicole C HLTH:EX
Subject: Re: IMIT PROJECT MANAGEMENT.pptx

Will do - as further background we have closed and notified the proponent for our Rfp for expert review. The EY team lead by John Bethel won this opportunity and I hope to expedite the signing and get going. John is well positioned to hit the ground running.

I have been talking to the ocio and have a meeting with them to leverage their assistance this coming Tuesday. John Jacobsen invited me to a meeting last week withLori and they are going to propose at DMCTt that a precursor to funding is detailed business process napping and requirements.

Infoway has some stellar project management risk review resources they are a potential external assurance point we could consider. I think we are weak on risk assessment project planning and estimating. We can strengthen but one should always do second and third independent reviews on estimates

Lastly this is not a business area where we need to develop new processes and steps - it's an industry with a lot of best practices and methodologies in place. My personal view is we need to imbed them and adhere to them. As we consider in house vs contracted I think we need to be practical about market forces.

Steve will review your deck and arrange the meeting.

Sent from my iPhone

On Nov 28, 2015, at 8:14 AM, Brown, Stephen R HLTH:EX <Stephen.Brown@gov.bc.ca> wrote:

> Hi Deb and Sabine
> Please see the deck I used with Rob Shaw from the Van Sun which builds from the discussion I had with the SCIMIT. I want to use this deck as the starting point for a policy review/framework development project for IMIT that will act as a backdrop to the further specific work we will do on Panorama. Let's get a meeting in the works to discuss and get a project charter in place but in the mean time can you both discuss how we could put together an expert reference panel for discussion and action when we meet. Thks Steve
>
> **From:** Plank, Sarah GCPE:EX
> **Sent:** Friday, November 27, 2015 9:53 AM
> **To:** Brown, Stephen R HLTH:EX
> **Subject:** RE: IMIT PROJECT MANAGEMENT.pptx
>
> Thanks. Looks much better! ☺
>
> I fixed a couple tiny little things and printed this version out to give to Rob.
>
> **From:** Brown, Stephen R HLTH:EX
> **Sent:** Friday, November 27, 2015 7:37 AM

To: Plank, Sarah GCPE:EX
Subject: IMIT PROJECT MANAGEMENT.pptx

<IMIT PROJECT MANAGEMENT.pptx>

Michell, Jennifer HLTH:EX

From: Plank, Sarah GCPE:EX
Sent: Friday, November 20, 2015 6:29 AM
To: Brown, Stephen R HLTH:EX; Feulgen, Sabine HLTH:EX
Subject: Another Vaughn Palmer column on Panorama

FYI

Auditor not finished health ministry IT probe
Vancouver Sun
20-Nov-2015
Page B06
By Vaughn Palmer

Page 016

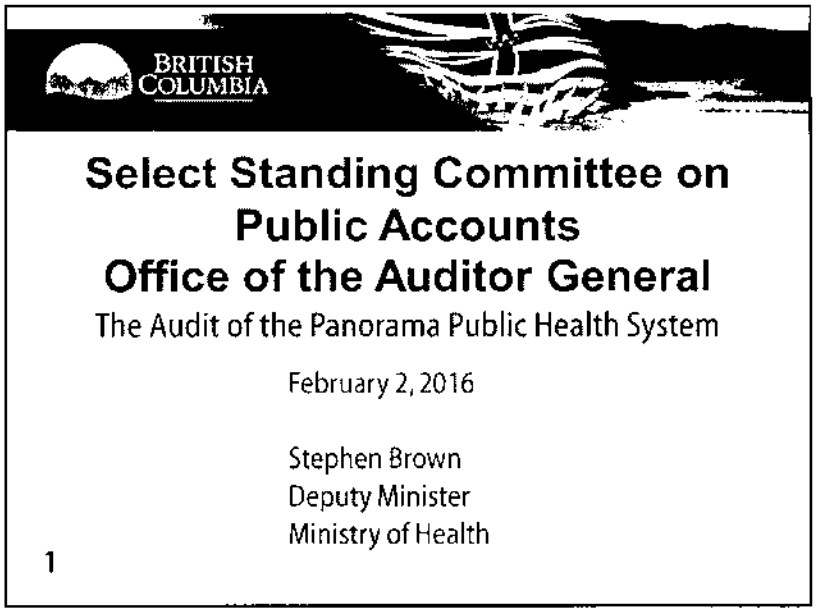
Withheld pursuant to/removed as

Copyright

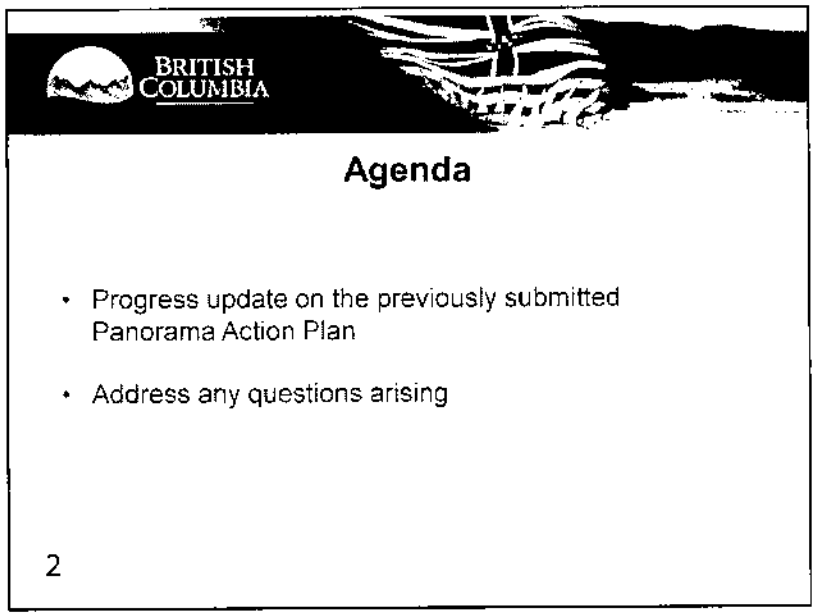
Sarah Plank
Communications Director | Ministry of Health
Government Communications & Public Engagement
Mobile: 250.208.9621 | Email:sarah.plank@gov.bc.ca

Sent from my iPhone

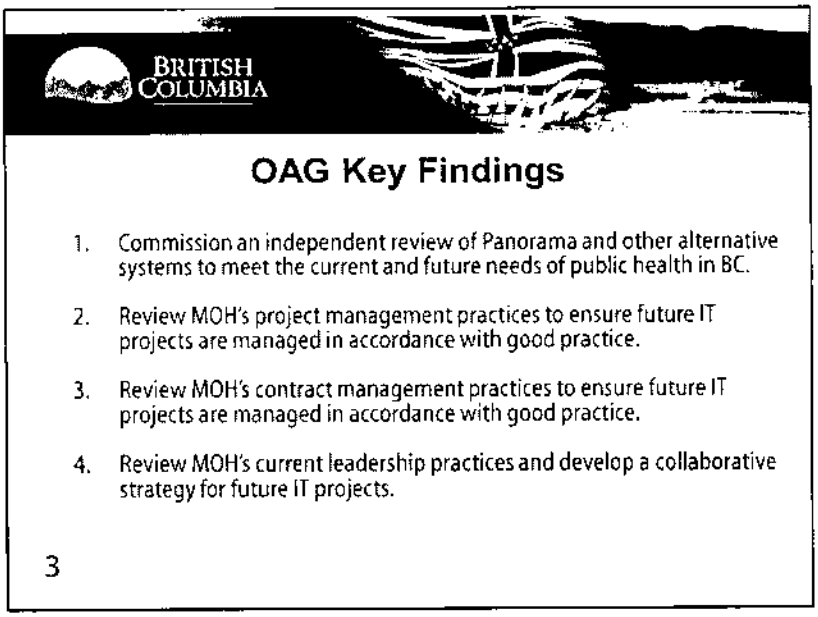
slide1


BRITISH
COLUMBIA
Select Standing Committee on
Public Accounts
Office of the Auditor General
The Audit of the Panorama Public Health System
February 2, 2016
Stephen Brown
Deputy Minister
Ministry of Health
1

slide2


BRITISH
COLUMBIA
Agenda
• Progress update on the previously submitted Panorama Action Plan
• Address any questions arising
2

slide3


BRITISH
COLUMBIA
OAG Key Findings
1. Commission an independent review of Panorama and other alternative systems to meet the current and future needs of public health in BC.
2. Review MOH's project management practices to ensure future IT projects are managed in accordance with good practice.
3. Review MOH's contract management practices to ensure future IT projects are managed in accordance with good practice.
4. Review MOH's current leadership practices and develop a collaborative strategy for future IT projects.
3

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BRITISH
COLUMBIA
Ministry Targeted Improvements for Large IT Projects
Principles:
• Clear Process
• Grounded objectives/deliverables linked to patients and fiduciary value proposition
• Competent costing, budget allocation and contract procurement/negotiation (including risk sharing profile)
• Excellent governance
• Excellent project management across "lifecycle" and independent expert project assurance
• Excellent contract management (including off-ramp provisions)
• Excellent standardized record keeping
4

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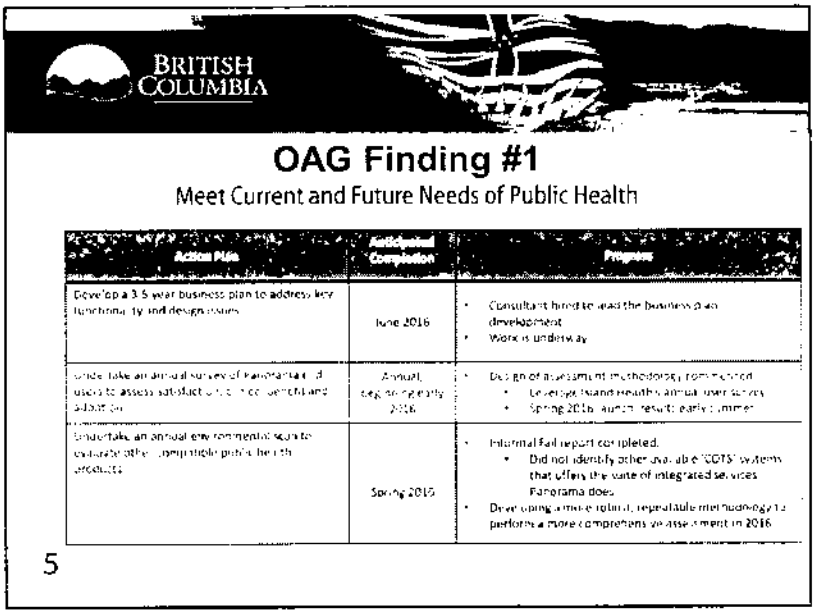
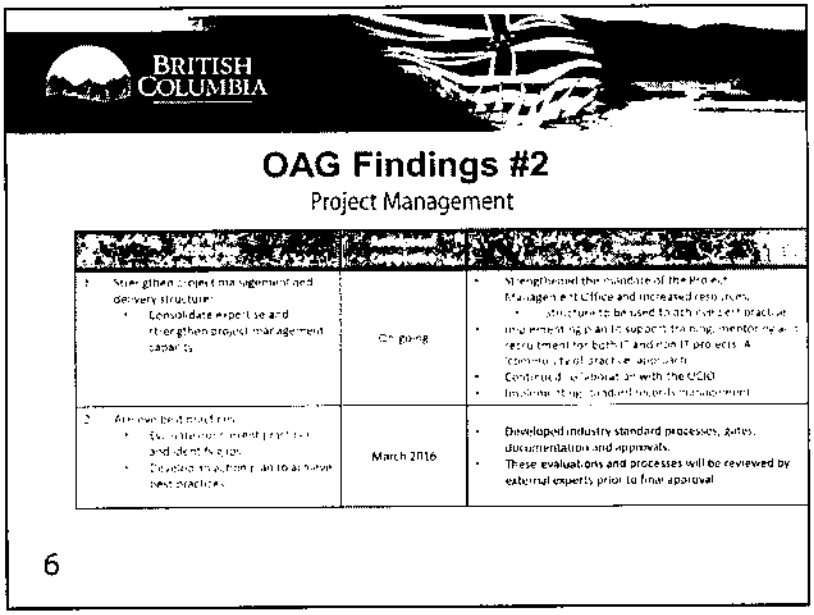


A detailed business plan has been initiated to ensure the key functionality that is needed in Panorama. This will involve identifying any functions that were postponed or removed from scope during the implementation of Panorama as well as any new functionality that is needed to ensure Panorama can meet public health needs for the future. The plan will also include prioritization of the new or enhanced functions. The resources have been identified to do this work and a plan is being developed. A meeting with the Clinical and Business Oversight Committee of Panorama has been scheduled for Feb to review in detail and start the consultation process.

An annual user survey has been developed based on one that has been used at Island Health. This has been distributed to health authorities and results are expected by early summer.

Fall report was informal and not subject to internal or external reviews but did provide a high-level assessment of alternative systems and their functionality and concluded that from an integrated, comprehensive solution perspective there were no other COTS products available at this time.

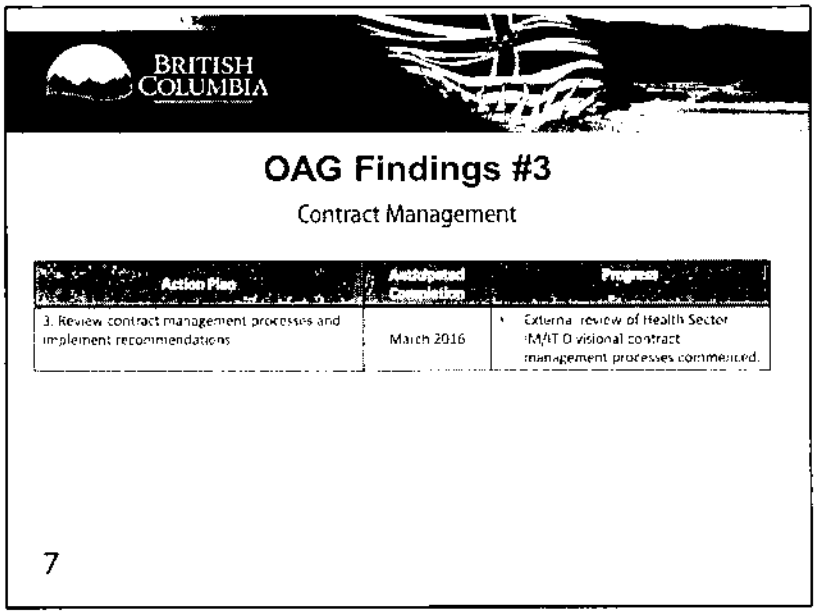
slide6



We are taking a two-pronged approach to strengthening our PM and Delivery structure:

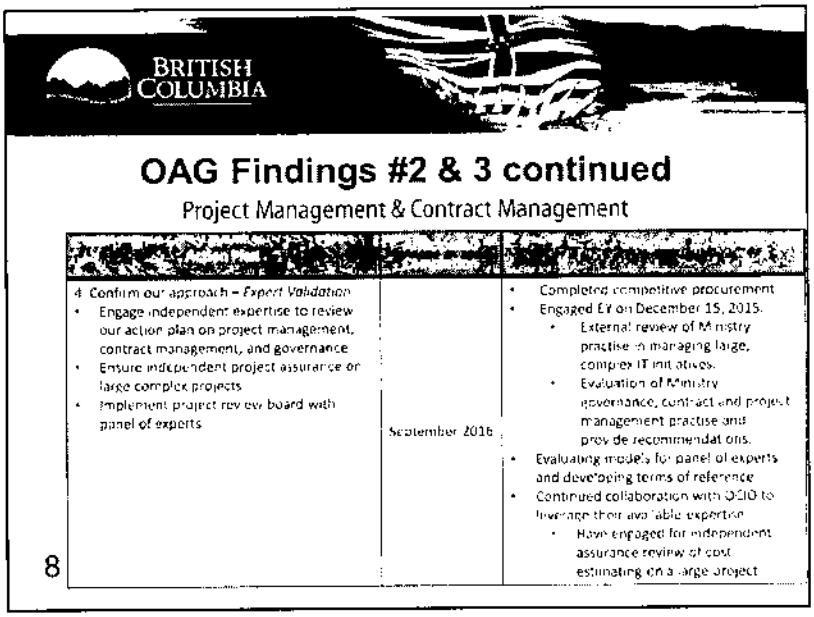
1. External expertise has been brought in to review practises and make recommendations
2. In parallel, we are assessing and revising our internal practises
    - Recommended internal changes will be brought to a draft state and reviewed by the external experts
    - Some of the internal progress is articulated on slide

slide7



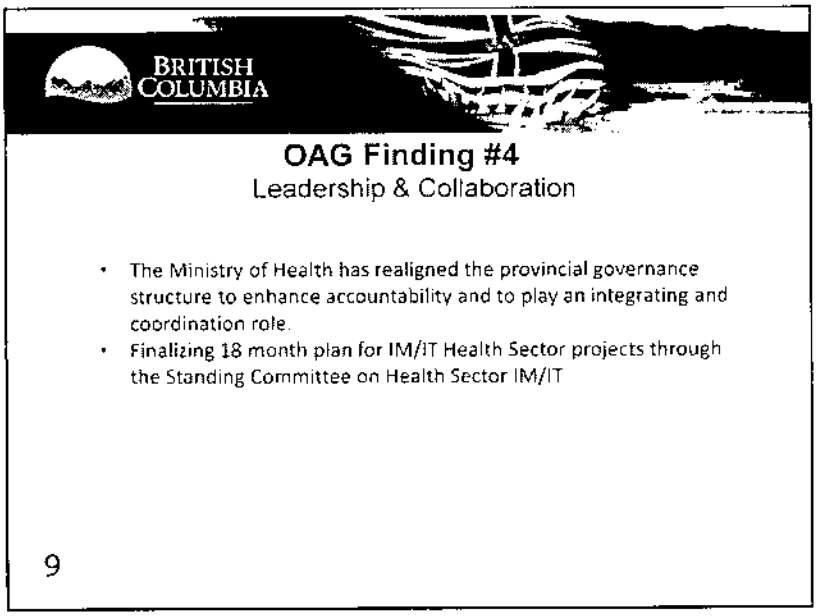
External experts were engaged in late December and are in the process of reviewing our contract management practices.

slide8



Slide points

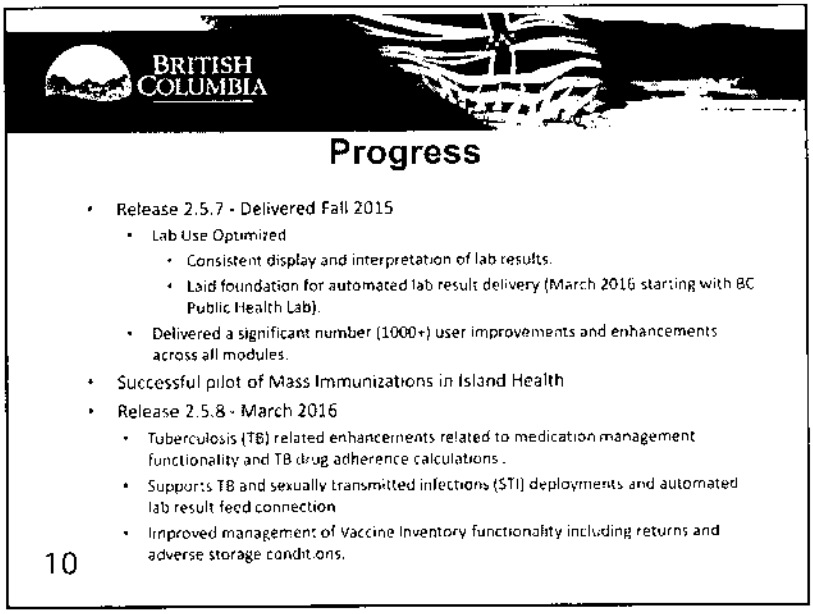
slide9



SCIMIT, the Standing Committee on Health Sector IM/IT reports up through to Leadership Council and membership includes:

- HSIMIT ADM
- HA CIOs
- HA CMIOs
- DoBC Rep
- CMO Rep
- HA VP Operations Rep (Island Health)

slide10



Enhancements Examples:

Enhanced Lab Summary and Quick Entry – these enhancements support the STI and TB on boarding by improving the efficiency of lab result data entry and decreases the misinterpretation of lab results by improving their display. These enhancements in conjunction with updates to provincial lab result naming conventions combine to improve clinical decision making.

Prescriptions – Recording Prescriptions and Filling Prescriptions. These enhancements were required to support TB's rigorous medication management requirements, including the ordering and filling of prescriptions from their in-house pharmacy. These enhancements ensure clinicians have one system supporting their end-to-end workflow.

Mass Immunizations:

In BC, this functionality supports running mass clinics in schools providing immunization services across numerous grades.
Panorama has a fully functioning module that allows for preparation of the clinic and completes with mass documentation against the cohort list.
Public Health in being increasingly asked to report and manage coverage rates at individual schools and grades for both surveillance and to leverage the opportunities provided by Panorama to assess risk and immunization coverage at the individual school level.

Clinical Business Benefits

Support Panorama solution partners in efficient management of mass programs, primarily school based immunization programs but also includes screening programs. Additionally, provides capability to do school based surveillance
Increase solution partner adoption of Mass Immunization functionality
☒ The use of Mass Immunization functionality in Panorama supports full clinical documentation of student immunizations providing the student with an accurate immunization record and taking another step towards the provincial immunization registry.

Provides capability to monitor immunization coverage at the individual school level:
☒ Support solution partners in monitoring and reporting on specific immunization coverage rates at school and grade population level.

Michell, Jennifer HLTH:EX

From: Heinze, Laura R GCPE:EX
Sent: Wednesday, August 12, 2015 3:33 PM
To: Feulgen, Sabine HLTH:EX; Kislock, Lindsay M HLTH:EX; Paton, Arlene HLTH:EX
Cc: Lawrie, Hannah GCPE:EX
Subject: FW: Materials for OAG's Panorama report
Attachments: IN_Panorama Audit Aug 11 2015_UPDATED.docx; QA Panorama Audit Aug 11 2015 FINAL.docx; STATEMENT_Panorama Aug 11 2015_UPDATED.docx

Categories: Printed

Hi all,

Realized I have neglected sharing this package with you today – sorry!

Attached is the statement, issues note and QA in preparation for Panorama audit release tomorrow. We've got the statement lined up to go out around 11am.

Thx
Laura

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ADVICE TO MINISTER

CONFIDENTIAL ISSUES NOTE **Ministry: Health** **Date: August 11, 2015** **Minister Responsible: Terry Lake**	**Panorama Audit**

BACKGROUND REGARDING THE ISSUE:

- On August 13, 2015, B.C.'s Office of the Auditor General (OAG) will release a report on its audit of Panorama.
- The audit includes scope, budget and timelines for both the National Build project and BC/Yukon implementation projects, and includes extensive document requests and individual interviews both at the ministry and in the health authorities.
- The audit states that:
  - Panorama is $86 million over what was budgeted at the project outset and is over five years late.
  - It does not have all of the functionality required to achieve the stated benefits of the system.
  - Health authorities continue to be concerned about its impact on patient safety and health authority costs
  - Panorama is not, and likely will never be, a pan-B.C. system.
- The audit makes four recommendations:

  Recommendation 1: That the ministry commission an independent review of Panorama and other alternative systems to identify the most cost-effective integrated approach to meet the current and future needs of public health in British Columbia.

  Recommendations 2&3: That the ministry review its project and contract management practices to ensure future IT projects are managed in accordance with good practice.

  Recommendation 4: That the ministry review its current leadership practices and develop a collaborative leadership strategy for future IT projects.

- The Ministry responded to the OAG's four recommendations as follows:

  Recommendation 1: The Ministry does not accept this recommendation. Public health experts across Canada agree there is no other system that can provide the comprehensive solution that Panorama provides. The ministry's position is that Panorama provides a solid platform, which will continue to evolve to meet the needs of British Columbians for effective, efficient and responsive public health services.

  Recommendation 2 and 3: The Ministry accepts these recommendations, as it is already actively engaged in reviewing its IT project and contract management practices to ensure future projects are managed in accordance with good practice. As well, the ministry has already created a unit to better deal with large-scale transformational projects like Panorama. This unit consolidates in-house expertise to better ensure that the Ministry conducts appropriate oversight of vendors and contracted resources, provides necessary financial oversight and ensures adherence to Ministry and government policy. As well, the Ministry has invested in

additional change management training and certification for information technology staff.

Recommendation 4: The Ministry accepts this recommendation but wants to make clear that building the necessary consensus to develop a single solution across the health sector is inherently challenging when a variety of organizations is involved in a large-scale project; however, the Ministry also recognizes that there has been strong feedback on the need to better ensure and enable open feedback that is welcomed and not interpreted as user reluctance to change. To this end, the Ministry continues to pursue activities that will support more collaborative and effective governance structures. The recently released IM/IT enabling strategy recognizes the need to continue to work on governance and to collaborate on all IM/IT projects that are of a common and shared interest.

- The Ministry of Health's position is that the OAG focused on issues that have since been addressed; did not consider that timelines of the national build project were made at a national steering committee level and therefore should not be in scope for a provincial audit; and that the audit excludes mention of Panorama's successes and benefits.

History of Panorama in B.C.:

- In March 2003, Dr. David Naylor released his report into the SARS outbreak, which identified lack of investment in public health infrastructure, lack of standards and inability to co-ordinate between jurisdictions, and the potential for significant human and economic loss as a result of public health emergencies (43 lives and an estimated $1 billion in Ontario due to SARS).
- In March 2004, in the wake of the SARS outbreak and the Naylor Report, the federal government initiated Infoway, an independent, not-for-profit organization funded by the federal government, to develop a Canada-wide public health surveillance system (PHS) in partnership with the provinces and territories.
- As per Infoway's Annual Report 2012-13, Infoway received approximately $2.1 billion in funding from the federal government since 2001. Approximately $133 million of this was earmarked for a PHS. $50 million went to benefits the initial build of the PHS, which became Panorama and approximately $83 million went to support provincial implementations of Panorama.
- Panorama is a national public health data management, assessment and reporting system that aids the co-ordination of public health and communicable disease management in B.C. and across Canada.
- The project was co-sponsored by B.C. and Canada Health Infoway and was governed by a steering committee made up of executive-level public health and information technology representatives from all provincial and territorial jurisdictions, as well as Health Canada, the Public Health Agency of Canada and other key stakeholders.
- Panorama was built in multiple phases. Led by B.C. on behalf of all provincial and territorial jurisdictions across Canada, it was created based on input from hundreds of public health stakeholders, representing every province and territory across Canada.
- Panorama has been implemented in B.C., Quebec, Ontario, Saskatchewan and Manitoba – representing 82% of the Canadian population.
- All Panorama modules are up and running in B.C.: vaccine inventory, immunization, family health, and communicable disease outbreaks and investigations.
- Quebec and Saskatchewan have also implemented their vaccine inventory module and are in the process of implementing their immunization module.
- Ontario has completed its full deployment of the immunization module and is presently deploying its vaccine inventory functionality. Manitoba implemented vaccine inventory

and immunization, and will deploy throughout the province in a staged approach.

- Yukon partnered with B.C.to implement Panorama in their territory. Yukon is leveraging B.C.'s implementation and infrastructure. B.C. will hold Yukon's public health information as it relates to Panorama's records. Without B.C.'s support, Yukon would not be able to sustain a program this large.
- Initially all provinces and territories were fully engaged, as was the Public Health Agency of Canada (PHAC). Over time, however, in the face of economic challenges, smaller jurisdictions and Alberta opted out of the national process and PHAC itself declined a central support/coordinating role.

National Development timeline:

- Infoway funded the initial build of Panorama at 100%, which was approximately $50 million.
- The initial timeline set out that Panorama would be delivered by IBM in March 2007. However, in 2006, the national steering committee recognized the need to allow for further customization of the product so that it would meet the varied needs and technical requirements of each jurisdiction – that an "out-of-the-box" product would not meet the needs of the provinces and territories.
- As a result, the contract was amended, with an extended timeline, and the product was delivered by IBM in December 2008.
- At that point, B.C. took Panorama and began the additional work to allow the now highly configurable Panorama product to support B.C and Yukon's unique public health business and clinical requirements.

B.C. Implementation:

- The B.C. Yukon Public Health Implementation project began in 2007 and includes the deployment of Panorama for use in B.C. and Yukon (including First Nations).
- Panorama was delivered in an initial phase in spring 2010, configured for the vaccine inventory module, and rolled out to end users in subsequent phases throughout 2010 and 2011.
- B.C.'s initial implementation of Panorama was delayed to make sure the product was enhanced to support B.C.'s unique clinical requirements.
- Over an eight-year period, B.C. will have invested over $132 million (capital and operating costs) for the B.C. Yukon Public Health Implementation project. That funding is attributed to:
    - developing the B.C. specific family health module;
    - making significant product enhancements to tailor the system to B.C. and meet our unique clinical requirements, which was completed by IBM.
    - replacing, decommissioning and converting data from multiple previous systems;
    - preparing and deploying the full set of Panorama modules;
    - leveraging investments in provincial eHealth infrastructure via integration with client and provider registries, provincial lab information in other provincial databases, and physician electronic medical records; and
    - fully supporting Panorama production operations at PHSA.

- Fully implemented, Panorama improves the ability of public health professionals to work and share information across multi-disciplinary teams, regions, and jurisdictions. It allows public health care providers to:
    - co-ordinate public health service/program delivery and develop more timely, effective and targeted care planning, education, awareness, prevention and

promotion activities;
  - develop interdisciplinary and collaborative action plans with individuals, families and other health care providers in the areas of maternal, infant, child, youth and adult health;
  - support research and evaluation of family health programs;
  - efficiently manage immunization programs and vaccine inventory;
  - improve health outcomes related to communicable diseases;
  - identify, investigate and manage communicable disease cases and contacts, as well as communicable disease outbreaks and associated risks to the public's health;
  - broadly communicate important public health information related to communicable diseases through alerts and notifications; and
  - further enable BCCDC and health authorities to conduct research and analysis to support improved preparedness for future communicable disease outbreaks and risks to communicable diseases.
- Panorama is not fully used in Vancouver Coastal Health (they have implemented the vaccine inventory functionality), which uses its own community and public health application called PARIS.
- The implementation of Panorama's communicable disease case and outbreak management components include an interface with PARIS for case data for the purposes of provincial and national data sharing about disease investigations and disease outbreak management.
- Vancouver Coastal Health is expected to further integrate immunization and family health data flows and conversations are ongoing in regards to adopting the outbreak functionality to ensure consistency across the province.
- As well, Panorama will soon be interoperable with the Integrated Community Care Information System (ICCIS) in the Northern Health Authority.

What is the Benefits Evaluation Report:

- To evaluate Panorama, MNP LLP, a business service firm, collaborated with the BC Ministry of Health's Information Technology Services Branch and the Population Health Surveillance, Engagement and Operations Branch, the BC Centre for Disease Control and Canada Health Infoway.
- To develop this evaluation, more than 40 interviews and a focus group were held with B.C. public health personnel that use Panorama to assess nurse and nurse supervisor perceptions of Panorama. As well, secondary research was conducted including reviews of initiative-specific documentation and survey data.
- In general, these interviews and research indicates that Panorama has demonstrated benefits and is a marked improvement to the previous system. The Immunization Management and Family Health modules help users by providing standardized electronic records, which are easy to access and share.
- The complete evaluation can be found here: https://www.infoway-inforoute.ca/en/component/edocman/2773-bc-panorama-benefits-evaluation-report-for-immunization-management-and-family-health-modules/view-document?Itemid=101

DISCUSSION/ADVICE:

s.16,s.17

ADVICE TO MINISTER

ADVICE AND RECOMMENDED RESPONSE:

- Panorama is the first of its kind globally, and we knew from the outset that a project of this size wasn't going to be easy.
- There have been challenges, which we've actively and aggressively worked to address.
- While it is not perfect, what we have now is a powerful tool that has set us up to successfully respond to public health emergencies.
- A recent evaluation report developed with more than 40 interviews with B.C. public health personnel that use Panorama tells us Panorama has demonstrated benefits and is a marked improvement to the previous system.
- It provides the foundation to better protect the health of British Columbians and Canadians.

If asked about Panorama's benefits and successes

- The Ministry of Health fully acknowledges that there have been significant challenges and lessons learned with this project.
- Although the system is not perfect, it also has clear benefits.
- In partnership with Ontario, Quebec, Manitoba, Saskatchewan and Yukon, Panorama currently supports 82% of the Canadian population.
- Recently, Panorama was instrumental in containing a school measles outbreak in Ontario, as public health personnel could quickly and efficiently access non-immunized student records.
- Quebec successfully consolidated 23 separate public health data sources and mandated Panorama as the only immunization registry permitted in the province.
- In Saskatchewan, Panorama means relevant clinical client immunization data is available regardless of where a patient requires service.
- And here at home, public health personnel report that having immediate, digital access to children's immunization histories means only those who require vaccines receive them.
- Panorama has also made it easier to manage vaccine supplies, which has reduced wastage and costs.
- It supported our response to Ebola and is helping to close the gap in First Nations health care.
- BC's First Nations Health Authority reports quicker, more efficient access to clinical information.
- And the B.C. First Nations Panorama Implementation project team has recently won a national eHealth award for creating new pathways to technology and access to better health services for First Nations in the province.

If asked about budget and timelines

- Panorama is a bilingual, national system – the first of its kind. It was necessary to revise the original scope to create a system powerful enough to meet the varied needs and technical requirements of each jurisdiction.
- A decision was made at the national governance level that an "out-of-the-box" product would not be sufficient, so Panorama was shifted to a custom developed application.
- As well, the provincial steering committee made a decision to move B.C. and Yukon to a phased implementation.
- These decisions regarding the scope of the project significantly affected both the budget and the schedule.
- The complexity of multiple jurisdictions involved in decision-making and defining requirements cannot be underestimated.
- The final cost and timeline are comparable to other large scale implementations at this level.

If asked about Panorama's functionalities

- The original vision for Panorama was a cross-Canada public health surveillance system tool to help manage outbreaks through early detection, rapid verification and appropriate response to emerging disease threats.
- While it is not perfect, this is what Panorama is doing in B.C. and will do for other provinces as they continue implementation.

If asked about VCH and other health authorities

- To effectively manage outbreaks and detect emerging disease threats, public health officials must be able to track data across the whole province.
- This is why it is essential for health authorities to participate in Panorama.
- Vancouver Coastal Health uses its own community and public health application called PARIS, developed before Panorama was planned.
- They have invested significant financial resources into PARIS, and the program is used to manage both public and community health resources.
- For that reason, Vancouver Coastal was allowed to be "grandfathered in" to the Panorama program.
- Panorama is compatible with PARIS and is able to share provincial and national data for the purposes of disease investigations and outbreak management.
- As well, Panorama will soon be compatible with the Integrated Community Care Information System in the Northern Health Authority.

If asked about HA patient safety and costs concerns

- Far from a patient safety risk, in fact Panorama allows public health personnel to better protect the public, through information and tools we've never had before.
- While the system is not perfect, public health nurses report that having immediate, digital access to children's immunization histories means better

decision-making – so that only those who require vaccines receive it, and children who require further vaccinations can be brought up to date.

- **As well, public health officials report Panorama has made it easier to manage vaccine supplies, which reduces wastage and helps keep costs down.**

Communications Contact: Hannah Lawrie
Program Area Contact: Jonathan Robinson
File Created: March 25, 2015
File Updated: July 7, 2015

Minister's Office	Program Area	Deputy	Media Manager
			Laura Heinze

Appendix: Financial Information

Panorama Project Financial Implications

As at April 17/14

$ in Millions

Ministry of Health Expenditures	2009/10 and Prior Actual	2010/11 Actual	2011/12 Actual	2012/13 Actual	2013/14 Actual	2014/15 Forecast	Total
Operating			8.64	23.38	27.34	9.84	69.19
Capital	24.77	9.19	3.65	0			37.61
Total	24.77	9.19	12.29	23.38	27.34	9.84	106.80

$ in Millions

Health Authority Expenditures	2009/10 and Prior Actual	2010/11 Actual	2011/12 Actual	2012/13 Actual	2013/14 Actual	2014/15 Forecast	Total
Operating				2.23	2.98	11.76	16.97
Capital				0.75	4.12	3.72	8.59
Total	0	0	0	2.98	7.10	15.48	25.56
Grand Total	24.77	9.19	12.29	26.36	34.44	25.32	132.36

QUESTIONS AND ANSWERS

Panorama - Auditor General's Report
August 12, 2015

Q1. What is Panorama?

- Panorama is a public health surveillance system that helps several provinces to manage outbreaks through early detection, rapid verification and appropriate response to emerging disease threats.
- Panorama was developed in response to the recommendations of a Canadian expert panel, which identified lack of investment in public health infrastructure; lack of standards and inability to co-ordinate between jurisdictions, and the potential for significant human and economic loss as a result of public health emergencies (43 lives and an estimated $1 billion in Ontario due to SARS).
- In March 2004, in the wake of the SARS outbreak, the federal government mandated Canada Health Infoway to develop a Canada-wide public health surveillance system in partnership with provinces and territories.
- The project was co-sponsored by B.C. and Canada Health Infoway, and was governed by a steering committee made up of executive-level public health and information technology representatives from all provincial and territorial jurisdictions, as well as Health Canada, the Public Health Agency of Canada and other key stakeholders.
- The project to build Panorama included multiple phases and British Columbia volunteered to take the lead on behalf of partner provincial and territorial jurisdictions across Canada.
- Panorama supports a range of public health functions, including:
    - vaccine and inventory management,
    - immunization management,
    - communicable disease case management,
    - outbreak management,
    - work management,
    - notifications management, and
    - family health management.

Q2. What are the OAG's recommendations and how does the ministry respond?

The OAG looked at whether Panorama is providing the IT solution the Ministry of Health expected, and whether the build and implementation were completed on time and budget. The audit makes four recommendations:

Recommendation 1: That the ministry commission an independent review of Panorama and other alternative systems to identify the most cost-effective integrated approach to meet the current and future needs of public health in British Columbia.

Response: The Ministry does not accept this recommendation. Public health experts across Canada agree there is no other system that can provide the comprehensive solution that Panorama provides. The ministry's position is that Panorama provides a solid platform, which will continue to evolve to meet the needs of British Columbians for effective, efficient and responsive public health services.

Recommendations 2&3: That the ministry review its project and contract management practices to ensure future IT projects are managed in accordance with good practice.

Response: The Ministry accepts these recommendations, as it is already actively engaged in reviewing its IT project and contract management practices to ensure future projects are managed in accordance with good practice. The ministry has also created a unit to better deal with large-scale transformational projects like Panorama. This unit consolidates in-house expertise to better ensure that the Ministry conducts appropriate oversight of vendors and contracted resources, provides necessary financial oversight and ensures adherence to Ministry and government policy. As well, the Ministry has invested in additional change management training and certification for information technology staff.

Recommendation 4: That the ministry review its current leadership practices and develop a collaborative leadership strategy for future IT projects.

Response: The Ministry accepts this recommendation but wants to make clear that building the necessary consensus to develop a single solution across the health sector is inherently challenging when a variety of organizations is involved in a large-scale project; however, the Ministry also recognizes that there has been strong feedback on the need to better ensure and enable open feedback that is welcomed and not interpreted as user reluctance to change. To this end, the Ministry continues to pursue activities that will support more collaborative and effective governance structures. The recently released IM/IT enabling strategy recognizes the need to continue to work on governance and to collaborate on all IM/IT projects that are of a common and shared interest.

Q3. The OAG says Panorama was $86 million over what was budgeted for B.C.'s implementation, which they say is 420% over budget, and completion was five years late. How did the budget and schedule get so far off the original estimates?

- Panorama is a bilingual, national system – the first of its kind. It was necessary to revise the original scope to create a system powerful enough to meet the varied needs and technical requirements of each jurisdiction.
- A decision was made at the national governance level that an "out-of-the-box" product would not be sufficient, so Panorama was shifted to a custom developed application.
- As well, the provincial steering committee made a decision to move B.C. and Yukon to a phased implementation.
- These decisions regarding the scope of the project significantly affected both the budget and the schedule.
- The complexity of multiple jurisdictions involved in decision-making and defining requirements cannot be underestimated.
- The final cost and timeline are comparable to other large-scale implementations at this level.

Q4. Has B.C. shouldered most of the costs for Panorama?

- There are two financial components to the implementation of Panorama – the initial product development and the customization and implementation of the modules at the provincial level.
- For the initial product development, Panorama was funded 100% by Canada Health Infoway, which invested in the Panorama product from funding they received from the federal government.
- As per Infoway's Annual Report 2012-13, Infoway received approximately $2.1 billion in funding from the federal government since 2001. Approximately $133 million of this was earmarked for a public health surveillance system (PHS); $50 million went to the initial build of the PHS, which became Panorama, and approximately $83 million went to support provincial implementations of Panorama.
- For the implementation component, B.C. took the lead on customization and implementation of Panorama for federal, provincial and territorial governments. In that role, some of the initial development costs, including the Family Health module which was developed exclusively for B.C., were borne by British Columbia.

- Our investment in Panorama is mostly complete. As the system is implemented in our partner provinces and territories, they are assuming costs.

Q5. How much has B.C. spent on Panorama?

- Over an eight-year period, B.C. has invested over $132 million, which includes capital and operating costs for the BC Yukon Public Health Implementation project. This funding includes:
    - Initial costs for the development and implementation of Panorama for federal, provincial and territorial governments.
    - Product enhancements tailored to meet B.C.'s unique clinical needs, including the development of the B.C.-specific family health module.
    - The vaccine inventory module, which an evaluation indicates will result in savings of approximately $2 million annually in reduced wastage, returns and improved productivity.
    - Replacing, decommissioning and converting data from multiple previous systems.
    - Developing standard business processes for use by public health professionals across BC.
    - Establishment of a robust data governance model that protects the personal health information in Panorama.
    - The full set of Panorama modules successfully deployed in B.C and supporting operations at PHSA.
    - Leveraging provincial eHealth infrastructure investments through integration with and client and provider registries, provincial lab information other provincial databases, and physician electronic medical records.
- B.C. has received more than $4 million from Infoway to implement B.C.-specific Panorama modules. An additional $6 million is in progress of being reimbursed to B.C.

Q6. The audit states that the ministry agreed to a series of change orders which descoped significant pieces and transferred risk from IBM and to the ministry and ultimately, taxpayers. In particular, the audit states that the ministry took on the risks of increasing costs and prolonging time to fix defects. Is BC paying for bugs in the system and if so, why?

- The Panorama build was is a national initiative funded through Canada Health Infoway.

- The risk shift was is reflective of the national decision to move from a commercial-off-the-shelf (COTS) product to a custom build.
- COTS and custom products have differing risk sharing profiles and the shift was reasonable and supported by the national governance bodies which included BC representation.
- BC and all of the other participating jurisdictions pay annual maintenance fees. A portion of these fees is directed to defect fixes.
- Under this system, we have complete transparency into where and how many defects exist. As well, we control how much of the annual fees goes to defect remediation and which defects get addressed.
- This transparency and control is a unique approach. Most product suppliers make all of those decisions and the licensee only finds out what has been fixed once a release comes out.
- BC's investment to customize Panorama for its unique Public Health business requirements in Panorama is mostly complete.
- As the system is implemented in our partner provinces and territories, they are investing in customization which BC gains the benefit of assuming costs.
- The move from COTS to Custom meant there were beneficial balancing trade-off's for the risk shift, which was not apparent in the OAG's report:
    - $7.3 million Master License Fee reduction
    - $2 million reduction in jurisdictional license fee savings
    - $1 million in letter of credits
    - Increase in IBMs limitation of liability from $14 million to $23 million
    - Additional report deliverables added
    - Increase in late delivery penalties from $500,000 to $2 million

Q7. The audit says that the ministry dismissed health authority concerns around the safety and efficiency of the system and ignored important system issues. How do you respond?

- Health authorities were instrumental in guiding the development of Panorama.

- The Panorama Executive Steering Committee was made up of senior health authority IT and public health representatives. As well, the Panorama Clinical Oversight Committee was a subcommittee made up of clinicians from each health authority that evaluated clinical risk and made recommendations to the steering committee.
- There were numerous occasions where the steering committee deferred deployments based on the Clinical Oversight Committee's risk assessment where risk mitigation strategies did not suffice

Q8. The OAG report says Panorama's functionalities were either not delivered or were delivered but are either unusable or have significant limitations.

- The original vision for Panorama was a cross-Canada public health surveillance system tool to help manage outbreaks through early detection, rapid verification and appropriate response to emerging disease threats.
- While it is not perfect, this is what Panorama is doing in B.C. and will do for other provinces as they continue implementation.
- To create a system capable of meeting the varied needs and technical requirements of each jurisdiction, it was necessary to revise the original scope.
- Revising the scope means Panorama has expanded capabilities and enhanced features not originally envisioned, including:
    - The family health module which helps public health personnel to support family health services, such as screenings and assessments for maternal and infant birth events, early childhood growth and development, and speech and language development.
    - Consistent clinical business workflows standards, which are critical to data quality, reporting and clinical records management fully customized to Canadian Public Health requirements.
    - A single source for comprehensive and standardized communicable disease surveillance data.
- Since the OAG began their audit, significant improvements have been made and many of the concerns in the audit have been addressed.

Q9. You state many of the concerns been addressed. How?

- Stability issues were short-term and many are no longer a concern.

- A Shared Service model means all major systems benefit when issues are addressed in the corporate infrastructure.
- Panorama has been integrated or is in the process of integrating with numerous heath sector assets, including provider registry, client registry, the provincial laboratory information system, Vancouver Coastal Health Authority's community-based care system PARIS (Primary Access Regional Information System), and BEST (the provincial audiology system), and soon to be interoperable with the Integrated Community Care Information System (ICCIS) in the Northern Health Authority.
- Though appointment times may be slightly longer, this is as a result of additional data being collected. This is valuable information not previously collected, and is essential for public health personnel in detecting and managing outbreaks and emerging threats.

Q10. The reports say health authorities continue to be concerned about Panorama's impact on patient safety and health authority costs. What do you say to this?

- Quite the opposite - Panorama in fact improves patient safety. It allows public health personnel to better protect the public through documentation and tools that we've never had before.
- While the system is not perfect, public health nurses report that having immediate, digital access to children's immunization histories means better decision-making – so that only those who require vaccines receive it, and children who require further vaccinations can be brought up to date.
- As well, public health officials report Panorama has made it easier to manage vaccine supplies, which reduces wastage and helps keep costs down.
- We recognize that the implementation has been very challenging for health authorities, and we will continue to make improvements to the system to allow for more efficient and effective public health records management.

Q11. If Panorama was to be a nation-wide service, why are only five other provinces participating? Alberta was on board then dropped out. Why?

- Initially all provinces and territories were fully engaged, as was the Public Health Agency of Canada (PHAC).
- At this point, only Alberta and New Brunswick have officially opted out. In the face of economic challenges, other jurisdictions have put their projects on hold.

- Nova Scotia for example put their whole eHealth program on hold and have been slowly ramping it back up.
- We continue to look for effective ways for smaller jurisdictions to participate, and B.C.'s partnership with Yukon is a great example of this.

Q12. Panorama is not even exclusively used in B.C. – Vancouver Coastal Health continues to use its own system and other health authorities have requested to pursue alternatives. How can it be successful if it's not used exclusively?

- To effectively manage outbreaks and detect emerging disease threats, public health officials must be able to track data across the whole province, which is why it is essential for health authorities to participate in Panorama.
- Vancouver Coastal Health does use its own community and public health application called PARIS (Primary Access Regional Information System), which was developed before Panorama was planned.
- Though Vancouver Coastal Health uses PARIS, reportable communicable diseases data is automatically downloaded into Panorama, which allows for a complete provincial picture. This data download is daily improving the timeliness and completeness of surveillance from the previous IT system which only downloaded VCH data weekly.
- As well, Vancouver has piloted Panorama's inventory module and have plans to implement it.
- Vancouver Coast Health invested significant financial resources into PARIS before Panorama. For that reason, Vancouver Coastal was allowed to be "grandfathered in" to the Panorama program.
- Panorama was developed to be a fully interoperable system not only integrated with PARIS, but also the provider registry, client registry, the provincial laboratory information system, and BEST (the provincial audiology system), and soon to be interoperable with the Integrated Community Care Information System (ICCIS) in the Northern Health Authority.
- B.C.'s First Nations Health Authority has successfully implemented Panorama and is reporting vast improvements in access to clinical information.

Q13. Have the five other provinces fully implemented Panorama?

- B.C. is the first province to fully implement Panorama and the partner provinces are making great progress.

- Saskatchewan has fully implemented and Quebec is well on its way.
- Ontario has completed its full deployment of the immunization module and is presently deploying its vaccine inventory functionality.
- Manitoba implemented the inventory and immunization modules and will deploy throughout the province in a staged approach.
- Yukon partnered with B.C.to implement Panorama in their territory. Yukon is leveraging B.C.'s implementation and infrastructure. B.C. will hold Yukon's public health information as it relates to Panorama's records. Without B.C.'s support, Yukon would not be able to sustain a program this large.

Q14. What is the Benefits Evaluation Report?

- To evaluate Panorama, MNP LLP, a business service firm, collaborated with the BC Ministry of Health's Information Technology Services Branch and the Population Health Surveillance, Engagement and Operations Branch, the BC Centre for Disease Control and Canada Health Infoway.
- To develop this evaluation, more than 40 interviews and a focus group were held with B.C. public health personnel that use Panorama to assess nurse and nurse supervisor perceptions of Panorama. As well, secondary research was conducted including reviews of initiative-specific documentation and survey data.
- In general, these interviews and research told us that Panorama has demonstrated benefits and is a marked improvement to the previous system. The Immunization Management and Family Health modules help users by providing standardized electronic records, which are easy to access and share.
- There are recommendations in the evaluation, which we are reviewing.

Q15. What are the benefits and successes of Panorama?

- The Ministry of Health fully acknowledges that there have been significant challenges and lessons learned with this project.
- Although the system is not perfect, it also has clear benefits.
- In partnership with Ontario, Quebec, Manitoba, Saskatchewan and Yukon, Panorama currently supports 82% of the Canadian population.
- Recently, Panorama was instrumental in containing a school measles outbreak in Ontario, as public health personnel could quickly and efficiently access non-immunized student records.

- Quebec successfully consolidated 23 separate public health data sources and mandated Panorama as the only permissible immunization registry in the province.
- In Saskatchewan, Panorama means relevant clinical client immunization data is available regardless of where a patient requires service.
- And here at home, public health personnel report that having immediate, digital access to children's immunization histories means only those who require vaccines receive them.
- Panorama has also made it easier to manage vaccine supplies, which has reduced wastage and costs.
- It supported our response to Ebola and is helping to close the gap in First Nations health care.
- BC's First Nations Health Authority reports quicker, more efficient access to clinical information.
- And the B.C. First Nations Panorama Implementation project team has recently won a national eHealth award for creating new pathways to technology and access to better health services for First Nations in the province.

Q16. What's next for Panorama?

- Two upgrades are underway to add tracking capability for sexually transmitted infections and tuberculosis.
- Mobile solutions are in development and feedback on usability improvements is extremely promising.
- We're doing planning work to give access to B.C. doctors to ensure accuracy when delivering immunizations and to help keep patient data current.

Q17. How is the data protected in Panorama?

- All information contained in the system is protected in accordance with provincial and federal protection of privacy legislation.
- Each jurisdiction will be required to assess and manage privacy risk and take reasonable steps to protect any personal information that may be contained on the system.
- B.C. has completed a detailed privacy impact assessment, and worked with the Privacy Commissioner to ensure that all questions have been answered and there are no privacy concerns.

- The commissioner is comfortable with the steps taken and security of the system.
- The security capabilities of the system will enable each jurisdiction to configure an implementation that is in compliance with their legislation, policy, standards, procedure and best practices.

Q18. Isn't this just yet another provincial IT disaster along with BCESIS, ICM, BC Hydro, etc.?

- All new IT systems, particularly for a major project such as this one, typically have unforeseen challenges during implementation.
- To meet the needs of British Columbians, even off-the-shelf IT solutions often have to be customized or modified. This process can often result in a slower rollout of a system, but provides added value over the lifespan of the application.
- Ministry IT staff continue to be diligent addressing issues as they arise and are working with the vendor to ensure adjustments are made as needed.

Q19. Is this a pattern with IBM? Why does the government continue to partner with them considering how past IT projects with them have gone?

- Government uses a comprehensive process for reviewing, evaluating and approving IT projects.
- As with any other procurement, the process evaluates risk, rewards and benefits as well as cost to ensure value for money and prioritization of scarce resources.
- IBM was selected through this process – had another supplier been able to meet the requirements with higher scores, they would have been selected.

BRITISH COLUMBIA

STATEMENT

For Immediate Release
[release number]
[Aug. 13, 2015]

Ministry of Health

Government responds to the auditor general's report on Panorama

VICTORIA – Health Minister Terry Lake issued the following statement today in response to the auditor general's report on Panorama.

"We appreciate the opportunity the Office of the Auditor General gives us to review our projects.

"The Ministry of Health acknowledges that there have been significant challenges and lessons learned with Panorama. We agree with most of the recommendations in the report. Work has already begun to review our IT project and contract management practices so future projects are managed better.

"We also recognize the need for a collaborative leadership approach for large IT projects. This is included in our recently released Information Management and Information Technology strategic framework, which was developed to support and enable the health sector's priorities.

"To effectively manage outbreaks and detect emerging disease threats, public health officials must be able to track data across the whole province. Panorama allows us to better protect the public, through information and tools we've never had before.

"Though it is not perfect, public health experts across Canada agree there is no other system that can provide the comprehensive solution that Panorama provides. With this in mind, we will not pursue alternative systems.

"To develop a Benefits Evaluation Report of Panorama, more than 40 interviews were held with B.C. public health personnel that use the system. In general, these interviews tell us that Panorama is an improvement to the previous system. The Immunization Management and Family Health modules help users by providing standardized electronic records, which are easy to access and share.

"Public health personnel also report that having immediate, digital access to children's immunization histories means only those who require vaccines receive them. As well, Panorama makes it easier to manage vaccine supplies, which reduces wastage and costs. The system also supported our response to Ebola and is helping to close the gap in First Nations health care. Many issues with the system have now been resolved and Panorama provides clear benefits.

"Recently in Ontario, Panorama was instrumental in containing a school measles outbreak, as public health staff could easily identify and follow up with non-immunized students. In Saskatchewan, Panorama means relevant client immunization information is available regardless of where a patient requires service. The system has allowed Quebec to consolidate 23 separate public health data sources.

"We will continue to work with our national partners on further improvements to the system. Two upgrades are underway which will support treatment and management of sexually transmitted infections and tuberculosis. More enhancements at the national level are planned for the future, such as mobile solutions and usability improvements. Planning to extend Panorama access to B.C. doctors is also underway.

"Panorama currently supports 82% of the Canadian population throughout Ontario, Quebec, Manitoba, Saskatchewan, Yukon and B.C. This public health information system provides a solid platform which will continue to evolve to meet the needs of British Columbians and Canadians for effective, efficient and responsive public health services."

Media contact: Laura Heinze
Media Relations Manager
Ministry of Health
250 952-1887 (media line)

GENERAL SERVICE AGREEMENT

For Administrative Purposes Only	
Ministry Contract No.: _2016-137_____ *Requisition No.:* __ _____ *Solicitation No.(if applicable):* CTM15/ RFQHL052 *Commodity Code:* _____ ***Contractor Information*** *Supplier Name: Ernst and Young LLP* *Supplier No.:* _____ *Telephone No.:* 604 891 8200 *FAX:* *E-mail Address: John.P.Bethel@ca.ey.com*	***Financial Information*** *Client:* 026 *Responsibility Centre:* 66072 *Service Line:* 44005 *STOB:* 60 *Project:* 6600000 ***Template version:*** *December 1, 2013*

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THIS AGREEMENT is dated for reference the 15th day of December, 2015.

BETWEEN:

Ernst and Young LLP (the "Contractor") with the following specified address and fax number:
700 West Georgia Street, Vancouver, BC V7Y 1C7

AND:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, as represented by Minister of Health, (the "Province") with the following specified address and fax number:

Ministry of Health
Health Sector Information Management Information Technology and Diagnostic Services Division
2nd Floor, 1515 Blanshard Street, Victoria BC V8W 9P1
FAX: (250) 952 1186

The Province wishes to retain the Contractor to provide the services specified in Schedule A and, in consideration for the remuneration set out in Schedule B, the Contractor has agreed to provide those services, on the terms and conditions set out in this Agreement.

As a result, the Province and the Contractor agree as follows:

1 DEFINITIONS

General

1.1 In this Agreement, unless the context otherwise requires:

(a) "Business Day" means a day, other than a Saturday or Sunday, on which Provincial government offices are open for normal business in British Columbia;

(b) "Incorporated Material" means any material in existence prior to the start of the Term or developed independently of this Agreement, and that is incorporated or embedded in the Produced Material by the Contractor or a Subcontractor;

(c) "Material" means the Produced Material and the Received Material;

(d) "Produced Material" means records, software and other material, whether complete or not, that, as a result of this Agreement, are produced or provided by the Contractor or a Subcontractor and includes the Incorporated Material;

(e) "Received Material" means records, software and other material, whether complete or not, that, as a result of this Agreement, are received by the Contractor or a Subcontractor from the Province or any other person;

(f) "Services" means the services described in Part 2 of Schedule A;

(g) "Subcontractor" means a person described in paragraph (a) or (b) of section 13.4; and

(h) "Term" means the term of the Agreement described in Part 1 of Schedule A subject to that term ending earlier in accordance with this Agreement.

Meaning of "record"

1.2 The definition of "record" in the *Interpretation Act* is incorporated into this Agreement and "records" will bear a corresponding meaning.

2 SERVICES

Provision of services

2.1 The Contractor must provide the Services in accordance with this Agreement.

Term

2.2 Regardless of the date of execution or delivery of this Agreement, the Contractor must provide the Services during the Term.

Supply of various items

2.3 Unless the parties otherwise agree in writing, the Contractor must supply and pay for all labour, materials, equipment, tools, facilities, approvals and licenses necessary or advisable to perform the Contractor's obligations under this Agreement, including the license under section 6.4.

Standard of care

2.4 Unless otherwise specified in this Agreement, the Contractor must perform the Services to a standard of care, skill and diligence maintained by persons providing, on a commercial basis, services similar to the Services.

Standards in relation to persons performing Services

2.5 The Contractor must ensure that all persons employed or retained to perform the Services are qualified and competent to perform them and are properly trained, instructed and supervised.

Instructions by Province

2.6 The Province may from time to time give the Contractor reasonable instructions (in writing or otherwise) as to the performance of the Services. The Contractor must comply with those instructions but, unless otherwise specified in this Agreement, the Contractor may determine the manner in which the instructions are carried out.

Confirmation of non-written instructions

2.7 If the Province provides an instruction under section 2.6 other than in writing, the Contractor may request that the instruction be confirmed by the Province in writing, which request the Province must comply with as soon as it is reasonably practicable to do so.

Effectiveness of non-written instructions

2.8 Requesting written confirmation of an instruction under section 2.7 does not relieve the Contractor from complying with the instruction at the time the instruction was given.

Applicable laws

2.9 In the performance of the Contractor's obligations under this Agreement, the Contractor must comply with all applicable laws.

3 PAYMENT

Fees and expenses

3.1 If the Contractor complies with this Agreement, then the Province must pay to the Contractor at the times and on the conditions set out in Schedule B:

(a) the fees described in that Schedule;

(b) the expenses, if any, described in that Schedule if they are supported, where applicable, by proper receipts and, in the Province's opinion, are necessarily incurred by the Contractor in providing the Services; and

(c) any applicable taxes payable by the Province under law or agreement with the relevant taxation authorities on the fees and expenses described in paragraphs (a) and (b).

The Province is not obliged to pay to the Contractor more than the "Maximum Amount" specified in Schedule B on account of fees and expenses.

Statements of accounts

3.2 In order to obtain payment of any fees and expenses under this Agreement, the Contractor must submit to the Province a written statement of account in a form satisfactory to the Province upon completion of the Services or at other times described in Schedule B.

Withholding of amounts

3.3 Without limiting section 9.1, the Province may withhold from any payment due to the Contractor an amount sufficient to indemnify, in whole or in part, the Province and its employees and agents against any liens or other third-party claims that have arisen or could arise in connection with the provision of the Services. An amount withheld under this section must be promptly paid by the Province to the Contractor upon the basis for withholding the amount having been fully resolved to the satisfaction of the Province.

Appropriation

3.4 The Province's obligation to pay money to the Contractor is subject to the *Financial Administration Act*, which makes that obligation subject to an appropriation being available in the fiscal year of the Province during which payment becomes due.

Currency

3.5 Unless otherwise specified in this Agreement, all references to money are to Canadian dollars.

Non-resident income tax

3.6 If the Contractor is not a resident in Canada, the Contractor acknowledges that the Province may be required by law to withhold income tax from the fees described in Schedule B and then to remit that tax to the Receiver General of Canada on the Contractor's behalf.

Prohibition against committing money

3.7 Without limiting section 13.10(a), the Contractor must not in relation to performing the Contractor's obligations under this Agreement commit or purport to commit the Province to pay any money except as may be expressly provided for in this Agreement.

Refunds of taxes

3.8 The Contractor must:

(a) apply for, and use reasonable efforts to obtain, any available refund, credit, rebate or remission of federal, provincial or other tax or duty imposed on the Contractor as a result of this Agreement that the Province has paid or reimbursed to the Contractor or agreed to pay or reimburse to the Contractor under this Agreement; and

(b) immediately on receiving, or being credited with, any amount applied for under paragraph (a), remit that amount to the Province.

4 REPRESENTATIONS AND WARRANTIES

4.1 As at the date this Agreement is executed and delivered by, or on behalf of, the parties, the Contractor represents and warrants to the Province as follows:

(a) except to the extent the Contractor has previously disclosed otherwise in writing to the Province,

(i) all information, statements, documents and reports furnished or submitted by the Contractor to the Province in connection with this Agreement (including as part of any competitive process resulting in this Agreement being entered into) are in all material respects true and correct,

(ii) the Contractor has sufficient trained staff, facilities, materials, appropriate equipment and approved subcontractual or other agreements in place and available to enable the Contractor to fully perform the Services and to grant any licenses under this Agreement, and

(iii) the Contractor holds all permits, licenses, approvals and statutory authorities issued by any government or government agency that are necessary for the performance of the Contractor's obligations under this Agreement; and

(b) if the Contractor is not an individual,

(i) the Contractor has the power and capacity to enter into this Agreement and to observe, perform and comply with the terms of this Agreement and all necessary corporate or other proceedings have been taken and done to authorize the execution and delivery of this Agreement by, or on behalf of, the Contractor, and

(ii) this Agreement has been legally and properly executed by, or on behalf of, the Contractor and is legally binding upon and enforceable against the Contractor in accordance with its terms except as enforcement may be limited by bankruptcy, insolvency or other laws affecting the rights of creditors generally and except that equitable remedies may be granted only in the discretion of a court of competent jurisdiction.

5 PRIVACY, SECURITY AND CONFIDENTIALITY

Privacy

5.1 The Contractor must comply with the Privacy Protection Schedule attached as Schedule E.

Security

5.2 The Contractor must:

(a) make reasonable security arrangements to protect the Material from unauthorized access, collection, use, disclosure, alteration or disposal; and

(b) comply with the Security Schedule attached as Schedule G.

Confidentiality

5.3 The Contractor must treat as confidential all information in the Material and all other information accessed or obtained by the Contractor or a Subcontractor (whether verbally, electronically or otherwise) as a result of this Agreement, and not permit its disclosure or use without the Province's prior written consent except:

(a) as required to perform the Contractor's obligations under this Agreement or to comply with applicable laws;

(b) if it is information that is generally known to the public other than as result of a breach of this Agreement; or

(c) if it is information in any Incorporated Material.

Public announcements

5.4 Any public announcement relating to this Agreement will be arranged by the Province and, if such consultation is reasonably practicable, after consultation with the Contractor.

Restrictions on promotion

5.5 The Contractor must not, without the prior written approval of the Province, refer for promotional purposes to the Province being a customer of the Contractor or the Province having entered into this Agreement.

6 MATERIAL AND INTELLECTUAL PROPERTY

Access to Material

6.1 If the Contractor receives a request for access to any of the Material from a person other than the Province, and this Agreement does not require or authorize the Contractor to provide that access, the Contractor must promptly advise the person to make the request to the Province.

Ownership and delivery of Material

6.2 The Province exclusively owns all property rights in the Material which are not intellectual property rights. The Contractor must deliver any Material to the Province immediately upon the Province's request.

Matters respecting intellectual property

6.3 The Province exclusively owns all intellectual property rights, including copyright, in:

(a) Received Material that the Contractor receives from the Province; and

(b) Produced Material, other than any Incorporated Material.

Upon the Province's request, the Contractor must deliver to the Province documents satisfactory to the Province that irrevocably waive in the Province's favour any moral rights which the Contractor (or employees of the Contractor) or a Subcontractor (or employees of a Subcontractor) may have in the Produced Material and that confirm the vesting in the Province of the copyright in the Produced Material, other than any Incorporated Material.

Rights in relation to Incorporated Material

6.4 Upon any Incorporated Material being embedded or incorporated in the Produced Material and to the extent that it remains so embedded or incorporated, the Contractor grants to the Province:

(a) a non-exclusive, perpetual, irrevocable, royalty-free, worldwide license to exercise, in respect of that Incorporated Material, the rights set out in the *Copyright Act* (Canada), including the right to use, reproduce, modify, publish and distribute that Incorporated Material; and

(b) the right to sublicense or assign to third-parties any or all of the rights granted to the Province under section 6.4(a).

7 RECORDS AND REPORTS

Work reporting

7.1 Upon the Province's request, the Contractor must fully inform the Province of all work done by the Contractor or a Subcontractor in connection with providing the Services.

Time and expense records

7.2 If Schedule B provides for the Contractor to be paid fees at a daily or hourly rate or for the Contractor to be paid or reimbursed for expenses, the Contractor must maintain time records and books of account, invoices, receipts and vouchers of expenses in support of those payments, in form and content satisfactory to the Province. Unless otherwise specified in this Agreement, the Contractor must retain such documents for a period of not less than seven years after this Agreement ends.

8 AUDIT

8.1 In addition to any other rights of inspection the Province may have under statute or otherwise, the Province may at any reasonable time and on reasonable notice to the Contractor, enter on the Contractor's premises to inspect and, at the Province's discretion, copy any of the Material and the Contractor must permit, and provide reasonable assistance to, the exercise by the Province of the Province's rights under this section.

9 INDEMNITY AND INSURANCE

Indemnity

9.1 The Contractor must indemnify and save harmless the Province and the Province's employees and agents from any loss, claim (including any claim of infringement of third-party intellectual property rights), damage award, action, cause of action, cost or expense that the Province or any of the Province's employees or agents may sustain, incur, suffer or be put to at any time, either before or after this Agreement ends, (each a "Loss") to the extent the Loss is directly or indirectly caused or contributed to by:

(a) any act or omission by the Contractor or by any of the Contractor's agents, employees, officers, directors or Subcontractors in connection with this Agreement; or

(b) any representation or warranty of the Contractor being or becoming untrue or incorrect.

Insurance

9.2 The Contractor must comply with the Insurance Schedule attached as Schedule D.

Workers compensation

9.3 Without limiting the generality of section 2.9, the Contractor must comply with, and must ensure that any Subcontractors comply with, all applicable occupational health and safety laws in relation to the performance of the Contractor's obligations under this Agreement, including the *Workers Compensation Act* in British Columbia or similar laws in other jurisdictions.

Personal optional protection

9.4 The Contractor must apply for and maintain personal optional protection insurance (consisting of income replacement and medical care coverage) during the Term at the Contractor's expense if:

(a) the Contractor is an individual or a partnership of individuals and does not have the benefit of mandatory workers compensation coverage under the *Workers Compensation Act* or similar laws in other jurisdictions; and

(b) such personal optional protection insurance is available for the Contractor from WorkSafeBC or other sources.

Evidence of coverage

9.5 Within 10 Business Days of being requested to do so by the Province, the Contractor must provide the Province with evidence of the Contractor's compliance with sections 9.3 and 9.4.

10 FORCE MAJEURE

Definitions relating to force majeure

10.1 In this section and sections 10.2 and 10.3:

(a) "Event of Force Majeure" means one of the following events:

(i) a natural disaster, fire, flood, storm, epidemic or power failure,

(ii) a war (declared and undeclared), insurrection or act of terrorism or piracy,

(iii) a strike (including illegal work stoppage or slowdown) or lockout, or

(iv) a freight embargo

if the event prevents a party from performing the party's obligations in accordance with this Agreement and is beyond the reasonable control of that party; and

(b) "Affected Party" means a party prevented from performing the party's obligations in accordance with this Agreement by an Event of Force Majeure.

Consequence of Event of Force Majeure

10.2 An Affected Party is not liable to the other party for any failure or delay in the performance of the Affected Party's obligations under this Agreement resulting from an Event of Force Majeure and any time periods for the performance of such obligations are automatically extended for the duration of the Event of Force Majeure provided that the Affected Party complies with the requirements of section 10.3.

Duties of Affected Party

10.3 An Affected Party must promptly notify the other party in writing upon the occurrence of the Event of Force Majeure and make all reasonable efforts to prevent, control or limit the effect of the Event of Force Majeure so as to resume compliance with the Affected Party's obligations under this Agreement as soon as possible.

11 DEFAULT AND TERMINATION

Definitions relating to default and termination

11.1 In this section and sections 11.2 to 11.4:

(a) "Event of Default" means any of the following:

(i) an Insolvency Event,

(ii) the Contractor fails to perform any of the Contractor's obligations under this Agreement, or

(iii) any representation or warranty made by the Contractor in this Agreement is untrue or incorrect; and

(b) "Insolvency Event" means any of the following:

(i) an order is made, a resolution is passed or a petition is filed, for the Contractor's liquidation or winding up,

(ii) the Contractor commits an act of bankruptcy, makes an assignment for the benefit of the Contractor's creditors or otherwise acknowledges the Contractor's insolvency,

(iii) a bankruptcy petition is filed or presented against the Contractor or a proposal under the *Bankruptcy and Insolvency Act* (Canada) is made by the Contractor,

(iv) a compromise or arrangement is proposed in respect of the Contractor under the *Companies' Creditors Arrangement Act* (Canada),

(v) a receiver or receiver-manager is appointed for any of the Contractor's property, or

(vi) the Contractor ceases, in the Province's reasonable opinion, to carry on business as a going concern.

Province's options on default

11.2 On the happening of an Event of Default, or at any time thereafter, the Province may, at its option, elect to do any one or more of the following:

(a) by written notice to the Contractor, require that the Event of Default be remedied within a time period specified in the notice;

(b) pursue any remedy or take any other action available to it at law or in equity; or

(c) by written notice to the Contractor, terminate this Agreement with immediate effect or on a future date specified in the notice, subject to the expiration of any time period specified under section 11.2(a).

Delay not a waiver

11.3 No failure or delay on the part of the Province to exercise its rights in relation to an Event of Default will constitute a waiver by the Province of such rights.

Province's right to terminate other than for default

11.4 In addition to the Province's right to terminate this Agreement under section 11.2(c) on the happening of an Event of Default, the Province may terminate this Agreement for any reason by giving at least 10 days' written notice of termination to the Contractor.

Payment consequences of termination

11.5 Unless Schedule B otherwise provides, if the Province terminates this Agreement under section 11.4:

(a) the Province must, within 30 days of such termination, pay to the Contractor any unpaid portion of the fees and expenses described in Schedule B which corresponds with the portion of the Services that was completed to the Province's satisfaction before termination of this Agreement; and

(b) the Contractor must, within 30 days of such termination, repay to the Province any paid portion of the fees and expenses described in Schedule B which corresponds with the portion of the Services that the Province has notified the Contractor in writing was not completed to the Province's satisfaction before termination of this Agreement.

Discharge of liability

11.6 The payment by the Province of the amount described in section 11.5(a) discharges the Province from all liability to make payments to the Contractor under this Agreement.

Notice in relation to Events of Default

11.7 If the Contractor becomes aware that an Event of Default has occurred or anticipates that an Event of Default is likely to occur, the Contractor must promptly notify the Province of the particulars of the Event of Default or anticipated Event of Default. A notice under this section as to the occurrence of an Event of Default must also specify the steps the Contractor proposes to take to address, or prevent recurrence of, the Event of Default. A notice under this section as to an anticipated Event of Default must specify the steps the Contractor proposes to take to prevent the occurrence of the anticipated Event of Default.

12 DISPUTE RESOLUTION

Dispute resolution process

12.1 In the event of any dispute between the parties arising out of or in connection with this Agreement, the following dispute resolution process will apply unless the parties otherwise agree in writing:

(a) the parties must initially attempt to resolve the dispute through collaborative negotiation;

(b) if the dispute is not resolved through collaborative negotiation within 15 Business Days of the dispute arising, the parties must then attempt to resolve the dispute through mediation under the rules of the Mediate BC Society; and

(c) if the dispute is not resolved through mediation within 30 Business Days of the commencement of mediation, the dispute must be referred to and finally resolved by arbitration under the *Arbitration Act*.

Location of arbitration or mediation

12.2 Unless the parties otherwise agree in writing, an arbitration or mediation under section 12.1 will be held in Victoria, British Columbia.

Costs of mediation or arbitration

12.3 Unless the parties otherwise agree in writing or, in the case of an arbitration, the arbitrator otherwise orders, the parties must share equally the costs of a mediation or arbitration under section 12.1 other than those costs relating to the production of expert evidence or representation by counsel.

13 MISCELLANEOUS

Delivery of notices

13.1 Any notice contemplated by this Agreement, to be effective, must be in writing and delivered as follows:

(a) by fax to the addressee's fax number specified on the first page of this Agreement, in which case it will be deemed to be received on the day of transmittal unless transmitted after the normal business hours of the addressee or on a day that is not a Business Day, in which cases it will be deemed to be received on the next following Business Day;

(b) by hand to the addressee's address specified on the first page of this Agreement, in which case it will be deemed to be received on the day of its delivery; or

(c) by prepaid post to the addressee's address specified on the first page of this Agreement, in which case if mailed during any period when normal postal services prevail, it will be deemed to be received on the fifth Business Day after its mailing.

Change of address or fax number

13.2 Either party may from time to time give notice to the other party of a substitute address or fax number, which from the date such notice is given will supersede for purposes of section 13.1 any previous address or fax number specified for the party giving the notice.

Assignment

13.3 The Contractor must not assign any of the Contractor's rights or obligations under this Agreement without the Province's prior written consent. Upon providing written notice to the Contractor, the Province may assign to any person any of the Province's rights under this Agreement and may assign to any "government corporation", as defined in the *Financial Administration Act*, any of the Province's obligations under this Agreement.

Subcontracting

13.4 The Contractor must not subcontract any of the Contractor's obligations under this Agreement to any person without the Province's prior written consent, excepting persons listed in the attached Schedule C. No subcontract, whether consented to or not, relieves the Contractor from any obligations under this Agreement. The Contractor must ensure that:

(a) any person retained by the Contractor to perform obligations under this Agreement; and

(b) any person retained by a person described in paragraph (a) to perform those obligations

fully complies with this Agreement in performing the subcontracted obligations.

Waiver

13.5 A waiver of any term or breach of this Agreement is effective only if it is in writing and signed by, or on behalf of, the waiving party and is not a waiver of any other term or breach.

Modifications

13.6 No modification of this Agreement is effective unless it is in writing and signed by, or on behalf of, the parties.

Entire agreement

13.7 This Agreement (including any modification of it) constitutes the entire agreement between the parties as to performance of the Services.

Survival of certain provisions

13.8 Sections 2.9, 3.1 to 3.4, 3.7, 3.8, 5.1 to 5.5, 6.1 to 6.4, 7.1, 7.2, 8.1, 9.1, 9.2, 9.5, 10.1 to 10.3, 11.2, 11.3, 11.5, 11.6, 12.1 to 12.3, 13.1, 13.2, 13.8, and 13.10, any accrued but unpaid payment obligations, and any other sections of this Agreement (including schedules) which, by their terms or nature, are intended to survive the completion of the Services or termination of this Agreement, will continue in force indefinitely subject to any applicable limitation period prescribed by law, even after this Agreement ends.

Schedules

13.9 The schedules to this Agreement (including any appendices or other documents attached to, or incorporated by reference into, those schedules) are part of this Agreement.

Independent contractor

13.10 In relation to the performance of the Contractor's obligations under this Agreement, the Contractor is an independent contractor and not:

(a) an employee or partner of the Province; or

(b) an agent of the Province except as may be expressly provided for in this Agreement.

The Contractor must not act or purport to act contrary to this section.

Personnel not to be employees of Province

13.11 The Contractor must not do anything that would result in personnel hired or used by the Contractor or a Subcontractor in relation to providing the Services being considered employees of the Province.

Key Personnel

13.12 If one or more individuals are specified as "Key Personnel" of the Contractor in Part 4 of Schedule A, the Contractor must cause those individuals to perform the Services on the Contractor's behalf, unless the Province otherwise approves in writing, which approval must not be unreasonably withheld.

Pertinent information

13.13 The Province must make available to the Contractor all information in the Province's possession which the Province considers pertinent to the performance of the Services.

Conflict of interest

13.14 The Contractor must not provide any services to any person in circumstances which, in the Province's reasonable opinion, could give rise to a conflict of interest between the Contractor's duties to that person and the Contractor's duties to the Province under this Agreement.

Time

13.15 Time is of the essence in this Agreement and, without limitation, will remain of the essence after any modification or extension of this Agreement, whether or not expressly restated in the document effecting the modification or extension.

Conflicts among provisions

13.16 Conflicts among provisions of this Agreement will be resolved as follows:

(a) a provision in the body of this Agreement will prevail over any conflicting provision in, attached to or incorporated by reference into a schedule, unless that conflicting provision expressly states otherwise; and

(b) a provision in a schedule will prevail over any conflicting provision in a document attached to or incorporated by reference into a schedule, unless the schedule expressly states otherwise.

Agreement not permit nor fetter

13.17 This Agreement does not operate as a permit, license, approval or other statutory authority which the Contractor may be required to obtain from the Province or any of its agencies in order to provide the Services. Nothing in this Agreement is to be construed as interfering with, or fettering in any manner, the exercise by the Province or its agencies of any statutory, prerogative, executive or legislative power or duty.

Remainder not affected by invalidity

13.18 If any provision of this Agreement or the application of it to any person or circumstance is invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to any other person or circumstance will not be affected or impaired and will be valid and enforceable to the extent permitted by law.

Further assurances

13.19 Each party must perform the acts, execute and deliver the writings, and give the assurances as may be reasonably necessary to give full effect to this Agreement.

Additional terms

13.20 Any additional terms set out in the attached Schedule F apply to this Agreement.

Governing law

13.21 This Agreement is governed by, and is to be interpreted and construed in accordance with, the laws applicable in British Columbia.

14 INTERPRETATION

14.1 In this Agreement:

(a) "includes" and "including" are not intended to be limiting;

(b) unless the context otherwise requires, references to sections by number are to sections of this Agreement;

(c) the Contractor and the Province are referred to as "the parties" and each of them as a "party";

(d) "attached" means attached to this Agreement when used in relation to a schedule;

(e) unless otherwise specified, a reference to a statute by name means the statute of British Columbia by that name, as amended or replaced from time to time;

(f) the headings have been inserted for convenience of reference only and are not intended to describe, enlarge or restrict the scope or meaning of this Agreement or any provision of it;

(g) "person" includes an individual, partnership, corporation or legal entity of any nature; and

(h) unless the context otherwise requires, words expressed in the singular include the plural and *vice versa*.

15 EXECUTION AND DELIVERY OF AGREEMENT

15.1 This Agreement may be entered into by a separate copy of this Agreement being executed by, or on behalf of, each party and that executed copy being delivered to the other party by a method provided for in section 13.1 or any other method agreed to by the parties.

The parties have executed this Agreement as follows:

SIGNED on the 15 th day of December, 2015 by the Contractor (or, if not an individual, on its behalf by its authorized signatory or signatories): Ernst + Young LLP Signature(s) John Bethel Print Name(s) Partner Print Title(s)	SIGNED on the 15th day of December , 2015 on behalf of the Province by its duly authorized representative: Signature B. KOCUREK Print Name Chief Technology Officer Print Title

PART 1. TERM:

1. The term of this Agreement commences on December 15, 2015 and ends on March 31, 2016

PART 2. SERVICES:

Working with the Executive Team for the Health Sector Information Management and Information Technology (HSIM/IT) Division the Contractor will review our current processes and provide detailed recommendations to the Assistant Deputy Minister (ADM), HSIM/IT and Diagnostic Services concerning leading practices in governance, project management and contract management. The Contractor will also review a number of current projects as well as the audits performed by the Office of the Auditor General (OAG) and ensure their recommendations for leading practices meets the spirit and intent of the OAG recommendations. Detailed recommendations will be supported by an implementation strategy for HSIM/IT to follow when implementing the recommendations. **Outputs**

The Contractor must:

1. Provide Executive Level advisory services to the ADM, HSIM/IT and the Executive Team concerning the achievement of leading practices in the fields of governance, project management, and contract management processes;
2. Review a range of current projects against leading practices and assess the effectiveness of the current internal governance, project management and contract management processes in place in the HSIM/IT Division;
3. Examine current working relationships between the business areas of the Ministry of Health (Ministry) and HSIM/IT Division in the areas of governance and project management processes;
4. Prepare a comprehensive set of recommendations designed to increase effective collaboration both within the Ministry and between the Ministry and the health authorities. Provide the HSIM/IT Division with an implementation strategy to put into effect leading practices in the areas of governance, project management and contract management processes.

The Contractor must:

1. Using qualified resources review those projects identified by the ADM, HSIM/IT as case examples for use in assessing the effectiveness of the internal processes currently used within the HSIM/IT Division in the areas of governance, project management, and contract management.
2. Review the audit reports of the OAG for information about gaps in current HSIM/IT business practice pertaining to governance, project management, and contract management processes;
3. Interview the ADM and Executive Team and other appropriate personnel across the Ministry to identify, review and analyze current business practice, including how governance, project management and contract management processes are conducted within each business area, identifying the level of resources assigned and the extent of authority each brings to this work.
4. Using case examples assess the practices used by within the HSIM/IT Division against leading practices and assess their effectiveness when transitioning from project state to operations state;
5. Perform a review of the effectiveness of the HSIM/IT Division ability to transition projects from Ministry delivery to Ministry relationship oversight and management when passing project solutions to our operational arm at the Provincial Health Services Authority; and
6. Prepare a detailed set of recommendations to guide the HSIM/IT Division to implement improved business practices in a timely way.

Inputs

The Contractor must:

a. Provide qualified resources to perform the service; and
b. Provide all the relevant equipment to perform the service.

The Province must:

a. Provide clarification on all relevant issues; and
b. Review, comment and sign off on all deliverables.

Outcomes

Through the delivery of the Services the Province wishes to realize the following outcomes and, without limiting the obligation of the Contractor to comply with other provisions of this Part, the Contractor must use commercially reasonable efforts to achieve them:

The furtherance of leading practices pertaining to governance, project management and contract management processes.

The parties acknowledge that the Contractor does not warrant that these outcomes will be achieved.

Reporting requirements:

1. The Contractor will provide a written monthly status report to the ADM, HSIM/IT Division, on December 301 2015, January 31, 2016, February 28, 2016 and March 31, 2016.
2. At the conclusion of the project, the Contractor will provide to the ADM, HSIM/IT Division,a full report, inclusive of findings, recommendations and implementation strategy.

PART 3. RELATED DOCUMENTATION:

1. The Contractor must perform the Services in accordance with the obligations set out in this Schedule A including any engagement letter, Solicitation document excerpt, proposal excerpt or other documentation attached as an Appendix to, or specified as being incorporated by reference in, this Schedule.

Not Applicable

PART 4. KEY PERSONNEL:

1. John Bethel, Partner
2. Mike Miller, Partner
3. Tanya Hubbard, Senior Manager

Any changes to the Key Personnel listed above will require the prior written approval of the Province which can be in the form of an email.

If the Contractor's Key Personnel listed above is unavailable for a contemplated project or assignment, the Contractor may propose a substitute resource. The Contractor must provide the resume of any proposed substitution, to the Province for evaluation and consideration, at the sole option of the Province. It is expected that substitutions possess the same or better qualifications and experience as the person being replaced.

Schedule B – Fees and Expenses

1. MAXIMUM AMOUNT PAYABLE:

Maximum Amount: Despite sections 2 and 3 of this Schedule, $175,000.00 is the maximum amount which the Province is obliged to pay to the Contractor for fees and expenses under this Agreement (exclusive of any applicable taxes described in section 3.1(c) of this Agreement).

2. FEES:

Hourly Rate

Fees: at the hourly rates set below, to a maximum of $160,000.00, for performing the Services during the Term of this Agreement:

Partner: $375 per hour

Senior Manager: $290 per hour

3. EXPENSES:

Expenses: To a maximum of $15,000 during the Term of the Agreement for:

(a) travel, accommodation and meal expenses for travel greater than 32 kilometers away from 700 West Georgia Street, Vancouver, British Columbia V7Y 1C7on the same basis as the Province pays its Group II employees when they are on travel status; and

(b) the Contractor's actual long distance telephone, fax, postage and other identifiable communication expenses.

excluding goods and services tax ("GST") or other applicable tax paid or payable by the Contractor on expenses described in a) and (b) above to the extent that the Contractor is entitled to claim credits (including GST input tax credits), rebates, refunds or remissions of the tax from the relevant taxation authorities.

Statements of Account: In order to obtain payment of any fees or expenses under this Agreement for a period from and including the 1st day of a month to and including the last day of that month (each a "Billing Period"), the Contractor must deliver to the Province on a date after the Billing Period (each a "Billing Date"), a written statement of account in a form satisfactory to the Province containing:

(a) the Contractor's legal name and address;

(b) the date of the statement, and the Billing Period to which the statement pertains;

(c) the Contractor's calculation of all fees claimed for that Billing Period, including a declaration by the Contractor of all hours worked during the Billing Period.

(d) a chronological listing, in reasonable detail, of any expenses claimed by the Contractor for the Billing Period with receipts attached, if applicable, and, if the Contractor is claiming reimbursement of any GST or other applicable taxes paid or payable by the Contractor in relation to those expenses, a description of any credits, rebates, refunds or remissions the Contractor is entitled to from the relevant taxation authorities in relation to those taxes;

(e) the Contractor's calculation of any applicable taxes payable by the Province in relation to the Services for the Billing Period;

(f) a description of this Agreement;

(g) a statement number for identification; and

any other billing information reasonably requested by the Province.

5. PAYMENTS DUE:

Payments Due: Within 30 days of the Province's receipt of the Contractor's written statement of account delivered in accordance with this Schedule, the Province must pay the Contractor the fees and expenses (plus all applicable taxes) claimed in the statement if they are in accordance with this Schedule. Statements of account or contract invoices offering an early payment discount may be paid by the Province as required to obtain the discount.

Schedule C – Approved Subcontractor(s)

Not applicable

Schedule D – Insurance

1. The Contractor must, without limiting the Contractor's obligations or liabilities and at the Contractor's own expense, purchase and maintain throughout the Term the following insurances with insurers licensed in Canada in forms and amounts acceptable to the Province:

   (a) Commercial General Liability in an amount not less than $2,000,000.00 inclusive per occurrence against bodily injury, personal injury and property damage and including liability assumed under this Agreement and this insurance must

      (i) include the Province as an additional insured,

      (ii) be endorsed to provide the Province with 30 days advance written notice of cancellation or material change, and

      (iii) include a cross liability clause.

2. All insurance described in section 1 of this Schedule must:

   (a) be primary; and

   (b) not require the sharing of any loss by any insurer of the Province.

3. The Contractor must provide the Province with evidence of all required insurance as follows:

   (a) within 10 Business Days of commencement of the Services, the Contractor must provide to the Province evidence of all required insurance in the form of a completed Province of British Columbia Certificate of Insurance;

   (b) if any required insurance policy expires before the end of the Term, the Contractor must provide to the Province within 10 Business Days of the policy's expiration, evidence of a new or renewal policy meeting the requirements of the expired insurance in the form of a completed Province of British Columbia Certificate of Insurance; and

   (c) despite paragraph (a) or (b) above, if requested by the Province at any time, the Contractor must provide to the Province certified copies of the required insurance policies.

4. The Contractor must obtain, maintain and pay for any additional insurance which the Contractor is required by law to carry, or which the Contractor considers necessary to cover risks not otherwise covered by insurance specified in this Schedule in the Contractor's sole discretion.

Schedule E – Privacy Protection Schedule

Not applicable

Schedule F – Additional Terms

1. Contractor Identification – During the term of this Agreement and at the request of the Province, contractors shall identify themselves as contractors to the ministry. This may be in the form of email signature blocks, business cards, correspondence, and verbal business dealings.
2. In addition to section 13.1, the General Services Agreement may be entered into by each party signing and delivering it to the other party by email with attachment in PDF format.

Schedule G – Security Schedule

Not Applicable.

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Monday, November 23, 2015 9:05 AM
To: 'Tanya Hubbard'
Cc: 'John Bethel'
Subject: RE: EY Response to CTM015_RFQHL052_Review of Governance, Project Management and Contract Management Process

Good morning Tanya: This note is to confirm receipt of your response to CTM015 for a Review of Governance, Project Management and Contract Management Process.

Cheers

Heather J Taylor
Manager, Procurement and Contracts
IT Services Branch | Health Sector IM/IT | Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC V8W 3C8
Office: 250 952-3206

Keep Calm and Carry On

it Services Branch
Connecting IT solutions with ministry business priorities
and providing health sector identity services

From: Tanya Hubbard [mailto:tanya.hubbard@ca.ey.com]
Sent: Friday, November 20, 2015 12:50 PM
To: Taylor, Heather HLTH:EX
Cc: John Bethel
Subject: EY Response to CTM015_RFQHL052_Review of Governance, Project Management and Contract Management Process

Dear Heather,

Please find attached our response to the above noted Call to Market.

Thank you very much for the opportunity and we look forward to hearing from you.

Have a great weekend.

Kind regards,

Tanya

For more information on EY Canada's Health practice visit our web page at: ey.com/ca/healthcare

Find us on: Facebook | LinkedIn | Twitter | YouTube

Tanya Hubbard | Senior Manager
National Health Care Practice

Ernst & Young LLP
Pacific Centre, 700 West Georgia Street, P.O. Box 10101, Vancouver , BC V7Y 1C7 Canada
Phone: +1 604 643 5478 | Cell Phone: +1 604 725 0327
Tanya.Hubbard@ca.ey.com

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Friday, November 27, 2015 1:37 PM
To: 'Tanya Hubbard'
Cc: 'John Bethel'
Subject: RE: EY Response to CTM16 RFQHL052 StrategicRoadmap

Good afternoon, Tanya.

Please accept this e-mail as confirmation of receipt of your response to Call to Market #16 for a Strategic Roadmap.

Cheers

From: Tanya Hubbard [mailto:tanya.hubbard@ca.ey.com]
Sent: Friday, November 27, 2015 1:23 PM
To: Taylor, Heather HLTH:EX
Cc: John Bethel
Subject: EY Response to CTM16 RFQHL052 StrategicRoadmap

Dear Heather,

Please find attached our response to the above noted Call to Market. I have attached our 3 page proposal as well as an appendix of the diagrams in the proposal as the font in diagrams in the proposal document may be a little small to read.

Thank you very much for the opportunity and we look forward to hearing from you.

Have a great weekend.

Kind regards,
Tanya

Tanya Hubbard | Senior Manager
National Health Care Practice

Ernst & Young LLP
Pacific Centre, 700 West Georgia Street, P.O. Box 10101, Vancouver , BC V7Y 1C7 Canada
Phone: +1 604 643 5478 | Cell Phone: +1 604 725 0327
Tanya.Hubbard@ca.ey.com

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Friday, December 11, 2015 11:15 AM
To: 'Tanya Hubbard'
Cc: Shera, Deborah HLTH:EX; Kocurek, Brad A HLTH:EX
Subject: Call to Market 015 Review of Governance, Project Management and Contract Management

Dear Tanya Hubbard:

RE: Call to Market 015 Review of Governance, Project Management and Contract Management

Thank you for your response to the above-noted Call to Market.

The Ministry of Health has completed its evaluation process and has determined that Ernst and Young LLP is the highest scoring proponent in Call to Market 015.

Subject to the finalization and execution of a written contract, you will commence with the requirements of the Call to Market. The Ministry will be contacting you to schedule the dates for contract finalization proceedings.

Sincerely,

Heather J Taylor
Manager, Procurement and Contracts
IT Services Branch | Health Sector IM/IT | Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC V8W 3C8
Office: 250 952-3206

Keep Calm and Carry On

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Tuesday, December 15, 2015 4:27 PM
To: 'Tanya Hubbard'
Cc: Kocurek, Brad A HLTH:EX; Shera, Deborah HLTH:EX
Subject: Ernst and Young LLP contract #
Attachments: Ernst and Young 2016-137 Final Dec 15.15.docx

Good afternoon Tanya:

Per our telephone conversation, here for your review is Contract 2016-137 between Ministry of Health and Ernst and Young LLP. This contract will take effect upon the date of full execution, which I anticipate to be December 16, 2015.

Please review the contract and if no revisions are needed, sign and return it to me as a pdf. I will obtain the Ministry signature and return an electronic copy to you. If you also require a hard copy of the fully executed version, please let me know.

Cheers and thanks.

Heather J Taylor
Manager, Procurement and Contracts
IT Services Branch | Health Sector IM/IT | Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC V8W 3C8
Office: 250 952-3206

Keep Calm and Carry On

it Services Branch
Connecting IT solutions with ministry business priorities
and providing health sector identity services

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Tuesday, December 22, 2015 9:08 AM
To: 'Tanya Hubbard'
Subject: RE: EY Contract for IT Governance PM and Contract Management Process Review - EY Signature

Thanks, Tanya. Very nice meeting you yesterday – I enjoy putting faces and names together.

I'll have the document signed here and will return it to you as an electronic file.

Cheers

From: Tanya Hubbard [mailto:tanya.hubbard@ca.ey.com]
Sent: Monday, December 21, 2015 5:35 PM
To: Taylor, Heather HLTH:EX
Subject: EY Contract for IT Governance PM and Contract Management Process Review - EY Signature

Hello Heather,

As discussed please find attached an updated contract with the EY signature. I've removed the Manager and Senior Consultant roles/rates as discussed. I've attached a word version and the PDF version. If you need anything else at all please do not hesitate to call or email me. I'm on my cel for the next few days. Hope you have a great holiday season and happy holidays!

We look forward to working with you in 2016!

Kind regards,
Tanya

Tanya Hubbard | Senior Manager
National Health Care Practice

Ernst & Young LLP
Pacific Centre, 700 West Georgia Street, P.O. Box 10101, Vancouver , BC V7Y 1C7 Canada
Phone: +1 604 643 5478 | Cell Phone: +1 604 725 0327
Tanya.Hubbard@ca.ey.com

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Thursday, December 24, 2015 10:04 AM
To: 'Tanya Hubbard'
Cc: Taylor, Heather HLTH:EX; Kocurek, Brad A HLTH:EX
Subject: Ernst and Young LLP Contract #2016-137
Attachments: Ernst and Young Contract 2016-137 Fully Executed Dec 15.15.pdf; Insurance Certificate Dec 22.15.pdf

Good morning Tanya:

Enclosed **is Contract # 2016-137 between Ernst and Young LLP and Ministry of Health.** The term of this contract is between December 15, 2015 and March 31, 2016, and the maximum worth is $175,000.00.

Also enclosed is a **Certificate of Insurance** form which must be completed by your insurance provider and **returned for inclusion on our contract file.**

Schedule D – Insurance, in contract 2016-137 (fully executed and distributed as part of this e-mail) stipulates that you must hold insurance in accordance with the conditions described in the Schedule. **A signed Certificate of Insurance** is an essential part of the Ministry's contract file.

Part 1 of the enclosed Certificate of Insurance form has been completed by the Province. **Please have your insurance provider complete Part 2 of the form, and return the completed, signed document to my attention as a pdf.**

Please feel free to call if you have any questions or concerns.

Heather J Taylor
Manager, Procurement and Contracts
IT Services Branch | Health Sector IM/IT | Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC V8W 3C8
Office: 250 952-3206

Keep Calm and Carry On

it Services Branch
Connecting IT solutions with ministry business priorities
and providing health sector identity services

Taylor, Heather HLTH:EX

From: Taylor, Heather HLTH:EX
Sent: Tuesday, February 23, 2016 10:54 AM
To: 'Tanya Hubbard'
Subject: RE: EY Invoice for Fees from December 15 2015 - February 5th 2016

Thanks, Tanya. We'll review and get this into process right away.

Cheers

Heather

From: Tanya Hubbard [mailto:tanya.hubbard@ca.ey.com]
Sent: Tuesday, February 23, 2016 10:53 AM
To: Taylor, Heather HLTH:EX
Subject: EY Invoice for Fees from December 15 2015 - February 5th 2016

Hi Heather,

Please find attached an interim fees invoice for Dec 15 – Feb 5 for our IT Governance Review work. If you have any questions please do not hesitate to ask,

Thank you!
Tanya

Tanya Hubbard | BC Health Lead
Canadian Health Practice

Ernst & Young LLP
Pacific Centre, 700 West Georgia Street, P.O. Box 10101, Vancouver , BC V7Y 1C7 Canada
Phone: +1 604 643 5478 | Cell Phone: +1 604 725 0327
Tanya.Hubbard@ca.ey.com

Follow up to Public Accounts Committee Meeting on November 16, 2015 (Panorama Audit)

Follow up items as extracted from the transcript and provided by Mr. Ron Wall:

1. **[1040]**

   ***D. Eby**: With respect to the sustainment figures, I noted that, Mr. Brown, you had some notes with some additional breakdown of those costs. I wonder, Mr. Chair, whether those might be provided to the committee, as they have more detail than what we've been provided. I'll leave that with Mr. Brown — to ponder whether they're willing to release that.*

   B. Ralston (Chair): I can direct that it be released through the Clerk to the committee, and I'll make that direction.

Response:

Here is the requested additional relevant information taken directly from my notes.

Distribution of Sustainment Fees					
Sustainment Year	**IBM**	**Non-IBM**	**Total**	**BC**	**Other Jurisdictions**
2009	$8.50	$2.00	**$10.50**	$0.90	$9.60
2010	$10.00	$1.00	**$11.00**	$1.10	$9.90
Total	$18.50	$3.00	**$21.50**	**$2.00**	**$19.50**

2009 and 2010 Sustainment Contributions by Jurisdiction			
09/10 Contributions from Jurisdictions		**10/11 Contributions from Jurisdictions**	
Jurisdiction	**Amount**	**Jurisdiction**	**Amount**
Ontario	$ 3.32	Ontario	$ 3.57
Quebec	$ 2.32	Quebec	$ 2.48
Manitoba	$ 0.59	Manitoba	$ 0.62
Saskatchewan	$ 0.55	Saskatchewan	$ 0.57
Nova Scotia	$ 0.61	Nova Scotia	$ 0.63
New Brunswick	$ 0.57	New Brunswick	$ -
Newfoundland & Labrador	$ 0.51	Newfoundland & Labrador	$ 0.53
Yukon Territory	$ 0.04	Yukon Territory	$ 0.04
FNIHB	$ 0.35	FNIHB	$ 0.36
BC	$ 0.90	BC	$ 1.10
Fiscal Year Adjustment	$ 0.74	Fiscal Year Adjustment	$ 1.10
Total Contributions	**$ 10.50**	**Total Contributions**	**$ 11.00**

- In 2009, 31% of the sustainment funding (or approximately $3.3 million) was allocated to remediating defects and this dropped to below 20% in 2010.
- The remainder was used for normal sustainment activities such as help desk; release packaging; minor enhancements; testing; standards and quality; incident management etc.
- Industry norm for a relatively mature application is around 20% of the value of ongoing maintenance contracts are allocated to defect resolution.

2. [1040]

***D. Eby**: When I look at the old Health Canada website — I've asked the Chair, and he has forwarded the link to this around to my fellow committee members — I read that originally, Infoway was supporting the development and the implementation of this public health surveillance system called Panorama.*

Actually, when I look at the current project list on the Canada Health Infoway, I see that the government of Manitoba got $6.6 million. It looks like they haven't used it all yet, only about half of it. It looks like the government of Ontario got more than $27 million. Both descriptions say that the purpose of the project is to implement Panorama, a public health information system. Ontario — $27.7 million on the Canada Health Infoway project list website.

I'm wondering. Ontario got $27 million. Manitoba got $6 million for implementation. Did B.C. get any money, or did we have to front the full cost of implementation because we were carrying this project and it was our fault?

***S. Brown**: My understanding would be not the latter, but I would have to get a detailed answer for you. I don't know the answer. My understanding is that we got everything proportionally in line with other jurisdictions. I don't think there was a neglect on B.C. in terms of getting its proportion of the funds from Infoway. I'd be happy to get the answer and pass it to you through the Chair.*

Response:

The Province did receive Canada Health Infoway funding in support of the BC/Yukon Panorama Implementation Project of $9,818,158 and to date $8,270,523 has been reimbursed with the remaining to be received upon the final onboarding of programs related to Tuberculosis and Sexually Transmitted Infections.

3. [1055]

*B. Ralston **(Chair):** Just before you continue. Given that you've said you were revising the action plan and this is a new system that the committee is engaged in, I would appreciate it if you would file a new, revised action plan. The ministry and its action plan will be judged by the committee, and you'll be invited back, hopefully, in a year or so to report on your progress on the action plan. So if it is revised, it's probably important that we have that revised version before us.*

***S. Brown:** I'd be pleased to do that. If I could just say, by way of a marker, I think it would probably be around February by the time we've actually been through the full process internally and gone to*

leadership council and got sign-off of our game plan going forward. It won't be radically different, but it will be enhanced and refined, I think, Chair — what you will see.

Response:

As the Auditor General pointed out (see below) the action plan that we presented to this committee does reflect the revised thinking of the Ministry from what we had originally documented in our response to the audit. As we undertake our internal health sector governance reviews we will expand upon our plans and these changes will be provided to this committee as updates. However, what was presented is our current plan of action.

[1055]

C. Bellringer: *My understanding of what was presented in the action plan, which was the one that was provided at the last meeting, was different from what was included in our report as the ministry's response.*

I think the action plan.... I mean, unless you're saying it's changed since then...

S. Brown: *No, it hasn't.*

C. Bellringer: *I think it is reflecting the most current information and can be used. It's what we would be using to do the next assessment until such time as it changes.*

4. [1110]

V. Huntington*: We've spoken about the transfer of risk to the taxpayer on the major decisions. Was this transfer of risk made at the national level? At what level, in British Columbia, was that decision made? Did they sort of spread out the risk to all provinces, or was the risk only absorbed in British Columbia? And at what level was that decision made?*

S. Brown*: It was national. It was a shared risk in terms of the determination of the shifts and adjustments that were made in 2007, I think it was, when the changes were made. I understand that it was at a workup to a meeting that took place in Edmonton, where the decisions were made in terms of how to move forward, both with respect to stay or leave IBM, or to make accommodation for a custom build that was different than what was originally intended. Although, I understand it had already started evolving in that way over the previous year. It wasn't just a sudden switch and move to custom. That had already, really, begun to emerge, I think, in 2006, if I understood correctly.*

The people at that committee would have been at the ADM level, I think. I can check that for you if you want to know the level. It would have been at an ADM or a DM level at that national committee, in collaboration with Canada Health Infoway.

V. Huntington*: So it was made at an official level, then, on whether or not the taxpayer should absorb the risk and transfer it from IBM to the taxpayer.*

***S. Brown**: I would assume. I can check on this. I would assume that from that meeting, that would have, then, come back to the respective jurisdictions. But I would have to check on that to see what happened at that time.*

It would be normal practice. It wouldn't just be officials making that. I think what would have come back would have been the question that was raised last time, which was: what was the thinking? That would have been brought back in terms of the trade-offs and thinking that went into why, unanimously, there was a decision to carry on in that direction.

***V. Huntington**: I would be interested in receiving that sort of timeline of the decision — when and who and at what level it was made. Also, I've been interested in the discussion in the report around the issue of ministerial command-and-control decision-making and leadership styles. One of the concerns I had was the fact that the ministry appeared to — well, did — dismiss the health authority concerns about efficiencies and patient safety, etc.*

It's a twofold question. How does the ministry see its role in the delivery of health care versus the actual health authorities, which are responsible for that delivery? At what stage does the ministry seem to decide what is best for the patient? At what stage and why does the ministry make decisions that are not approved or acceptable to the health authorities? That's one.

[1115]

***V. Huntington**: ... The other question I had was .... It was a pan-Canadian project that you were looking to. However, in British Columbia, the decision was made at the ministry level to allow some authorities to opt out, others not to opt out. I'd like to know the criteria upon which that decision was made.*

***S. Brown**: With respect to your first question, I would say it's an evolving relationship. I'd say that early on in the last decade, when this was first implemented by having health authorities, B.C., along with most other jurisdictions, basically had the notion that you could move all operational accountability over to an enterprise like a health authority and that then the government, the ministry, would stay in the back in a steering role in enabling that.*

I think the reality of the political context for Health, in a Westminster model, led to the conclusion that the ministry is accountable, at the end of the day, for decisions that are made and is held accountable by the public.

I would say there's been an evolution over the ten years, where there is much more of a balance now between the health authorities and the ministry. I would say an active dialogue and debate goes on in terms of: what is the role of the ministry versus the role of the health authority?

I would have to make a distinction, though, to something that you said. I would say the ministry would contest that there was a serious clinical risk or that the ministry was actually determining and ignoring the clinical risk. The HAs themselves have a complex relationship with their clinicians, who are under the guidance of their respective colleges, in terms of clinical autonomy and clinical

standards. So there's a dynamic that occurs, just at the HA level, between the health authority administration and doctors, in particular, but also the health professionals in terms of clinical.

What you saw in play here was that dynamic taking place. You've got a range of different perspectives, even within the clinical, around what schedules should take place — what vaccination schedules, what dosages. So you've got quite a wide, broad debate going on at the same time as you're trying to move in an administrative direction.

I think the point that we did take from the Auditor's report.... I would say, personally, that we have made big strides. There is a different tone in the relationship over the last couple of years. I could definitely say, having been there. I can't speak for the previous, for some of it. There is very much....

We have done quite a lot of work with the HAs to clarify: what is the governance role of the HA? What's the role of the minister? What's the role of the ministry? What's the role of the senior executive teams in the HAs? We've done quite a lot of joint work with the boards, with the board chairs and with the senior executives to clarify those roles and really try and use, now, the leadership meeting, which is the officials on both sides. As well, the minister meets regularly with board chairs throughout the year, where there's some really good dialogue and working together through issues.

I would also say, in all honesty, there's some push-and-take about.... Sometimes, to be honest with you, it's like herding cats. We're all going off in multiple directions, and there's a need to push sometimes and say: "We've got to settle down. We're serving a population of people, and we need to make some decisions." So there are some tensions that occur on various issues as you're trying to work through stuff.

With respect to the second piece of your question, I will have to get that information for you — in terms of the detail of that. I will get the answer and supply it to the Chair.

Response 1:

The unanimous national decision to carry on with IBM and shift to a predominantly custom coded application was made during two national steering committee meetings. The first was on June 27th and 28th in Edmonton where the decision in principle to proceed was made and the steering committee members at the time of that meeting were:

Executive
Richard Alvarez
President, CEO and Co-Executive Sponsor
Canada Health Infoway / Inforoute Santé du Canada

Ron Danderfer
Assistant Deputy Minister and Co-Chair
Knowledge Management and Technology
BC Ministry of Health Services

Trevor Hodge
Senior Vice President and Co-Chair
Investment Strategy and Alliances
Canada Health Infoway / Inforoute Santé du Canada

British Columbia
Dr. David Patrick
Associate Professor and Director, Epidemiology Services
BC Centre for Disease Control

Andrew Hazlewood
Assistant Deputy Minister, Population Health and Wellness
BC Ministry of Health Services

Lisa Zetes-Zanatta (Alternate)
Surveillance Epidemiologist/iPHIS Program Manager
BC Centre for Disease Control

Dr. Eric Young (Alternate)
Deputy Provincial Health Officer
BC Ministry of Health Services

Yukon Territory
Dr. Paula Pasquali
Director of Community Health Programs
Department of Health and Social Services

Chris Bookless
Manager Finance and Systems
Department of Health and Social Services

Alberta
Mark Brisson
Executive Director, Information Management
Alberta Health and Wellness

Susan Shaw
Manager, Public Health Information
Alberta Health and Wellness

Northwest Territories
Maria Santos
Territorial Epidemiologist
Population Health, Health and Social Services
Box 1320 CST-6, Yellowknife NT X1A 2L9
Tel: (867) 920-3241
Fax: (867) 873-0122
Email: Maria_Santos@gov.nt.ca

Michele Hancsicsak
A/Chief Information Officer
Information Services, Health and Social Services

Cheryl Case (Alternate)
Communicable Disease Specialist
Population Health, Health and Social Services

Saskatchewan
Dr. Ross Findlater
Chief Medical Health Officer
Saskatchewan Health

Neil Gardner
Executive Director, Health Information Solutions Centre
Saskatchewan Health

Nunavut
Patrick Ridgeley
Manager, Information Technology
Department of Health and Social Services

Dr. Isaac Sobol
Chief Medical Officer of Health
Department of Health and Social Services

Dr. Geraldine Osborne (Alternate)
Associate Chief Medical Officer of Health
Department of Health and Social Services

Manitoba
Dr. Greg Hammond
Director, Public Health Branch
Manitoba Health

Ken Browne
A/Director, Information Systems Branch
Manitoba Health

Valerie Mann (Alternate)
Manager, Communicable Disease Control Unit
Manitoba Health

Ontario
Marie Muir
Manager, Business Improvement & Knowledge Mgmt
Ontario Ministry of Health and Long-Term Care

Ian Brunskill
Executive Lead, PHIIT, Public Health Division
Ontario Ministry of Health and Long Term Care

Quebec
Dr. Horacio Arruda
Directeur, Direction de la protection de la santé publique
Ministère de la Santé et des Services Sociaux

Philippe Moss
Directeur par interim, Direction des ressources informationnelles
Ministère de la Santé et des Services Sociaux

Newfoundland and Labrador
Dr. Faith Stratton
Director, Disease Control and Epidemiology
Department of Health and Community Services

Natalie Templeman
Director, Application Management
Social/Resource Branch - Office of the CIO

Paul Caines
Executive Director, Information Management
Department of Health and Community Services

Kevin Duggan (Alternate)
Project Lead, Health Surveillance Project
Department of Health and Community Services

Nova Scotia
Sandra Cascadden
Chief Information Officer
Nova Scotia Department of Health

Dr. Jeff Scott
Chief Medical Officer of Health
Nova Scotia Department of Health

New Brunswick
Dr. Holy Akwar
Communicable Disease Epidemiologist
Department of Health and Wellness

David Burke
Director, Information Systems
Department of Health and Wellness

Prince Edward Island
Dr. Linda VanTil
Epidemiologist, Health Policy Development
Prince Edward Island Health and Social Services

Randy Francis
Director of Program Management
IT Shared Services, Provincial Treasury

Health Organizations
Don Sweete
National Alliance Executive, Atlantic Canada
Canada Health Infoway

Dennis Giokas
Chief Technology Officer
Canada Health Infoway

Allan Oas (Alternate)
Director of Architecture, Registries
Canada Health Infoway

Anne McFarlane
Executive Director, Western Canada
Canadian Institute for Health Information

Bill Pascal
Chief Technology Officer
Canadian Medical Association

Debra Gillis
Director, Primary Health Care
First Nations/Inuit Health Branch
Health Canada

Susan Lamont-Baerg
A/Director General, IMIT Directorate
Public Health Agency of Canada

Dr. Amin Kabani
Senior Medical Advisor
Public Health Agency of Canada

Ron Sussey (Alternate)
Senior Technical Consultant, IMIT Directorate
Public Health Agency of Canada

Dr. Robert Pless (Alternate)
Manager, Surveillance Standards
Public Health Agency of Canada

Julie McAuley
Director, Health Statistics Division
Statistics Canada

Attendees to the June 27th and 28th 2007 meeting were:

Co-chairs: Ron Danderfer (BC), Trevor Hodge (CHI)

Attendees: Lorraine Adam (MB), Horacio Arruda (QC), Wilma Arsenault (MB), Susan Baikie (NS), Chris Bookless (YK), Mark Brisson (AB), Ian Brunskill (ON), Paul Caines (NL), John Campeau (PHAC), Sandra Cascadden (NS), Randy Francis (PEI), Neil Gardner (SK), Debra Gillis (FNIHB), Gordon Gilman (NB), Amin Kabani (PHAC), Anne McFarlane (CIHI), Marie Muir (ON), Cristin Muecke (NB), Bill Pascal (CMA), Dr. David Patrick (BC), Susan Shaw (AB), Faith Stratton (NL), Don Sweete (CHI), Heather Tabin (MB), Shelagh Jane Woods (FNIHB), Eric Young (BC)

Guest: Matthew Peters

Support: David Cowperthwaite, Susan MacKirdy, Clyde Macdonald, Jim Mickelson, Kelly Moran, Susan Rand, Leon Salvail, Sue Wilson

The second meeting where the revised contractual terms and project approach were unanimously approved was September 26th, 2007 in Toronto. Members in attendance at this meeting were:

Co-Chairs: Elaine McKnight (BC), Trevor Hodge (CHI)

Attending: Lorraine Adam (MB), Dr. Holy Akwar (NB), Dr. Horacio Arruda (QC), Susan Baikie (NS), Chris Bookless (YK), Ian Brunskill (ON), David Burke (NB), Paul Caines (NL), John Campeau (PHAC), Randy Francis (PEI), Dr. Amin Kabani (PHAC), Dr. Jay Mercer (CMA), Marie Muir (ON), Don Newsham (FNIHB), Allan Oas (CHI), Dr. Paula Pasquali (YK), Frans Sanders (NS), Susan Shaw (AB), Dr. Andre Simard (QC), Dr. Faith Stratton (NL), Heather Tabin (MB), Dr. Eric Young (BC), Lisa Zetes-Zanatta (BC)

Support: Louise Beauschene (CHI), David Cowperthwaite (PC), Krystyna Hommen (PC), Clyde Macdonald (PC), Susan MacKirdy (PC), Jim Mickelson (CHI), Kelly Moran (PC), Susan Rand (PC)

Guests (IBM): Rob Bligh, Barry Burk, Sharon Hartung

The first change order to revise the contractual terms to better support a custom developed application was signed on September 28th, 2007 and the second on September 25th, 2008.

Response 2:

I would first like to clarify that Panorama is and remains BC's provincial public health system and that the discussions with Health Authorities was not about 'opting out' from this perspective, but whether Panorama was to be the primary point of service application or to be integrated with via an alternate point of service application. These were assessed by the ministry on a case by case basis and where a sound business case was made with commitment to the provincial initiative the ministry supported alternative implementation models within the HAs.

In the case of Vancouver Coastal, they were provided with an exemption to mandatory adoption of Panorama very early on in the project and this was primarily based on their significant recent investments in PARIS at that time. This also in included a commitment to support the provincial implementation through integration, which is now complete for general case and in progress for immunizations which is in the planning phase. VCH has adopted the Inventory module of Panorama and discussions are ongoing for their use of provincial Outbreak functionality. This level of integration speaks to the flexible interoperable nature of Panorama.

In Northern Health's case, Panorama has been deployed and is in use as their point of service application for the inventory, case and outbreak modules. In support of the shift in NHA to a shared care service delivery model where a more complete longitudinal client health record was required, it was agreed after a compelling case was presented, that integration with Panorama as the provincial public health system for the immunization and family health modules best supported their new model. This also speaks to the flexible interoperable nature of Panorama.

In the case of Fraser Health, the Ministry was neither approached nor consulted and a review of alternate public health systems was initiated without the Ministry's knowledge, consent or with commitment to the provincial public health solution. As such, the Ministry directed FHA to terminate their contract and first present a convincing business case for alternate implementation models prior to reinitiating. Panorama is now fully deployed in that region and FHA is an active and engaged partner in this provincial initiative.

5. [1150]

K. Corrigan: *Was there any public reporting from the time that the contract was first signed through to, up until this report? Was there any public reporting on what was happening with the Panorama system?*

S. Brown: *The Auditor may know the answer to that. I do not know the answer, but I will check into that. I will, through the Chair, get an answer to you.*

Response:

As far as I am aware, there was no public reporting on the Panorama system.

6. [1150]

G. Heyman: *To your response to the first Auditor General recommendation for the independent review, which you're not doing. You are planning, as you've said, to undertake an annual survey of Panorama end-users and an annual environmental scan to evaluate other compatible public health products.*
My question is twofold: one, are you planning to consult with the Auditor General's office or anyone else on the parameters for the survey and the scan?
My second question is to the Chair. I would ask that the Chair request both the parameters as well as the results of at least the first survey and scan be submitted to the committee. I'll have a follow-up question after.
S. Brown: *With respect to the first part of your question, I'd be quite pleased to consult. We're working on a number of.... We actually worked through audits in different kinds of ways, and we've engaged the Auditor early on in the process with the Cerner. I've got no issue with any advice the Auditor may want to give me in terms of sharing what we're doing and any thoughts she may have that might better strengthen the process.*
B. Ralston (Chair): *As to the other request, I think in terms of reporting back to the committee on the progress of the action plan, Mr. Wall, who serves the committee, has noted that request. That will be something that we can pursue when the report comes back.*

Response:

As discussed previously, we will report back as required to this committee with progress against the action plan.

Detailed Action Plan - Prepared for the Select Standing Committee of Public Accounts

Ministry of Health

AN AUDIT OF THE PANORAMA PUBLIC HEALTH SYSTEM Released [08/15]

http://www.bcauditor.com/pubs

Initial PAC Meeting- [02/11/15]

Rec. #	OAG Recommendations[1]	Action Planned	Target Date	Assessment of Progress by Entity[2]	
1.	Commission an independent review of Panorama and other alternative systems to identify the most cost-effective, integrated approach to meet the current and future needs of public health in British Columbia.	Public health outcomes will be further advanced through ongoing improvements to Panorama and the onboarding of innovative health information technology applications facilitated through Panorama's interoperability design. Develop a 3-5 year business plan to address key functionality and design issues to ensure full clinical and surveillance benefit, including: • Supporting the operation and decision-making of collaborative Ministry and Health Authority governance structures, balancing the clinical, business and technical requirements • Leveraging the improvements and investments made by other Provinces • Building on previous reviews of Panorama modules, surveys of front line users, and ongoing monitoring of data quality and system performance	June 2016	Alternative Action taken	Completec performar modules: a) Immu b) Inven
		Undertake an annual survey of Panorama end users to assess satisfaction, clinical benefit and adoption.	Annual beginning early 2016	Partially Implemented	
		Undertake an annual environmental scan to evaluate other compatible public health products.	Annual beginning in 2015	Partially Implemented	

[1] This should include all the recommendations listed in the Office of the Auditor General (OAG) report unless previously assessed as fully or substantially implemented. (i.e. only outstanding recommendation

[2] The Select Standing Committee on Public Accounts (PAC) will request an update (i.e Assessment of Progress and Actions Taken column completed) on a yearly basis from the audited organization until all rec otherwise addressed to the satisfaction of the PAC. After the first action plan update only outstanding recommendations (i.e. those not fully or substantially implemented) need to be reported.

[3] This action plan and their subsequent updates have not been audited by the OAG. However, at a future date that Office may undertake work to determine whether the entity has fairly and accurately repre recommendations. The results of that work will be reported in a separate report prepared by the OAG.

Please provide your email response to:

Attention: Bruce Ralston, Chair of the Select Standing Committee on Public Accounts

Email: Kate.Ryan-Lloyd@leg.bc.ca, Deputy Clerk and Clerk of Committees

Cc email to: the Comptroller General's Office of the Government of British Columbia Comptroller.General@gov.bc.ca

Cc email to: the Office of the Auditor General of British Columbia lhatt@bcauditor.com

Action Planned	Target Date	Assessment of Progress by Entity[2]	Action Taken[3]
ined as the actions taken and planned will impact all three of the OAG recommendations referenced.			
eveloping a plan to meet industry standards for project management Develop action plan to move towards best practices	December 2015	Partially Implemented	Strengthened project management and delivery structure • Consolidated expertise and strengthened project management capacity
onfirm our approach	September 2016		
Engage independent expertise to review our action plan on project management, contract management, and governance	Started and Ongoing	Planned	Developing a plan to meet industry standards for project management
Ensure independent project assurance on large complex, multi-stakeholder, multi-year project		Partially Implemented	• Evaluated our current practices and identified gaps
nplement recommendations from contract management review	June 2016	Planned	Reviewed contract management processes
			The Ministry of Health has realigned governance structures to enhance accountability and to play an integrating and coordination role Leadership Council and the supporting committee framework are better aligning and prioritizing decisions, improving and strengthening coordination, communication and information sharing, and enabling stronger decision pathways across the ministry and health authorities.

:h, Health Sector IM/IT, Ministry of Health

:
ect Standing Committee on Public Accounts
ity Clerk and Clerk of Committees
of the Government of British Columbia Comptroller.General@gov.bc.ca
l of British Columbia lhatt@bcauditor.com

Hong, Ruby HLTH:EX

From: Schmidt, Tracee HLTH:EX
Sent: Friday, February 19, 2016 12:07 PM
To: Hong, Ruby HLTH:EX
Subject: FW: Ernst & Young Review
Attachments: Schedule A from fully executed 2016-137 Jan 12.16.pdf

For FOI

From: Kocurek, Brad A HLTH:EX
Sent: Tuesday, January 12, 2016 3:19 PM
To: Schmidt, Tracee HLTH:EX; Cookson, Guy HLTH:EX; Diacu, Mariana HLTH:EX; Shrimpton, Paul HLTH:EX; Aitken, Jeff HLTH:EX; Crickmore, Jane HLTH:EX
Cc: Shera, Deborah HLTH:EX
Subject: Ernst & Young Review

For your reference please find attached a copy of the Schedule A to the Ernst and Young contract.

Interviews on this engagement start tomorrow so please take 10 minutes to review. As part of their work, E & Y will ensure the work by Trevor Hodge on the Pharmanet Roadmap is incorporated.

Once Deborah has had a chance to meet with E&Y we will confirm the case examples they will be using for their work.

Thanks,

Brad

Brad Kocurek | Chief Technology Officer
IT Services Branch | Health Sector IM/IT | Ministry of Health
2nd Floor, 1515 Blanshard Street | Victoria, BC
Office: 250 952-1432 Cell: 250-744-7528

IT Services Branch
Connecting IT solutions with ministry business priorities
and providing health sector identity services

Schedule A – Services

PART 1. TERM:

1. The term of this Agreement commences on December 15, 2015 and ends on March 31, 2016

PART 2. SERVICES:

Working with the Executive Team for the Health Sector Information Management and Information Technology (HSIM/IT) Division the Contractor will review our current processes and provide detailed recommendations to the Assistant Deputy Minister (ADM), HSIM/IT and Diagnostic Services concerning leading practices in governance, project management and contract management. The Contractor will also review a number of current projects as well as the audits performed by the Office of the Auditor General (OAG) and ensure their recommendations for leading practices meets the spirit and intent of the OAG recommendations. Detailed recommendations will be supported by an implementation strategy for HSIM/IT to follow when implementing the recommendations. **Outputs**

The Contractor must:

1. Provide Executive Level advisory services to the ADM, HSIM/IT and the Executive Team concerning the achievement of leading practices in the fields of governance, project management, and contract management processes;
2. Review a range of current projects against leading practices and assess the effectiveness of the current internal governance, project management and contract management processes in place in the HSIM/IT Division;
3. Examine current working relationships between the business areas of the Ministry of Health (Ministry) and HSIM/IT Division in the areas of governance and project management processes;
4. Prepare a comprehensive set of recommendations designed to increase effective collaboration both within the Ministry and between the Ministry and the health authorities. Provide the HSIM/IT Division with an implementation strategy to put into effect leading practices in the areas of governance, project management and contract management processes.

The Contractor must:

1. Using qualified resources review those projects identified by the ADM, HSIM/IT as case examples for use in assessing the effectiveness of the internal processes currently used within the HSIM/IT Division in the areas of governance, project management, and contract management.
2. Review the audit reports of the OAG for information about gaps in current HSIM/IT business practice pertaining to governance, project management, and contract management processes;
3. Interview the ADM and Executive Team and other appropriate personnel across the Ministry to identify, review and analyze current business practice, including how governance, project management and contract management processes are conducted within each business area, identifying the level of resources assigned and the extent of authority each brings to this work.
4. Using case examples assess the practices used by within the HSIM/IT Division against leading practices and assess their effectiveness when transitioning from project state to operations state;
5. Perform a review of the effectiveness of the HSIM/IT Division ability to transition projects from Ministry delivery to Ministry relationship oversight and management when passing project solutions to our operational arm at the Provincial Health Services Authority; and
6. Prepare a detailed set of recommendations to guide the HSIM/IT Division to implement improved business practices in a timely way.

Inputs

The Contractor must:

a. Provide qualified resources to perform the service; and
b. Provide all the relevant equipment to perform the service.

The Province must:

a. Provide clarification on all relevant issues; and
b. Review, comment and sign off on all deliverables.

Outcomes

Through the delivery of the Services the Province wishes to realize the following outcomes and, without limiting the obligation of the Contractor to comply with other provisions of this Part, the Contractor must use commercially reasonable efforts to achieve them:

The furtherance of leading practices pertaining to governance, project management and contract management processes.

The parties acknowledge that the Contractor does not warrant that these outcomes will be achieved.

Reporting requirements:

1. The Contractor will provide a written monthly status report to the ADM, HSIM/IT Division, on December 301 2015, January 31, 2016, February 28, 2016 and March 31, 2016.
2. At the conclusion of the project, the Contractor will provide to the ADM, HSIM/IT Division,a full report, inclusive of findings, recommendations and implementation strategy.

PART 3. RELATED DOCUMENTATION:

1. The Contractor must perform the Services in accordance with the obligations set out in this Schedule A including any engagement letter, Solicitation document excerpt, proposal excerpt or other documentation attached as an Appendix to, or specified as being incorporated by reference in, this Schedule.

   Not Applicable

PART 4. KEY PERSONNEL:

1. John Bethel, Partner
2. Mike Miller, Partner
3. Tanya Hubbard, Senior Manager

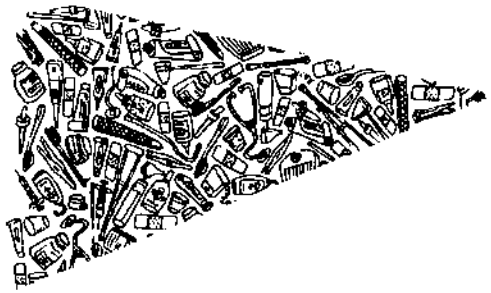
Any changes to the Key Personnel listed above will require the prior written approval of the Province which can be in the form of an email.

If the Contractor's Key Personnel listed above is unavailable for a contemplated project or assignment, the Contractor may propose a substitute resource. The Contractor must provide the resume of any proposed substitution, to the Province for evaluation and consideration, at the sole option of the Province. It is expected that substitutions possess the same or better qualifications and experience as the person being replaced.

MOH HSIMIT/DS Governance, Project Management, and Contract Management Review

13 January 2016

Confidential



EY

Agenda

Introductions & team

Project overview

Project plan & key dates

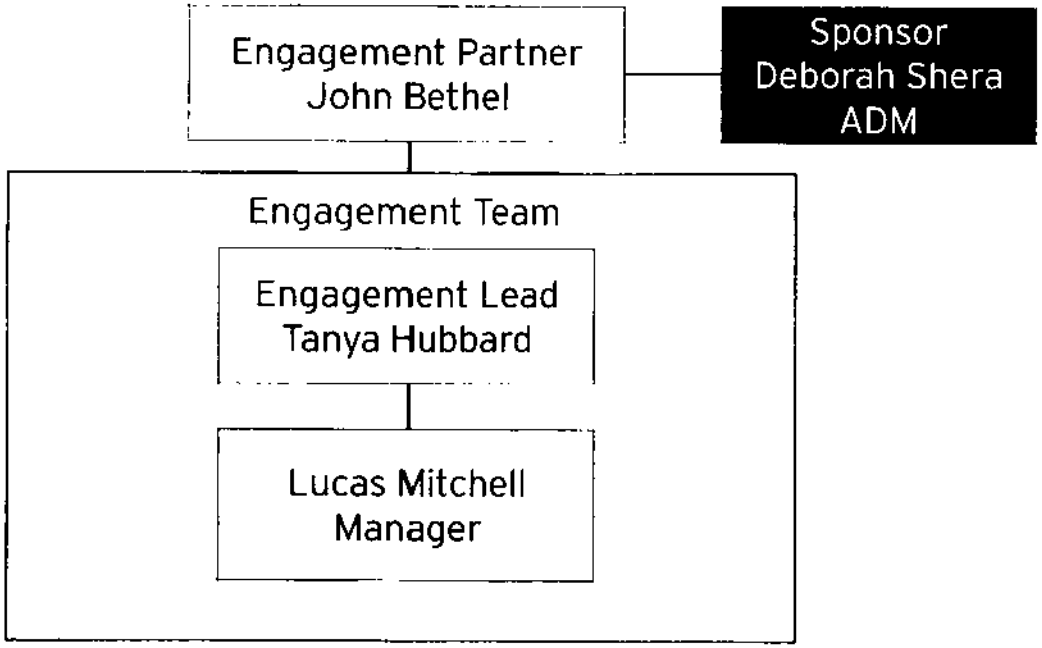
In-scope and case study projects

Document requests

Key questions

Other questions for us and next steps

Team introductions



Our understanding of your needs

EY has been asked to help the Ministry meet the following objectives:

Identify existing performance gaps in governance, project management and contract management in HSIMIT/DS Division through review of case examples and OAG reports;

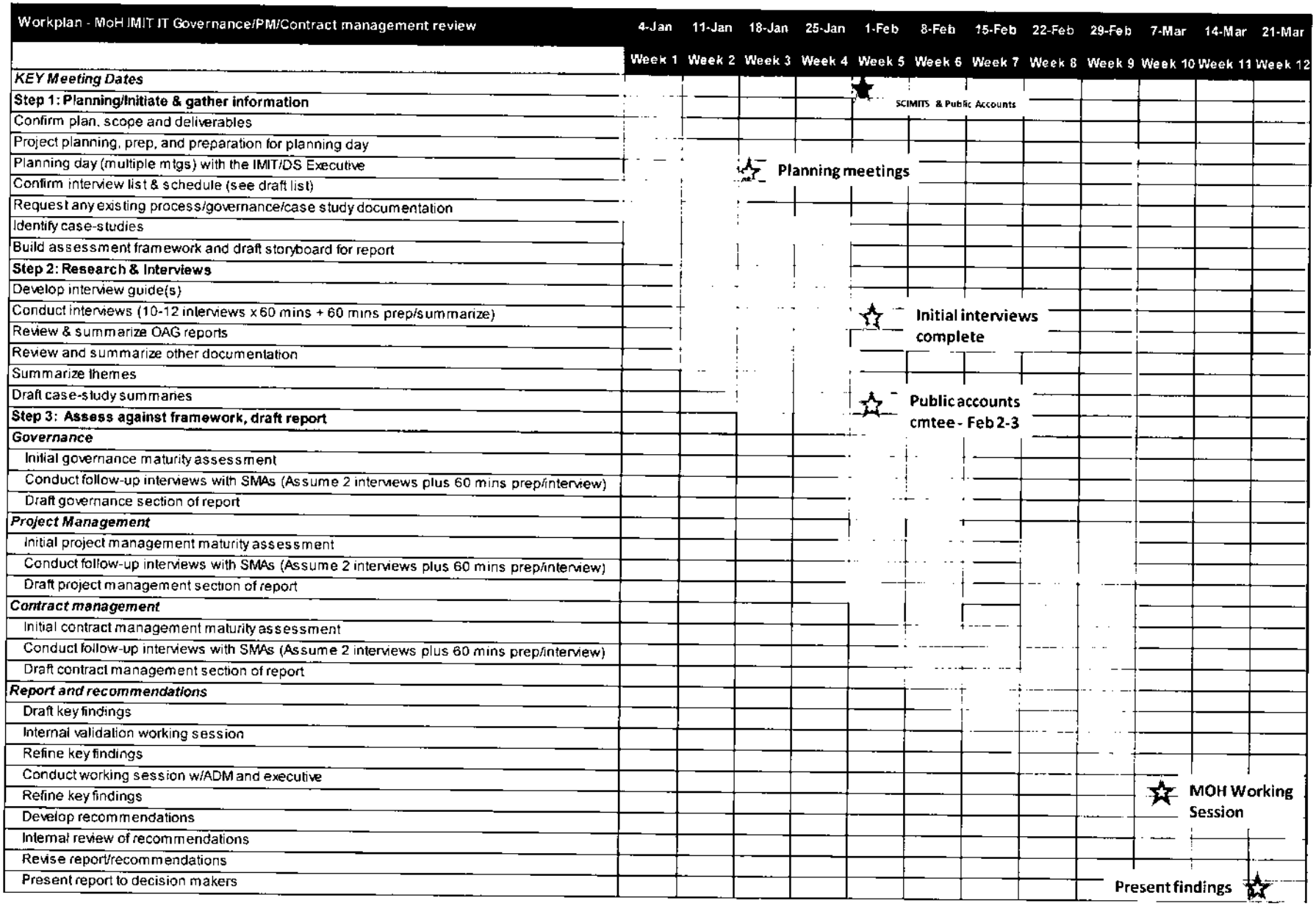
Interview the ADM and Executives in HSIMIT/DS Division and relevant business area executives to identify and seek to strengthen capacity and capabilities in governance, project management and contract management;

Review business area practices against leading practices using case examples;

Conduct an effectiveness review of the ability to transition project solutions from the Ministry to PHSA operations with Ministry oversight and monitoring; and

Outline detailed recommendations, with a focus on implementation, for improved and strengthened business practices in the areas of governance, project management and contract management.

Draft work-plan



Projects – preliminary list of in-scope and case study projects

HSIMIT/DS projects (in-scope):

- Health Insurance BC - Maximus
- HIAL/PLIS - Oracle (see info on BC Bid)
- HHM/Telehealth/ MOCP
- Health Information Exchange (HIE)
- Surgical system
- Panorama - IBM
- e-Prescribe
- Day to day maintenance / upgrades of various registries
- Shared Care
- EMRs
- WSS - Workstations / Devices - IBM
- KDC - HP Advanced Solutions
- Microsoft 360 / licenses
- Services Card
- Strategic Priorities - other IT initiatives
- Patient Portal - Doctors of BC - MTL
- Consumer health - Medeo / QHR
- CST
- Data management systems/processes

Case-study projects:

- Panorama
- e-Prescribing

Initial/indicative document requests

Where existing/applicable:

- Business cases for case study projects
- Project charters for case study projects
- Example requirements documents for case study projects
- Stage gate/milestone review documents for case study projects
- Example steering committee updates/meeting documents for case study projects
- RACI documents for case study projects
- Risk registers/logs for case study projects
- Project governance structures for case study projects
- Any project management process and policy documentation
- Any contract management policy documentation
- Reports or findings from any recent internal or external reviews of existing IT projects
- Current organization chart, mandate and division plans for HSIMIT/DS
- OCIO Directives
- Treasury Board Directives
- SCIMITS Terms of Reference, Governance Structure
- Updates on progress toward AG recommendations
- Any other relevant documents...

Key questions

What are your core areas of responsibility (functions/operations and projects)?

What is working well?

How is your group responding to the objectives of the IM/IT policy paper?

What are your biggest challenges related to governance?

What are your biggest challenges related to project management?

What are your biggest challenges related to contract management?

Additional question areas

Governance

- Strategic alignment
- Business case/Treasury Board submission
- Project sponsorship and steering
- Project control
- Funding / capital
- Accountabilities / mandates

Project Management

- Scope and documentation
- Cost estimates
- Change management
- Stakeholder/customer management
- Risk management
- Benefits management

Contract Management

- Business strategy and scope
- Procurement
- Contracting / negotiations
- Governance & relationship management
- Monitoring
- Acceptance and handover

Next steps

Continue interviews with HSIMIT/DS Division Executives

Gather and review existing documentation

Begin assessment

Conduct additional interviews and engage SMRs as needed

Thank you!