


Minutes

SecureKey/LCTZ Project Management Group Teleconference Meeting Friday, July 6, 2012, 10 a.m.

Attendees: LCTZ Wiebe, Patricia Moss, Jeremy
SecureKey Chapman, Chris
Recorder Adlhoch, Grietje (LCTZ)

Item	Discussion	Actions
1.	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	
2.	Approve Minutes and Review Action Items <ul style="list-style-type: none"> Minutes were approved Action items were updated 	
3.	Document Sign-Offs / Approvals <ul style="list-style-type: none"> Patricia has feedback to discuss with SK. 	<ul style="list-style-type: none"> Chris to set up a meeting and SK will return update to LCTZ
4.	CMS Integration Testing <ul style="list-style-type: none"> SK probably ready to finish STP connection July 11/12. 	<ul style="list-style-type: none"> Jeremy to get update from Jason for next teleconference call Patricia to forward email to Jeremy and Chris regarding outstanding issues with STP connection
5.	USB keys <ul style="list-style-type: none"> Patricia and Chris will discuss when she's in Toronto (July 9-13). 	
6.	JSON document	<ul style="list-style-type: none"> Patricia to finish another pass through the document, meet with Chris to resolve any issues, finalize the document and start sign off process
7.	Security Design Sign-Off	
8.	ICBC Security Checklist / Site Visit <ul style="list-style-type: none"> Discrete report work being deferred to September Chris working with IBM to include part of ICBC technical design (in advance of a site visit) in the security design document 	<ul style="list-style-type: none"> Chris to follow up on removing 3rd party agent from ICBC's security checklist

Item	Discussion	Actions
9.	Implementation Strategy <ul style="list-style-type: none"> ICBC advised LCTZ they will implement changes on Nov. 29th, have first day of processing on Nov. 30th, but won't send the file to LCTZ until the night of Monday, Dec. 3rd/morning of Tuesday, Dec. 4th 	
10.	CMS Update / Project Dashboard <ul style="list-style-type: none"> Review of SK workbook ongoing Alignment of SK workbook and LCTZ plan in progress 	<ul style="list-style-type: none"> SK and LCTZ to review latest version and reach agreement Patricia and Chris to meet and discuss Monday Grietje to send Patricia LCTZ plan by EOD today (July 6) 
11.	Authentication Update / Project Dashboard <ul style="list-style-type: none"> This item is being "parked" until working sessions done. 	<ul style="list-style-type: none"> Chris to set up time with both the UI and Reporting teams to meet with him and Patricia next week (July 9-13).
12.	Dual Reader Update	<ul style="list-style-type: none"> SK to provide update / next version of document.
13.	S14	
14.	JOC Meeting	
15.	Actions / Next Steps / Other Updates <ul style="list-style-type: none"> Chris: 2 cycles completed, 'drop' from Bell-ID on Monday with critical fixes being tested; progression testing will happen Thursday/Friday; good progress; some issues resolved. Testing team doing great job working over code; really good progress last week. 2 stage process - In PROD July 15-20; one week to settle and then about 4 days to produce PROD files for IRIS. Environment will be live Monday night. All pieces are falling into place. 	

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, January 9, 2012 6:10 PM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX
Cc: Heather Neale; Maggie Au; Pierre Roberge
Subject: 3/4 Antennas work fine

Hello Team

SecureKey can support $\frac{3}{4}$ and full antennae in cards. We need to get through certification with Visa but we expect this to pass (as $\frac{3}{4}$ are common in the industry and while the full antennae offer better performance, we do not require it to meet the user experience design point for this project.

Technical version:

This is to confirm that we have successfully test a (80.6 ± 0.5) mm x (35.0 ± 0.5) mm antennae for the BC Card project. While the final product will still need to be tested and to pass Visa certification, we are ok with amending the SecureKey card antenna requirement to also include a (80.6 ± 0.5) mm x (35.0 ± 0.5) mm antennae.

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Minutes

Joint Operations Committee (JOC) Meeting

S15

Friday, July 13, 2012, 11 a.m.

Attendees:

LCTZ	Bamford, Kevena	Bailey, Ian	Wiebe, Patricia	Moss, Jeremy
SecureKey	Boysen, Andre	Chapman, Chris		
ICBC	van der Merwe, Sam			
Regrets	Neal, Heather			
Recorder	Adlhoch, Grietje (LCTZ)			

Item #	Discussion	Actions
1	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	
2	Approve Minutes & Review Action Items <ul style="list-style-type: none"> Minutes were approved Action Items were updated 	
3	Terms of Reference (TOR) for JEC <ul style="list-style-type: none"> Kevena will be starting work on these actions as a priority. 	Kevena to update draft JEC TOR, contact Dave, Greg and Fred for JEC agenda items, and schedule the first JEC meeting. OUTSTANDING
4	Security Design Sign-off <ul style="list-style-type: none"> SecureKey and LCTZ met in Toronto this past week. LCTZ provided feedback and SecureKey is working to complete the next draft, and expect to return the document to the Province (LCTZ) on July 27. 	Aehle to incorporate LCTZ feedback in next draft of the <i>Program wide Security Card manufacturing and production Security design</i> document and send to LCTZ (Patricia) by July 27 th .

Item #	Discussion	Actions
	<ul style="list-style-type: none"> Chris followed up with Dmitry regarding the IBM Security Checklist this week. ICBC is waiting to get the IBM security checklist from Dmitry to determine the scope of work to be done. 	<p>Dmitry to update IBM Security Checklist. IN PROGRESS</p> <p>Sam to raise project change request to have IBM complete the checklist. PENDING CHANGE TO IBM SECURITY CHECKLIST</p>
5	<p>CMS Project Dashboard</p> <ul style="list-style-type: none"> Overall dashboard status unchanged; issues and risks updated. Milestone 3, <i>Program wide Security Card manufacturing and production Security design complete</i>: drafting continues with July 27 as the target completion date. Milestone 5, <i>SK to provide production personalization data file to IRIS for first production batch</i>: Yellow status depicts delay in testing which will not impact the August 1 forecast date. Plan to have the system up and fully running July 17/18. Issue has been bug/fix resolution in Bell software that required full regression test on drop. Confident that August 1 timeline will be met. Milestone 6, <i>SK to sign off production Services Card</i>: Trying to move sign off forward a couple of weeks to mitigate any issues with bad card stock. SecureKey is working with IBM and IRIS to sort this out. <ul style="list-style-type: none"> Table 5 – <i>Candidate Production (Production Keys)</i>: SecureKey hopes to get production file to IRIS on July 24/25 to test the card ASAP. 	

Item #	Discussion	Actions
	<p>Authentication Project Dashboard</p> <ul style="list-style-type: none"> SecureKey and LCTZ met during week of July 9th to work on the JSON Functional Spec document. Revisions were made, some outstanding sections completed and scope changes added. The document is back in SecureKey's hands for next steps. <hr/> <ul style="list-style-type: none"> Overall dashboard status unchanged Milestone 1, <i>Authentication interface functional design complete</i>: 80% complete; potential scope changes will be discussed between SecureKey and LCTZ. Milestone 3, <i>User Interface design complete</i>: Fair progress on prototyping. UI team met with LCTZ in Toronto this week. It will be fairly iterative with completion date not formalized. Two weeks needed to complete next cycle in prototype. Milestone 4, <i>Reporting Design complete</i>: Several items discussed this past week. There are a number of decisions the Province needs to make moving forward on billing related terms and requirements. A joint conversation between SecureKey and LCTZ is needed to clarify long list of requirements. Decisions are key to moving forward. Milestone 5, <i>SK to provide test env with test harness, test without services card</i>: There are some issues with the test harness that SecureKey is working on; initially connectivity problems and then code related issues. Yellow status is to reflect that the harness was not "clean" and might require code changes to remedy that. Work is in progress to sort this out ASAP. 	<p>Chris to send next draft of JSON Functional Spec document to Province (Patricia)</p> <hr/> <p>Patricia and Chris to provide more detailed update regarding re forecast milestones in a couple of days.</p> <p>Jeremy to set up a meeting next week with Andre, Ian, Patricia, Chris and himself to look at the Reporting Requirements and work through options.</p>

Item #	Discussion	Actions
6	<p>Dual Reader Update</p> <ul style="list-style-type: none"> SecureKey and LCTZ held a whiteboard session this week and identified a couple of options which need to be documented and brought back for discussion. 	<p>Dmitry and Patricia looking at options to follow up with next steps.</p>
7		
	S14	
8	<p>Press Release</p> <ul style="list-style-type: none"> LCTZ sent redacted copies of MSA and SOW to Jamie and Robert Blumenthall who are fine with the documents. Press release is ready, and public relations ready to post redacted contract on the OCIO website and share with other provinces pending passage of the regulations. All of this is projected to be completed in one and a half weeks. LCTZ will determine the BC communications contact person for the press release. 	<p>SecureKey to issue press release ON HOLD</p> <p>Kevena to send redacted copies of MSA and SOW to SecureKey COMPLETED</p> <p>Kevena to tell SecureKey who is the BC communications contact person for the press release OUTSTANDING</p>

Item #	Discussion	Actions
9	<p>Actions / Next Steps</p> <ul style="list-style-type: none"> • ICBC advised that the IBM facility received 17,000 production cards with test PAN from IRIS July 12. The IBM data card printers have the chip module(s) working. • The IBM PAN data management document that will feed into the security document is being looked at by SecureKey. Aehle requested a conference call with Chet to review the PAN data management document. • SecureKey is working on sorting out the PAN encryption. Exchange of PAN number going pretty well between SecureKey and IRIS. SecureKey trying to get everything locked into Production mode to deliver August 1 batches. • Potential BC job action impact on ICBC's development schedule being monitored. ICBC is proceeding with Point of Service training and trying to work something out with the union. The possibility of a labor disruption has been raised as a risk to the ADM project board with quantification estimates of the risk. • SecureKey asked if the Province would be interested in having a conversation with Govt of Canada representatives regarding the Relying Party on boarding process they use; as something to possibly leverage / apply to the BC scenario. LCTZ said yes they would definitely be interested. It was noted that GC uses a gateway that all RPs connect to and by having a broker in the middle, could increase privacy aspect whereas BC has a single sign on that all RPs are connected to. Possible knowledge to be learned from GC might be around the technical aspect of efficiencies and tools to use, internal marketing and mandate to get parties to the table. <p>ACTION: Chris to work with Andre, Ian and Kevena to set up an initial discussion later in August between GC and BC.</p>	

BF in September: Chris to check if IRIS Checklist report can be shared with ICBC

Minutes

Joint Operations Committee (JOC) Meeting

S15

Friday, July 27, 2012, 11 a.m.

Attendees:

LCTZ	Wiebe, Patricia	Moss, Jeremy	
SecureKey	Boysen, Andre	Chapman, Chris	Neale, Heather
ICBC	van der Merwe, Sam		
Regrets	Bamford, Kevena	Bailey, Ian	
Recorder	Adlhoch, Grietje (LCTZ)		

Item #	Discussion	Actions
1	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	<input checked="" type="checkbox"/> Date of next meeting was added to the agenda.
2	Approve Minutes & Review Action Items <ul style="list-style-type: none"> Minutes were approved Action Items were updated 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Terms of Reference (TOR) for JEC <ul style="list-style-type: none"> Jeremy advised that Kevena wishes to wait until re planning of the authentication/Rel 2 is done, as there is no urgency to convene the JEC. 	Kevena to update draft JEC TOR, contact Dave, Greg and Fred for JEC agenda items, and schedule the first JEC meeting. ON HOLD PENDING REL 2 RE-PLANNING
4	Security Design Sign-off <ul style="list-style-type: none"> Chris advised that the <i>Program wide Security Card manufacturing and production Security design</i> draft due July 27th is still in progress and that he will check with Eli on getting this done today. 	Chris to check status of draft <i>Program wide Security Card manufacturing and production Security design</i> draft with Eli today.

Item #	Discussion	Actions
	<ul style="list-style-type: none"> Chris also advised that Dmitry is working on updating the IBM Security Checklist. Sam advised there is no change to report to his action item. 	<p>Chris to send an update following this meeting on the status of IBM Security Checklist.</p> <p>Sam to raise project change request to have IBM complete the checklist. PENDING CHANGE TO IBM SECURITY CHECKLIST</p>
5	<p>CMS Project Dashboard</p> <ul style="list-style-type: none"> No major changes; couple of adjustments based on progress on #5 Milestone 6, <i>SK to sign off production Services Card</i> – Trying to move sign off forward to August 17th to enable IRIS to produce volumes of cards earlier. There is an issue around encryption that needs to be resolved in order to complete integration testing with IAS. Considering an alternate solution and believe it will be resolved early next week. <p>Authentication Project Dashboard</p> <ul style="list-style-type: none"> Chris advised that the Authentication Services milestones need to be “re planned”, based on scope changes. Functional design and UI design work is in progress and a meeting to discussion potential Reporting design options was pending. Jeremy advised that he did set up a meeting to discuss Reporting requirements and work through options but that the meeting was postponed to next week. 	

Item #	Discussion	Actions
CONT'D	<ul style="list-style-type: none"> Patricia and Jeremy supported Chris's update and added that although work is in progress on Rel 2 it often does not get the attention needed because of the focus on Rel 1 issues. SecureKey (Chris) and LCTZ (Patricia and Jeremy) recognize that Rel 2 re planning needs to be a priority over the next 3 weeks. Chris advised that a test harness was provided to LCTZ on July 1st but that it was unusable due to code bugs which never allowed it to function properly. SecureKey will resolve the bug issues over the next couple of days to have a working test harness by next Tuesday or Wednesday; making sure that the functionality needed is there to move forward. He also advised that SecureKey is working on a sandbox environment to enable testing and development. The draft requirements of another counter card reader concept that may be of interest to BC to support in person passcode management fulfillment needs was sent to Patricia July 27. Patricia has responded to Chris. 	Chris to confirm timelines of sandbox environment early next week, after tokens received and tested by SecureKey.
6	<p>Dual Reader Update</p> <ul style="list-style-type: none"> Patricia advised that she has a meeting scheduled with Health architects on Monday and will give a quick status report to SecureKey afterwards. If Health has any hurdles they need to be cleared first before SecureKey starts working on this. 	Patricia to send status report to SecureKey after her meeting with Health architects.

Item #	Discussion	Actions
7	S14	COMPLETED
8	<p>Press Release</p> <ul style="list-style-type: none"> Jeremy advised that Kevena has prompted BC communications for a contact name for the press release and she is still waiting for the information to pass on to SecureKey. 	<p>SecureKey to issue press release ON HOLD</p> <p>Jeremy will continue to pursue BC communications for a contact name while Kevena is off the next two weeks.</p>
9	<p>Actions / Next Steps</p> <ul style="list-style-type: none"> <u>Rel 1 re planning</u> – Jeremy, Patricia and Chris meeting next week to discuss possibility of Chris coming to Victoria for an in person session to complete this work. The intention is to bring a report/outline back to the next JOC on how to move forward. <u>Relying Party On boarding Strategy</u> – Patricia advised that this item was put on the agenda as Kevena thought the best place to start the discussion around which Relying Parties will need card readers was at these meetings. Andre advised that SecureKey wants to make sure that it is providing what is needed for people to do something with the cards. <ul style="list-style-type: none"> ACTION: Carry this item forward to next JOC meeting. COMPLETED <input checked="" type="checkbox"/> <u>Date of next JOC meeting</u> –As Ian, Kevena and Patricia when the next meeting is scheduled (i.e. August 10), it was agreed to move that meeting to early the following week. <ul style="list-style-type: none"> ACTION: Jeremy will reschedule the next JOC meeting early in the week of August 13th after confirming a date and time with Chris. <u>Card Logistics</u> – Andre asked if LCTZ has any concerns with a batch of card being shipped from Toronto to IBM in Victoria via secure courier. Patricia and Jeremy were fine with that arrangement. 	

Item #	Discussion	Actions
	<ul style="list-style-type: none"> • <u>BMO CSP software</u> – As a follow up to discussions when Patricia was in Toronto recently, Chris asked if LCTZ is considering this passcode strategy as an option for citizens to set up their passcode at a counter. Patricia advised that BC will likely not pursue this option. 	

Actions to bring forward:

- Mid August: Chris to work with Andre, Ian and Kevena to set up an initial discussion between GoC and BC, later in August.
- September: Chris to check if IRIS Checklist report can be shared with ICBC

Agenda

SECUREKEY/LCTZ PROJECT MANAGEMENT GROUP

July 18, 2012 Teleconference Meeting

SecureKey: Chris Chapman

LCTZ: Jeremy Moss, Patricia Wiebe & Grietje Adlhoch

No.	Item	Lead
1.	Agenda Review	Jeremy
2.	Approve Minutes and Review Action Items	Jeremy
3.	JOC Meetings	Jeremy
4.	CMS Update / Project Dashboard	Chris
5.	Authentication Update / Project Dashboard	Chris
6.	Transition File	Chris/Patricia
7.	Actions/Next Steps/Other Updates	All



SecureKey and Visa Partner to Provide Non-payment Authentication Services

Innovative service uses Visa-based cards and authentication services for drivers licenses and ID cards

Toronto, Canada, August XX, 2012 – [SecureKey Technologies Inc.](#) today announced that it has partnered with global payments technology leader, Visa, to provide an innovative secure authentication service using smart-chip-enabled cards along with Visa’s global network.

The new service will be implemented first for the Government of British Columbia, Canada, who will be replacing existing drivers licenses and health cards beginning in November 2012. The new EMV-based contactless BC Service Cards will help enhance security and privacy, and decrease identity fraud, when citizens access government services online and in person.

“SecureKey is pioneering a global platform for authentication, payment, and identity”, said Greg Wolfond, Chairman of SecureKey Technologies. “Our vision is to deliver financial-grade security, based on global standards, using devices and credentials people already have. By partnering with Visa, SecureKey can deliver powerful solutions with the security and reliability of a global authentication network.”

“The SecureKey solution provides BC with tremendous flexibility to expand online and in-person services with the confidence of enhanced security and convenience,” said David Nikolejsin, Associate Deputy Minister and Government Chief Information Officer for the Province of British Columbia. “Once fully deployed, we expect to provide users with secure access to personal healthcare information, tax transactions, social services, and education records, as well as other in-person services wherever proof of identity is required (e.g. medical tests, hospitals, doctor’s office).”

The BC Service Cards will continue to include a photograph and other anti-forgery features, as well as the new security chip for strong authentication and identity proofing. However, in contrast with other identity and authentication solutions in market today, no user personal information is stored in the chip. Request for services and access to personal information is controlled by users themselves in-person or online using compatible contactless readers.

“SecureKey’s innovative authentication service is a powerful new application of Visa’s global network,” said **XXX** of Visa. “By working with Visa, SecureKey can deliver simple, convenient and secure authentication solutions with proven reliability and scale.”

By embedding its technology in a variety of device platforms, including laptops, tablets, and mobile phones, SecureKey enables a wide range of scalable, enhanced security solutions which deliver choice, control and convenience, together with industry-leading best practices for privacy protection. SecureKey recently launched a new authentication service for the Government of Canada that allows Canadians to use their bank authentication credentials to obtain access to online government services.

SecureKey is a recent winner of Veracode’s Inaugural Secure Development award, UK Trade and Investment’s Inaugural Global Adventure Competition, and was named one of the top 25 Up and Comers in the Branham300 Annual list of Top Technology Companies.



DRAFT FOR APPROVAL

About SecureKey Technologies Inc.

SecureKey provides an innovative platform-as-a-service for authentication, payment and identity. By embedding its security client in laptops, tablets, and mobile devices, SecureKey enables partners to deliver scalable, easy-to-use solutions with the security of chip-based identity and payment credentials. Financial institutions, healthcare providers, telecoms, and government organizations are using SecureKey today to provide two-factor and federated authentication and identity solutions. SecureKey is a privately-held company based in Toronto, Canada, with backing from leading technology, payments and mobile industry network providers. For more information, please visit www.securekey.com.

About Visa

Visa is a global payments technology company that connects consumers, businesses, financial institutions and governments in more than 200 countries and territories to fast, secure and reliable digital currency. Underpinning digital currency is one of the world's most advanced processing networks-- VisaNet--that is capable of handling more than 20,000 transactions a second, with fraud protection for consumers and guaranteed payment for merchants. Visa is not a bank, and does not issue cards, extend credit or set rates and fees for consumers. Visa's innovations, however, enable its financial institution customers to offer consumers more choices: Pay now with debit, ahead of time with prepaid or later with credit products. For more information, visit www.corporate.visa.com.

For SecureKey:

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Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, February 6, 2012 11:39 AM
To: Bailey, Ian D CITZ:EX
Subject: Agreements

Hi Ian

Just an update.

Expecting to have updated docs tomorrow. Next push will be to get the schedules completed. Working on drafts of those as well

A

Andre Boysen
EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy

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Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, December 14, 2011 1:29 PM
To: 'Andre Boysen'; Wiebe, Patricia CITZ:EX
Subject: RE: Antennae Size

Thanks very much Andre are you ok if I share your note with ICBC?

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, December 14, 2011 11:42 AM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: Antennae Size

Hi Ian

The most important message is that antennae size has nothing do with certification - any size will pass certification. The size is about performance - no size is mandated by the spec. The next message is that IRIS needs propose its configuration for certification - Visa does not certify things in the abstract. The spec we provided gives them choices for vendors to source chips from. They need to pick one.

What is unique in the BC project is not antennae size but the use of polycarbonate. Polycarbonate is a more robust and expensive plastic which has not been used in the past by financial institutions for Visa card, for reasons of cost. Solely based on the fact that a new material will be used for the card construction, the newly created card product will need to go through some levels of certification at Visa. SecureKey is working diligently with Visa to make this process as smooth as possible.

Status update

1- We have spoke with Inside Secure, which IRIS is considering as a chip and prelam provider. Inside has years of experience with contactless card and is also the number one vendor of contactless cards in North America. Inside is aware of the Visa process for certification and will be working with Visa and SecureKey to get the approved antenna and prelam certified.

2- While We are still waiting for sample cards from Iris for internal testing and validation purposes, we have arranged to get sample cards directly from Inside to test immediately the performance of a Visa pre-approved 3/4 size antennae. The test will give us a clear understanding of the user experience based on reader with less power and smaller reader-antennea such as mobile device.

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, December 13, 2011 2:15 PM
To: 'Andre Boysen'
Cc: 'Greg Wolfond'; 'Pierre Roberge'
Subject: RE: Antennae sizes

Andre,

Thanks for the note. I think it get it :-).

I got this following note from Chet at IBM, I hope you can clarify.

"- Neither IRIS or I have a firm understanding of which card certification requirements are required when - because this initiative is unusual (using an EMV application in a nonfinancial way with a potentially nonstandard antenna/inlay), we are treading new ground and we don't know what the BIN owner certifies and what Visa certifies."

This relates to getting the full antenna chip inlay certified as I understand they have only certified a half antenna.

Ian.

-----Original Message-----

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Monday, December 12, 2011 8:09 PM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond; Pierre Roberge
Subject: Antennae sizes

Hi Ian

I know you talked to Greg today. I just wanted to get back to you with more detail.

The CareCard gets its power via the antennae which in turn captures power from the field of the reader. A half size antennae might work at a full plugged in terminal (Tim Hortons or a gas pump) but will likely have some difficulty at the new terminals embedded in phones and pc's. The power issue on phones is that turning up amps in the field dramatically shortens battery life. So for mobile use cases we strongly recommend full size antennae so that a better user experience is gained with minimal sacrifice of battery.

There is no material cost difference.

We will try the 3/4 antennae which is supposed to perform well but we don't recommend the half size one. We will try get some numbers on performance attenuation.

Andre Boysen

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, December 13, 2011 7:29 AM
To: 'Andre Boysen'
Cc: 'Greg Wolfond'; 'Pierre Roberge'
Subject: RE: Antennae sizes

Thanks Andre.

-----Original Message-----

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Monday, December 12, 2011 8:09 PM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond; Pierre Roberge
Subject: Antennae sizes

Hi Ian

I know you talked to Greg today. I just wanted to get back to you with more detail.

The CareCard gets its power via the antennae which in turn captures power from the field of the reader. A half size antennae might work at a full plugged in terminal (Tim Hortons or a gas pump) but will likely have some difficulty at the new terminals embedded in phones and pc's. The power issue on phones is that turning up amps in the field dramatically shortens battery life. So for mobile use cases we strongly recommend full size antennae so that a better user experience is gained with minimal sacrifice of battery.

There is no material cost difference.

We will try the 3/4 antennae which is supposed to perform well but we don't recommend the half size one. We will try get some numbers on performance attenuation.

Andre Boysen

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, February 15, 2012 2:05 PM
To: andre.boysen@securekey.com
Cc: Bamford, Kevena LCTZ:EX
Subject: base cost payment schedule?

Andre,

Would SK be amenable to a base payment schedule as follows:

Yr	Amount
11/12	\$1.5M
12/13	\$1.5M
13/14	\$1.5M
14/15	\$1.5M
15/16	\$1.5M
16/17	\$2.0M
17/18	\$2.0M
<hr/>	
Total	\$11.5M

Note yr. ending March 31st.

Also, do you have a price for the USB reader tokens?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, October 4, 2011 1:03 PM
To: Bailey, Ian D CITZ:EX
Subject: BC Card Model.xlsx
Attachments: BC Card Model.xlsx

Hi Ian

Here is the financial model for today's call
Andre

Cards in Market (000)	1000	1000	1000	1000	1000
Total Users	1000	2000	3000	4000	4500
Adoption %	10%	20%	30%	40%	50%
Active Users	100	400	900	1600	2250
Claims Adoption	5%	10%	20%	40%	50%
Active Claim Users	5	40	180	640	1125

All Nums (000)	YEYO	YEY1	YEY2	YEY3	YEY4	YEY5
Base Service	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Authentication Rev	\$0	\$200	\$800	\$1,800	\$3,200	\$4,500
<i>Total Auth Revenue</i>	<i>\$2,000</i>	<i>\$2,200</i>	<i>\$2,800</i>	<i>\$3,800</i>	<i>\$5,200</i>	<i>\$6,500</i>
ID Claim Reduction		(\$5)	(\$40)	(\$180)	(\$640)	(\$1,125)
Net	\$2,000	\$2,195	\$2,760	\$3,620	\$4,560	\$5,375
Cuml	\$2,000	\$4,195	\$6,955	\$10,575	\$15,135	\$20,510

Rev / Active User	\$2
IDClaim Reduction	\$1

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, October 4, 2011 1:10 PM
To: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: FW: BC Contract 1 Description

As requested, find below the draft description for the service required under the contract 1

Contract 1 - Acquire Card Licensing Rights (ICBC)

SecureKey to provide credential service provider bureau service

* Turn-key "chip management system" service. This hosted solution includes the chip lifecycle management system required to support ICBC issuance and management of contactless EMV credentials compatible with major payment network.

SecureKey to license card application for authentication services in networks

* Provide the required rights to buy and use a major network certified EMV contactless compatible payment applet used on contactless EMV compatible smartchips.

SecureKey to provide access rights to partner networks for authentication services

* Turn-key "EMV-chip authorization system" service. This hosted solution verifies if the cryptogram generated by an ICBC issued-credential is valid or not, and if the account is in good standing or not.

SecureKey to define and maintain the network configuration profile

* Defines and maintain the standard configuration for the contactless EMV application in compliance with the ICBC issuance program.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, April 3, 2012 11:26 AM
To: John Ouillette; Chet Watmough; Wiebe, Patricia LCTZ:EX; Bailey, Ian D LCTZ:EX; Bamford, Kevena LCTZ:EX; Van der Merwe, Sam ICBC:EX
Cc: Chris Chapman; Maggie Au; Pierre Roberge
Subject: BC Gov / Production Runs of Services Cards and dates

Production Runs of cards

Tuesday, April 03, 2012

1:47 PM

Card Run Name	Card Deliverable Date to IBM	Test Case	Primary Receiver	Sample Size
Art Work Rough	Mar 31	Outside Works	IBM	1000
Art Work Final	May 15	Outside Works	IBM	2000
Sample White Cards Rough	May 4	Inside Works	SK	20
Sample White Cards Final	May 18	Inside Works	SK	20
Candidate Production (Test Keys)	Jun 15	Combined	IBM	60
			SK	20
UAT Stock Cards	July 15	Combined	IBM	17000
Candidate Production (Production Keys)	Aug 15	Combined	IBM	500
			SK	20
First Full Production Run	Sept 15	Live	IBM	345000

Created with Microsoft OneNote 2010
One place for all your notes and information

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 11, 2011 2:54 PM
To: andre.boysen@securekey.com
Cc: Watkins, Peter CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: bc noi text (3)
Attachments: bc noi text (3).docx

Andre,

Re my phone call earlier today about the service descriptions and the meeting tomorrow at noon your time. ICBC and IBM and suggesting that there only be two contracts and that we need more clarity on what exactly we are buying (we accept that we are neophytes in this business so bear with us).

Have a look at what I've done to your latest descriptions (sans the intro part) and see if this make sense to you. They would like Citizen Services to do the activate/de-activate steps which I'm ok with and perhaps is easier and a cleaner architecture.

Ian.

Talk to you in 30 mins.

Contract 1 – Acquire Card Licensing Rights (ICBC)

- SecureKey to license card application for authentication services in payment networks
 - SecureKey to provide the required rights and authorizations to ICBC and its suppliers, so that ICBC's suppliers (IBM and IRIS) can use a major network certified EMV contactless compatible payment applet on contactless EMV compatible smart-chips, including the rights to a BIN.
- SecureKey to define and maintain the network configuration profile
 - Defines and maintains the standard configuration for the contactless EMV application in compliance with the ICBC issuance program and provides to ICBC's card supplier for personalization.
 - SecureKey to provide IRIS the key-material to support the card personalization process
 - SecureKey to provide IC perso file on a quarterly basis (PAN, PAN sequence, expiry, etc)
 - SecureKey to provide PAN to PAI mapping file to IBM on a quarterly basis
 - SecureKey to provide to IBM the paywave card configuration profile
 - Perform regular audit to ensure compliance of Card Personalization bureau to ensure the chip issuance program objective are being met or exceed.

Contract 2 Authentication Services provided to Citizen Services

- SecureKey to provide card management services to Citizen Services
 - Update the authentication services using daily card activation file generated by ICBC's card supplier (IBM) and return PAI identifiers for each activated card.
 - Update the authentication using daily card deactivation file generated by Citizen Services.
- SecureKey to provide card validation services
 - Card validation services for Citizen Services for all network transactions where an active card has been tapped.
 - Card validation services for Citizen Services for all direct internet based consumer and provider transactions using SecureKey terminals where an active card has been tapped.
 - Enable the ICBC cards to be used in conjunction with Credential Brokering Services for access to other clients of the Credential Brokering Services, for example Federal Government.
- SecureKey to provide Credential Brokering Services
 - Enable Citizen Services to accept authentication transactions from credential service providers connected to the credential brokering service.
- SecureKey to provide access to network terminals
 - Enables BC to use deployed SecureKey terminals for authentication services. The CBS service has a broad range of consumer terminals as well as access to commercial partner networks.
- SecureKey to provide custom terminalisation services when required
 - Support BC in defining a proprietary terminal version compliant with CBS network specifications. The terminal will need to support existing applications that depend on the current magstripe terminal as well as support for the new contactless CareCard.

Contract 1 Acquire Card Licensing Rights, Card Technologies and Card Personalisation Services (ICBC)

- SecureKey to license card application for authentication services in payment networks

- SecureKey to provide the required rights and authorizations to ICBC and its qualified suppliers, so that ICBC's suppliers (~~IBM and IRIS~~) can use a major network certified EMV contactless compatible payment applet on contactless EMV compatible smart-chips, including a unique PAN for each issued card ~~the rights to a BIN~~.

- SecureKey to define and maintain the network configuration profile

- Defines and maintains the standard configuration for the contactless EMV application in compliance with the Payment Network and ICBC issuance program and provides to ICBC's qualified card supplier for personalization.
- SecureKey to provide ~~IRIS~~ the ICBC qualified Personalisation bureau the key-material to support the card personalization process
- SecureKey to provide IC perso file on a quarterly basis (PAN, PAN sequence, expiry, etc)
- SecureKey to provide PAN to PAI mapping file to ~~IBM~~ ICBC Distribution Bureau on a quarterly basis
- SecureKey to provide to the ICBC qualified Personalisation bureau ~~IBM~~ the EMV compatible smart-chips ~~paywave~~ card configuration profile
- Update the Card authentication services using batch card personalisation file generated by ICBC's Chip Personalisation and send PAN identifiers for each personalised card.
- Perform regular audit to ensure compliance of Chip Personalisation Bureau, Card Personalization bureau and the Distribution Bureau to ensure the chip issuance program objective are being met or exceed.

Contract 2 Authentication Services provided to Citizen Services

- SecureKey to provide card management services to Citizen Services

- Update the Card authentication services using daily card activation file generated by ICBC's card supplier (~~IBM~~) and ~~return~~ send PAI identifiers for each activated card.
- Update the Card authentication services using daily card deactivation file generated by Citizen Services and send PAI identifiers for each deactivated card.

- SecureKey to provide card validation services

- Card validation services for Citizen Services ~~for all network transactions~~ where an active card has been tapped on a qualified terminal.
- ~~• Card validation services for Citizen Services for all direct internet based consumer and provider transactions using SecureKey terminals where an active card has been tapped.~~
- Enrol Citizen Services as a Credential Service Provider to the Credential Brokering Services
- ~~• Enable the ICBC cards to be used in conjunction with Credential Brokering Services for access to other clients of the Credential Brokering Services, for example Federal Government.~~

- SecureKey to provide Credential Brokering Services

- Allow Citizen Services to enrol as a Relying Party to the Credential Brokering Services at the prescribed rate of the Credential Brokering Services.

- ~~• Enable Citizen Services to accept authentication transactions from credential service providers connected to the credential brokering service.~~

- SecureKey to provide access to network terminals

- Enables BC-Citizen Services to use deployed SecureKey terminals for authentication services. The CBS service has a broad range of consumer terminals as well as access to commercial partner networks.

- SecureKey to provide custom terminalisation services when required

- Support Citizen Services BC in defining a proprietary terminal version compliant with CBS network specifications. The terminal will need to support existing applications that depend on the current magstripe terminal as well as support for the new contactless CareCard services card.

From: [Andre Boysen](#)
To: [Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX; Wiebe, Patricia CITZ:EX;](#)
cc: [Pierre Roberge;](#)
Subject: bc noi text (4)
Date: Wednesday, October 12, 2011 10:23:37 AM
Attachments: [bc noi text \(4\).docx](#)

Updated document from joint meeting today.

Great session.

Thanks

Andre

The Government of British Columbia intends to modernize and expand its online service delivery capabilities to better serve the citizens and businesses of the province, as well as others who need services from the Province. Everything from checking healthcare records ... to ... to... enrolling children at school.

On May 19th, 2011, the Ministry of Health announced the introduction of a new CareCard for the Province . The new card, which would replace the current Care Card, will offer more security benefits than a current driver's licence, including a photograph of the beneficiary, anti-forgery features, high-level identity proofing – as well as a security chip. People can choose to have the new card, or to have their driver's licence indicate they are enrolled in the Medical Services Plan.

The security chip in the CareCard and driver's licence is a vital component to B.C.'s strategy to evolve online service delivery. Critical to service delivery is a level of certainty about the individual seeking service, whether for needs personal or on behalf of a business. The security chip provides this certainty and is the same type of chip used by banks globally. Because a rigorous identity-proofing was completed when the card was issued, the Province gathers certainty about the individual identity when a transaction is performed with the security chip and a passcode is provided.

Coupled with the security chip strategy is the need for terminalisation – a widespread, secure, easy to use and supported set of devices capable of reading the security chip for all the different service delivery scenarios required by the Province.

The Government of Canada has contracted with SecureKey Technologies for access to its market-based ecosystem for authentication. The service will be launching in early 2012. The ecosystem allows consumers easier access to Government services while assuring authentication levels used by existing bank credentials. By offering this choice, Canadians with banking relationships with selected large banks in Canada will be able to use cards, userids and passwords to access online services by the Government of Canada. Included with the service is broad-based consumer and business terminalisation to provide support for contactless cards like debit and credit cards for a broad range of transactions. A core value proposition of the service is choice, control and convenience for Canadians, together with the industry-leading best practices for privacy protection.

The Province has explored deploying a Provincial infrastructure for terminalisation. For reasons including cost, terminal reach, operational support, and user acceptance, the Province has decided that it would be better served by accessing a managed-infrastructure with broad-based access for terminalisation and authentication services, rather than deploy a dedicated infrastructure.

For these reasons the Province intends to acquire the services described below from SecureKey because there is no apparent market alternative and interoperation with the Federal initiative is vital to ensure that greater choice and convenience is available to the Citizens of B.C.

Contract 1 Acquire Card Licensing Rights (ICBC)

- SecureKey to provide credential service provider bureau service
- SecureKey to license card application for authentication services in networks
- SecureKey to provide access rights to partner networks for authentication services
- SecureKey to provide the card management system
- SecureKey to define and maintain the network configuration profile

Contract 2 Acquire Card Personalization Services (IBM)

- SecureKey to provide card personalization of chips
- SecureKey to grant authority to purchase chips orders on demand
- SecureKey to grant authority to personalize the chips independently
- SecureKey to provide key-materials to support the card personization process
- SecureKey to provide IC perso file on a quarterly basis
- SecureKey to provide a privacy mapping file on a quarterly basis
- SecureKey to provide an up to date card configuration profile

Contract 3 Authentication Services

- SecureKey to provide access to partner network terminals
- SecureKey to provide access to the federal credential broker service provider service
- SecureKey to provide card validation services
- SecureKey to assist in managing the card status
- SecureKey to provide custom terminalisation services when required

Outline

- Lead off with the current BC goals (more services online, lower operation costs, reduce fraud) and challenges (terminals, silos, choice for consumers) and the solution
- Refer to card announcement
- Talk about market developments and direction
- Talk about Feds service why interoperability is important
- What the market-based ecosystem for authentication and identity offering
- Where is this going.
- Closer - The benefits for citizens and the province

+++++

The Government of British Columbia intends to modernize and expand its online service delivery capabilities to better serve the citizens and businesses of the province, as well as others who need services from the Province. Everything from checking healthcare records ... to ... to... enrolling children at school.

On May 19th, 2011, the Ministry of Health announced the introduction of a new CareCard for the Province . The new card, which would replace the current Care Card, will offer more security benefits than a current driver's licence, including a photograph of the beneficiary, anti-forgery features, high-level identity proofing – as well as a security chip. People can choose to have the new card, or to have their driver's licence indicate they are enrolled in the Medical Services Plan.

The security chip in the CareCard and driver's licence is a vital component to B.C.'s strategy to evolve online service delivery. Critical to service delivery is a level of certainty about the individual seeking service, whether for needs personal or on behalf of a business, the security chip provides this certainty and is the same type of chip used by banks globally. Because a rigorous identity-proofing was completed when the card was issued, the province gathers certainty about the individual identity when a transaction is performed with the security chip and a passcode is provided.

Coupled with the security chip strategy is the need for terminalisation a widespread, secure, easy to use and supported set of devices capable of reading the security chip for all the different service delivery scenarios required by the Province.

The Government in Canada has contracted with SecureKey Technologies for access to its market-based ecosystem for authentication. The service will be launching in early 2012. The ecosystem allows consumers easier access to Federal services while assuring authentication levels used by existing bank credentials. By offering this choice, Canadians with banking relationships with selected large banks in Canada will be able to use cards, userids and passwords to access online services by the Government of Canada. Included with the service is broad-based consumer and business terminalisation to provide support for contactless cards like debit and credit cards for a broad range of transactions. A core value proposition of the service is choice, control and convenience for Canadians, together with the industry-leading best practices for privacy protection.

The Province has explored deploying a Provincial infrastructure for terminalisation. For reasons of costs, terminal reach, operational support, user acceptance, the Province has decided that it would be better served by accessing a managed-infrastructure with broad-based access for terminalisation and authentication services rather than deploy a dedicated infrastructure.

+++++

Contract for

- 1) ICBC - SecureKey to provide credential service provider bureau service to ICBC
 - SecureKey to license paywave card application
 - SecureKey to secure BIN rights
 - SecureKey to provide the card management system
 - SecureKey to define and maintain the paywave card configuration profile

Contract for

- 2)
 - SecureKey to contract with IBM for the BC IC card perso
 - SecureKey to allow IBM to order paywave chip on it behalf
 - SecureKey to allow IBM to perso paywave chip on it behalf
 - SecureKey to provide IBM the key-material to support the card perso process
 - SecureKey to provide IC perso file on a quarterly basis (PAN, PAN sequence, expiry, etc)
 - SecureKey to provide PAN to PAI mapping file to IBM on a quarterly basis
 - SecureKey to provide to IBM the paywave card configuration profile
 - IBM to provide to SecureKey daily card activation file for activation
 - IBM to provide to SecureKey daily card deactivation file for deactivation
 - IBM to provide to SecureKey weekly reports TBD
 - IBM to fully assist and support SecureKey for audit purposes as requested by Visa and or SecureKey from time to time

Contract For

- 3)
 - SecureKey to provide credential broker service provider service to BC
 - SecureKey to provide credential provider service provider to GC on BC behalf
 - - SecureKey to validate card cryptogram
 - - SecureKey to validate card status
 - BC to implement SecureKey RP service interface to GC-CBS service

+++junk below here+++++

The trend in industry is toward federated authentication services. Services like Facebook, Google and OpenID have deployed shared credential services to allow users a single login between sites.

Feds are launching and the banks are also contactless now, they are collaborating we want in. Better because more choice, more coverage, consumer support is provided, and it is not a silo.

The Province will get better consumer uptake and wider reach by participating in market ecosystem then trying to rollout a unique and dedicated provincial infrastructure

Transition --- service delivery needs authentication and identity services.

Cameron, Dianna LCTZ:EX

Subject: BC Pricing Discussion
Location: conf call as below

Start: Thu 2012-02-16 9:30 AM
End: Thu 2012-02-16 10:30 AM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Andre Boysen

Moderator name: Andre Boysen

Toll-free Dial-in number: S15, S17 / Conference ID: S15, S17

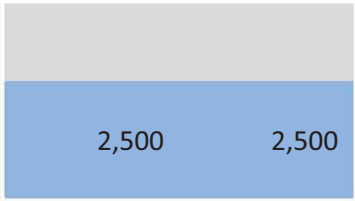
Local dial-in number: S15, S17 / Conference ID: S15, S17

Global toll-free dial-in number: S15, S17 / Conference ID: S15, S17

From: [Andre Boysen](#)
To: [Chris Chapman; Wiebe, Patricia LCTZ:](#)
[EX;](#)
Subject: bc service rollout projections.xlsx
Date: Wednesday, July 11, 2012 8:46:48 AM
Attachments: [bc service rollout projections.xlsx](#)

	2013 q1	2013 q2	2013 q3	2013 q4	2014 q1	2014 q2
Cards	400,000	300,000	300,000	300,000	300,000	300,000
Intel IPT						
Phones NFC						
USB						
Dual Rdrs	2,500	2,500	2,500	2,500	2,500	2,500
Counter Rdrs						
Services						
Hcare						
GC Services						
CBS						

2014 q3	2014 q4
300,000	300,000



Cameron, Dianna LCTZ:EX

From: Chris Chapman [Chris.Chapman@securekey.com]
Sent: Monday, May 28, 2012 2:46 PM
To: Wiebe, Patricia LCTZ:EX
Subject: RE:

Patricia,

I wanted to chat about timing for the various docs this week. Here is what I have on the list. The intent is that when you get these docs they will be signed off by SK pending BC concurrence. It does not leave much time to circulate internally and so wanted to talk through what is reasonable to complete the sign off process. I am avail this aft/evening for a call if needed.

Thx. Chris

	Doc	Review Status	Target Date
1	CMS-IAS interface, security design	Final review session BC/SK May 29, 2PM EST Ready for LCTZ signoff May 30	May 31
2	CMS-IRIS interface, security design	Final review session IRIS/BC/IBM May 29, 8:30PM EST Ready for LCTZ review May 30	May 31
3	CMS Program Security Design	Available for LCTZ review May 30 Will include IAS, IRIS docs as appendices	May 31 should follow closure of 1, 2
4	IAS-SKAP functional, security design	My estimate is we will have a final draft by May 31 and will need a few extra days to finish up.	May 31

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Monday, May 28, 2012 2:16 PM
To: Chris Chapman
Subject: RE:

OK.

Btw Ian asked again about the dual reader proposal.

I have time in an hour, but after that my afternoon is mostly booked up.

So email might be better than phone. Of course call me on my cell if its urgent.

Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Monday, May 28, 2012 11:13 AM
To: Wiebe, Patricia LCTZ:EX
Subject:

Sorry Patricia,

S22

....i will be unable to call until later today. Nothing urgent and can likely send an email a

bit later too.

Thx. Chris

Chris Chapman,
SecureKey Technologies Inc - Online Security Made Easy.
chris.chapman@SecureKey.com

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Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, April 30, 2012 12:51 PM
To: Moss, Jeremy LCTZ:EX; Bailey, Ian D LCTZ:EX; Dmitry Barinov; Chris Chapman
Subject: Call in details --- RE: Continuation of discussion on Security Requirements

Moderator name: Andre Boysen

Toll-free Dial-in number: S15, S17 / Conference ID: S15, S17

Local dial-in number: S15, S17 / Conference ID: S15, S17

Global toll-free dial-in number: S15, S17 / Conference ID: S15, S17

-----Original Appointment-----

From: Moss, Jeremy LCTZ:EX [<mailto:Jeremy.Moss@gov.bc.ca>]

Sent: Monday, April 30, 2012 3:16 PM

To: Moss, Jeremy LCTZ:EX; Bailey, Ian D LCTZ:EX; Andre Boysen; Dmitry Barinov; Chris Chapman

Subject: Continuation of discussion on Security Requirements

When: Monday, April 30, 2012 2:00 PM-2:30 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Ian and Jeremy to call Andre

When: Monday, April 30, 2012 2:00 PM-2:30 PM (GMT-08:00) Pacific Time (US & Canada).

Where: Ian and Jeremy to call Andre

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

Number to dial: S15, S17

Need clarity around issues such as:

- What requirements are coming from Visa vs SecureKey?
- What are "must do's" by Nov 2012 vs "nice to have" to keep payment option alive?
- Can ICBC/IBM get access to documents referenced in the Security Requirements?
- Does IBM have to be PCI compliant by Nov 2012, or just be in process (self-assessment complete, with timeline for compliance)?
-
-

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, October 5, 2011 1:24 PM
To: andre.boysen@securekey.com; 'greg.wolfond@securekey.com'
(greg.wolfond@securekey.com)
Cc: McDonald, Seanna CITZ:EX; Watkins, Peter CITZ:EX; Bamford, Kevena LCTZ:EX
Subject: Call on Friday at 2pm PDT

Andre, Greg,

Peter, Kevena, and I are hoping we can discuss the cost spreadsheet on Friday at 2pm PDT. I've asked Seanna to schedule a conference call. Peter and I are not available on Thursday. You should get a meeting request soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 4, 2011 11:41 AM
To: 'Greg Wolfond (greg@securekey.com)'; 'andre.boysen@securekey.com'
Subject: call today?

Greg, Andre,

I'm asking if we can have a call at 1pm or 1:30pm our time Peter would like to join in and he can't until that time. I'll also ask Kathy Thomson of ICBC and our purchasing consultants Richard Poutney and Mike Kishimoto to join as well not sure if they can attend. I will setup conf call if ok with you?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Sunday, February 19, 2012 8:32 PM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Call tomorrow

Hi Ian

Greg and I would like to arrange a call with you for 12PM EST tomorrow to talk about the contract points. Does that timing work for you?

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

Subject: Canceled: Discuss NOI Service Descriptions from SecureKey
Location: S15, S17

Start: Tue 2011-10-04 1:00 PM
End: Tue 2011-10-04 2:00 PM
Show Time As: Free

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bailey, Ian D CITZ:EX
Required Attendees: andre.boysen@securekey.com; greg.wolfond@securekey.com; XT:Thomson, Kathy CITZ:EX; Kishimoto, Mike J LCTZ:EX; Watkins, Peter CITZ:EX
Optional Attendees: Poutney, Richard G LCTZ:EX; Wiebe, Patricia CITZ:EX; Brodie, Diane SSBC:EX; Bamford, Kevena LCTZ:EX

Importance: High

Very short notice, but for those of you that can join us, please do. We will be discussing the NOI for services with the SecureKey team.

Conference call is S15, S17 participant code S15, S17

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, December 21, 2011 1:42 PM
To: Bailey, Ian D CITZ:EX
Cc: Pierre Roberge
Subject: Card Application Label

Hi Ian

We need to provide a data field in the card for the card personalization profile. The field is the "Card Application" label. The field is not readable or viewable by a user. It is visible to a terminal only.

My inclination is to name it "SecureKey Card" or something like that. We could call it the "BC Services Card" as well. Here is the decision point:

1. Calling it the SecureKey Card will allow us, to the extent all the provinces (and other jurisdictions), sign up for this service, SK will be able to treat all the traffic as aggregated and get better pricing and routing if we go this route. As we are acting as the issuer for the card under the covers this seems sensible approach.
2. Calling it the BC Service Card is an option, but makes it harder to aggregate traffic (because now we have to parse for every possible jurisdiction to know if the card app is one we know or not).

As your issuer this is what I think makes sense but I wanted to run it by you.

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, December 19, 2011 11:38 AM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: Card update

Hi Ian

The initial status seems positive a ¾ antennae will meet the performance needs.

The final result may not come until January.

This test is not the final test but it is a good start. Testing in Polycarbonate will still needs to be completed by Iris once we complete our work

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, August 14, 2012 2:12 PM
Cc: Bamford, Kevena LCTZ:EX; Bailey, Ian D LCTZ:EX; Moss, Jeremy LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: CONFIDENTIAL - Proposed release with Visa - 2012-08-XX Visa BC v2b Draft
Attachments: 2012-08-XX Visa_BC v2b Draft.pdf

Hi Kevena

As promised, here is a copy of the proposed release with Visa citing the BC project. The ask is for you to review the content and emphasis with a goal of getting approval and timing.

Please let me know if you have any questions.

Andre

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 9, 2012 1:21 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: contract and cap

Does 1:30 PST work?

I will set up a line so both Greg and I can join.

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, February 09, 2012 3:34 PM
To: Andre Boysen; Greg Wolfond
Subject: contract and cap
Importance: High

Andre, Greg,

S13

I'm going into a meeting right now are either of you available to talk between 1pm and 2:30pm PST today.

Thanks, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 14, 2012 5:50 PM
To: Bailey, Ian D CITZ:EX; Chris Chapman
Subject: Contract schedules
Attachments: Schedule B Implementation Plan draft v1.2.doc; Schedule A SecureKey Card and Authentication Services draft v1.0.docx

Hi Ian

There are 5 schedules planned for the MSA (master services agreement). This is based on the previous version of the contract, but I am not expecting it to change with the new draft we get from our lawyer.

Schedule	Description	Comments
A	Project Overview and Services	Review - First draft attached - start with NOI - needs more discussion about how broad/narrow we go here.
B	Project Implementation Plan	Review - There is a lot of content - will cut what is not required
C	Fees	Both - Need to discuss w Greg and based on email
D	BC Citizens Services Security Provisions	BC to provide
E	BC Privacy Protection	BC to provide
F	Card Specification	SK - We have this - need to get it in schedule form.

Take a look and we can talk about next steps. Do you have a time in mind to go over the fees?
Thurs PM PST or Friday?
Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, February 15, 2012 11:11 AM
To: 'Andre Boysen'; 'Chris Chapman'
Subject: RE: Contract schedules

Yes Thursday afternoon is clear right now from 1pm to 4pm.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, February 14, 2012 5:50 PM
To: Bailey, Ian D CITZ:EX; Chris Chapman
Subject: Contract schedules

Hi Ian

There are 5 schedules planned for the MSA (master services agreement). This is based on the previous version of the contract, but I am not expecting it to change with the new draft we get from our lawyer.

Schedule	Description	Comments
A	Project Overview and Services	Review - First draft attached - start with NOI - needs more discussion about how broad/narrow we go here.
B	Project Implementation Plan	Review - There is a lot of content - will cut what is not required
C	Fees	Both - Need to discuss w Greg and based on email
D	BC Citizens Services Security Provisions	BC to provide
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Take a look and we can talk about next steps. Do you have a time in mind to go over the fees?
Thurs PM PST or Friday?
Andre

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 9, 2012 12:35 PM
To: Bailey, Ian D CITZ:EX; Greg Wolfond
Subject: RE: contract and cap

I am available. Catch me on my cell.

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, February 09, 2012 3:34 PM
To: Andre Boysen; Greg Wolfond
Subject: contract and cap
Importance: High

Andre, Greg,

S13

I'm going into a meeting right now are either of you available to talk between 1pm and 2:30pm PST today.

Thanks, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, February 23, 2012 6:40 PM
To: 'andre.boysen@securekey.com'
Subject: Re: Contract update

Thx

----- Original Message -----

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, February 23, 2012 05:12 PM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Cc: Chris Chapman <Chris.Chapman@securekey.com>
Subject: Contract update

Hi Ian

We now have complete MSA and sched a prts 1 and 2 - nearing final draft got the lawyers - just your review.

Just need to clean up a few comments

Will have something out first thing

Sorry for the delay. S22

Chris is carrying the ball to get this to you

Andre Boysen
EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy

+16472872544

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, October 3, 2011 8:55 PM
To: andre.boysen@securekey.com
Subject: ctv story on nfc and issue with paypass and paywave credit cards

Andre,

Wondering if SecureKey has any information that will help us ward off the story that ran on CTV - we need to demo that our cards are not vulnerable in the same way - ie. no personal info or data that can be used in any way.

Ian.

Cameron, Dianna LCTZ:EX

Subject: Discuss NOI Service Descriptions from SecureKey
Location: S15, S17

Start: Tue 2011-10-04 1:00 PM
End: Tue 2011-10-04 2:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bailey, Ian D CITZ:EX
Required Attendees: andre.boysen@securekey.com; greg.wolfand@securekey.com; XT:Thomson, Kathy CITZ:EX; Kishimoto, Mike J LCTZ:EX; Watkins, Peter CITZ:EX
Optional Attendees: Poutney, Richard G LCTZ:EX; Wiebe, Patricia CITZ:EX; Brodie, Diane SSBC:EX; Bamford, Kevena LCTZ:EX

Importance: High

Very short notice, but for those of you that can join us, please do. We will be discussing the NOI for services with the SecureKey team.

Conference call is S15, S17 participant code S15, S17

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 18, 2011 10:26 AM
To: andre.boysen@securekey.com
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: Draft contract?

Andre,

Just a reminder that you were going to send Kathy and us draft contracts. How soon do you think you could get that?

Thx, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: [Moss, Jeremy LCTZ:EX](#)
To: ["Chris Chapman";](#)
cc: [Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX;](#)
Subject: Draft JOC Meeting Minutes
Date: Tuesday, August 7, 2012 5:37:09 PM
Attachments: [2012-07 27 record - draft 2.docx](#)

Hi Chris,

Please see the attached draft JOC meeting minutes from July 27th. We can discuss on our phone call this Thurs.

Jeremy Moss
Program Development Director
Provincial IDIM Program | Office of the CIO
Ministry of Labour, Citizens' Services and Open Government

jeremy.moss@gov.bc.ca
desk phone: 250-387-1581
cell phone: S22

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, September 30, 2011 12:37 PM
To: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Cc: greg wolfond; Pierre Roberge
Subject: Draft of NOI text as promised.
Attachments: bc noi text.docx

Hi Ian, Peter

Here is the draft of the NOI text.

Greg is S22 so I don't have his comments yet. There may be changes after his review.

Please review and comment as soon as you can. I can get another turn on it tonight if you get it back to me in the next two hours.

Thanks
Andre

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 21, 2012 5:16 PM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Cc: Chris Chapman; Pierre Roberge; Greg Wolfond; Jaime Shapiro
Subject: Emailing: IT Services - SecureKey - Schedule A v0 6-TrackChanges, IT Services - SecureKey - Schedule A v0 6-Clean
Attachments: IT Services - SecureKey - Schedule A v0 6-TrackChanges.docx; IT Services - SecureKey - Schedule A v0 6-Clean.docx

Hi Ian/Patricia

Here are the copies of Sched A back with our comments embedded.

The tracked changes version might not be useful because of the volume of changes.

The two sections you had at the top were removed because they are in the MSA.

When you give it back to us please rename it to "v0 7"

Talk to you tomorrow.

Andre

Your message is ready to be sent with the following file or link attachments:

IT Services - SecureKey - Schedule A v0 6-TrackChanges IT Services - SecureKey - Schedule A v0 6-Clean

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, October 20, 2011 2:58 PM
To: 'andre.boysen@securekey.com'; 'Pierre Roberge'
Subject: emv chip uplift?

Andre, Pierre,

My recollection of a conversation with you the last time you were out re the added cost of the emv chip over a non emv licensed/personalized contactless chip from a manufacturer such as Iris or G&D was about \$0.20 per card or so...but maybe I've got this wrong.

Last year our supplier provided costs for a contactless chip card (4k memory, etc) in polycarbonate. This year we said the contactless chip needed to have the emv app (paywave) burned in, the PAN personalized, and the chip locked down.

I want to be armed with the right "order of magnitude" costing when I review our suppliers projected costs for card production.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, February 20, 2012 12:05 PM
To: Bailey, Ian D CITZ:EX
Subject: file for discussion
Attachments: SK - BC Pricing Contract Pricing Matrix.xlsx

Bc Pricing Matrix	Card Mgmt	Health User Caps	Non Health Users	Contracts Caps Before ID claim Monetization	Monetization of Identity Claims	Total Cost of Ownership
2011/2012	1.5	0	0	1.5		1.5
2012/2013	1.5	0	0.5	2		2
2013/2014	1.5	0.5	1	3	-1	2
2014/2015	1.5	1	1.5	4	-2	2
2015/2016	1.5	2	2	5.5	-3	2.5
2016/2017	2	2	2.5	6.5	-4	2.5
2017/2018	2	3	3	8	-4	4
totals	11.5	8.5	10.5	30.5	-14	16.5

pricing basis

\$1/user/year for health usage \$1/user/year for non health usage BC Rev share based on one user ID claim per year at \$1

Notes:

Total Health Cost including Card Mgmt over contract life max \$20M Total Non Health User Cap is \$10.5M before ID claim monetization ID check for bank account open is more \$ and ID check for retail purchase is less but target is to get BC at least \$1/user

Terminals

SK
Terminals
will be at
cost plus
25%

USB target
is \$5, with
display \$35

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Jaime Shapiro \(jaime.shapiro@securekey.com\)"; "Ayinde Yakubu \(Ayinde.Yakubu@securekey.com\)"; "Chris Chapman"; "Scott Allan \(scott.allan@securekey.com\)";](#)
cc: [Bamford, Kevena LCTZ:EX; Moss, Jeremy LCTZ:EX;](#)
Subject: S14
Date: Monday, July 23, 2012 10:59:00 PM

Coming soon, very soon.

S14

S14

We're so close to being done now...
thanks everyone for your help in the last few days/weeks on this.

Patricia

Patricia Wiebe, Director, Identity and Information Architecture and Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, February 20, 2012 2:08 PM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX
Cc: Greg Wolfond; Jaime Shapiro; Pierre Roberge; Chris Chapman
Subject: First draft of SecureKey-Citizens' Services MSA (CLEAN V1)
Attachments: SecureKey-Citizens' Services MSA (CLEAN V1).doc

Hi Ian

Here is the first draft of the Citizen Services' Master Services Agreement (MSA). It is the main agreement that brings all the other pieces of work together. As discussed there is now one main agreement (instead of two as before) with the ability to add schedules for incremental pieces of work.

Two notes:

1. We intend to add a schedule to list and describe all the other schedules to make easier for new readers to understand the contract. We did not want to hold this version up so you can get going. You will see it in the next revision from us.
2. The timing language around CBS services and identity services may be more imminent sounding then you would prefer. We want to make sure this is going ahead from a contract point of view, but we understand you may want to recharacterize the timing of it.

We will get you Schedule A with our comments tomorrow by end of day.

Let's talk tomorrow about filling in the rest of the schedules.

Thanks for the call today
Andre

Pages 67 through 75 redacted for the following reasons:

S13

From: [Maggie Au](#)
To: [Wiebe, Patricia CITZ:EX;](#)
cc: [Heather Neale;](#)
Subject: Follow-up
Date: Thursday, December 15, 2011 3:14:07 PM

Hi Patricia,

It was my pleasure to meet you in person yesterday. We had a great discussion yesterday and we shared our vision and roadmap. In the next week, we will provide you an update on the design document with descriptions.

There are a few items that we need your feedback on:

- Whether it is okay for CSB to get encrypted data and provide a pass through to the RP.
- Whether the serial number on the back of the service card is unique? Currently the format is "a00000000".

I also have some questions with regard to the card production project. We ran out of time yesterday!

- Do you know when we can share the flow with ICBC/IBM/IRIS?
- In order to have a new driver's license, the request must go through ICBC and IBM and the user will get the physical card from mail. No driver's license will be issued at the branch or service center. Is this right?
- Do we need to have a PIN on the card? In the future to support the use on the terminal?
- IBM mentioned that they require to have one year of supply in inventory. Can the period be shorter?

Thank you very much for your time to visit us in person. If there is anything else that you need, please let me know.

Best Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

From: [Moss, Jeremy LCTZ:EX](#)
To: ["Chris Chapman"; Wiebe, Patricia LCTZ:EX; Adlhoch, Grietje A LCTZ:EX;](#)
Subject: For our meeting today: SK / LCTZ PM notes from 2012-07-06
Date: Wednesday, July 18, 2012 8:21:32 AM
Attachments: [2012-07-18 Agenda - SK LCTZ PM Group.docx](#)
[2012 07 06 Record - draft rev layout.docx](#)
[2012-07 13 JOC Minutes draft V2.docx](#)

Hi Chris, Patricia and Grietje,

Sorry for the last minute materials, but Grietje has prepared an agenda for us, and has a new, streamlined record of our discussion & action items, more closely aligned with our JOC format. I think it will be easier to use going forward, but wanted your thoughts as well.

Also, I'm attaching the draft JOC meeting minutes from our meeting on 2012-07-13. We don't have to review them today, but wanted Chris to have them before I left today,

S22

Talk to you later today.

Jeremy

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, July 17, 2012 10:22 AM
To: Moss, Jeremy LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

Jeremy, attached are reformatted minutes and an agenda for your consideration.

Cheers,
G

From: Moss, Jeremy LCTZ:EX
Sent: Tuesday, July 17, 2012 8:56 AM
To: Adlhoch, Grietje A LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

Thx!

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, July 17, 2012 8:54 AM
To: Moss, Jeremy LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

I'll do a draft and you can decide based on that.

From: Moss, Jeremy LCTZ:EX
Sent: Tuesday, July 17, 2012 8:38 AM
To: Adlhoch, Grietje A LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

I'm tempted. Wondering if we can make it easier to align JOC action items & status with the PM meetings. I know we will discuss some things at PM that we will never discuss at JOC, but most of the things we discuss at JOC are also touched on at the PM meetings.

What are your thoughts?

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, July 17, 2012 8:35 AM
To: Moss, Jeremy LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

Would you like to change these "minutes" to the same format/layout as the JOC minutes and for me to follow that method?

Happy to do that if you prefer.

From: Moss, Jeremy LCTZ:EX
Sent: Tuesday, July 17, 2012 7:49 AM
To: 'Chris Chapman'
Cc: Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: SK / LCTZ PM notes from 2012-07-06

Hi Chris,

Please see the attached notes from our meeting held on July 6th. We can quickly review them during our meeting tomorrow (July 18th). Sorry for the delay – they are a bit out of date now that we have had the JOC.

I've tried to prune out some of the detail / history of some items to make them a little quicker to review.

Jeremy

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, January 16, 2012 11:16 AM
To: XT:Thomson, Kathy CITZ:EX; Bamford, Kevena CITZ:EX (Kevena.Bamford@gov.bc.ca)
Cc: andre.boysen@securekey.com; Bell, Carolyn P HLTH:EX; Wiebe, Patricia CITZ:EX
Subject: Full Antennae in cards

Kathy,

This note is to confirm our request to have the full antennae chip in the BC Services Card and Combo Card since all indications are that our manufacturer IRIS can produce these cards and our card authentication service provider SecureKey provides readers that work best with the full antenna.

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, January 17, 2012 7:18 AM
To: andre.boysen@securekey.com
Subject: FW: Full Antennae in cards

Importance: High

Andre, see below re Class 1 antenna. Please confirm you are good with this.

Thanks, Ian.

From: Thomson, Kathy [Kathy.Thomson@icbc.com]
Sent: January 17, 2012 6:25 AM
To: Bailey, Ian D CITZ:EX
Subject: FW: Full Antennae in cards

Ian can u confirm.

.
Kathy Thomson
Director, Provincial Licensing
Driver Licensing Division
ICBC building trust. driving confidence.
.
910 Government street|
Victoria | British Columbia | V8W 3Y8
telephone: 250-414-7625
facsimile: 250-978-8007 | mobile: S17

-----Original Message-----
From: Van Der Merwe, Sam
Sent: Monday, January 16, 2012 3:22 PM
To: Thomson, Kathy
Subject: RE: Full Antennae in cards

Hi Kathy,
We (IBM) will provide a full ID-1 sized antenna, also known as a Class 1 antenna

Thanks
Sam
.
. . .

-----Original Message-----
From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, January 16, 2012 11:16 AM
To: Thomson, Kathy; Bamford, Kevena LCTZ:EX
Cc: andre.boysen@securekey.com; Bell, Carolyn P HLTH:EX; Wiebe, Patricia CITZ:EX
Subject: Full Antennae in cards

Kathy,

This note is to confirm our request to have the full antennae chip in the BC Services Card and Combo Card since all indications are that our manufacturer IRIS can produce these cards and our card authentication service provider SecureKey provides readers that work best with the full antenna.

Thanks, Ian.

This email and any attachments are intended only for the named recipient and may contain confidential and/or privileged material.

Any unauthorized copying, dissemination or other use by a person other than the named recipient of this communication is prohibited.

If you received this in error or are not named as a recipient, please notify the sender and destroy all copies of this email immediately.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, November 18, 2011 1:21 PM
To: 'andre.boysen@securekey.com'; 'John Ouilette (ouilette@ca.ibm.com)'
Subject: FW: Order Cards now and do contracts for paywave later.

Importance: High

Andre, John,

Please confirm when you have reached agreement, thanks, Ian.

From: Bailey, Ian D CITZ:EX
Sent: Friday, November 18, 2011 11:39 AM
To: John Ouilette (ouilette@ca.ibm.com)
Cc: XT:Vanhelvoirt, Joy; ICBC CITZ:IN; andre.boysen@securekey.com; 'greg.wolfond@securekey.com' (greg.wolfond@securekey.com); Nikolejsin, Dave CITZ:EX
Subject: Order Cards now and do contracts for paywave later.
Importance: High

John,

I discussed the approved approach for ordering cards now and doing contracts for paywave app later with Greg and Andre at SecureKey this morning. Greg asked that you check back with them to make sure everyone is on the same page with respect to the chip specification. If you could please contact Andre and/or Greg asap that would be great.

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, April 5, 2012 7:59 PM
To: Bailey, Ian D LCTZ:EX; Bamford, Kevena LCTZ:EX
Subject: FW: Rate Card Schedule for Skey

From: Andre Boysen
Sent: Thursday, April 05, 2012 8:57 PM
To: Jaime Shapiro; Chris Chapman; 'Rob Hyndman'
Subject: Rate Card Schedule for Skey

Role	\$Rate/day
Business/Prof Svs Executive	2500
Project Manager	1900
Dev/QA Mgr	1250
Architect	1700
Business Analyst	750
Developer	750
QA Analyst	750
Operations Analyst	750

Page 85 redacted for the following reason:

S14

BC Services Card Project Card Personalization Workshop

July 18, 2011, 2:30– 5:00 pm

S15

Attendee List

Ministry of Labour, Citizens' Services and Open Government (LCTZ)	Patricia Wiebe (chair and minutes), Peter Watkins, Doug Collinge, Steve Shulhan
SecureKey	Andre Boysen, Mike Stephenson (from TD Merchant Services, on behalf of SecureKey)
Ministry of Health (MH)	Jeremy Moss, Guy Friswell (each for part of meeting)
Insurance Corporation of British Columbia (ICBC)	Sam Van der Merwe
IBM (on behalf of ICBC)	Chet Watmough, John Ouillette
Sierra (on behalf of LCTZ)	Roger Fabi, Greg Turner

AGENDA

- Review current card production process by ICBC/IBM
- Discuss how chip personalization can be incorporated in current card production process
- Identify data on chips and in servers to enable chip authentication with SecureKey technology

OBJECTIVES

- Achieve common understanding among stakeholders of card/chip personalization process
- Identify new/changed requirements re: how chips will be used with SecureKey technology
- Position IBM to prototype a set of demo cards that can work with SecureKey technology

DISCUSSION

Note: This workshop included some advanced technical discussion that was not fully explained or documented. These minutes likely contain technical mistakes; however the minutes are intended to express the general technical concepts discussed. A discussion/solution paper will be drafted next that will endeavour to correctly and more fully describe the technical discussion.

Business Context

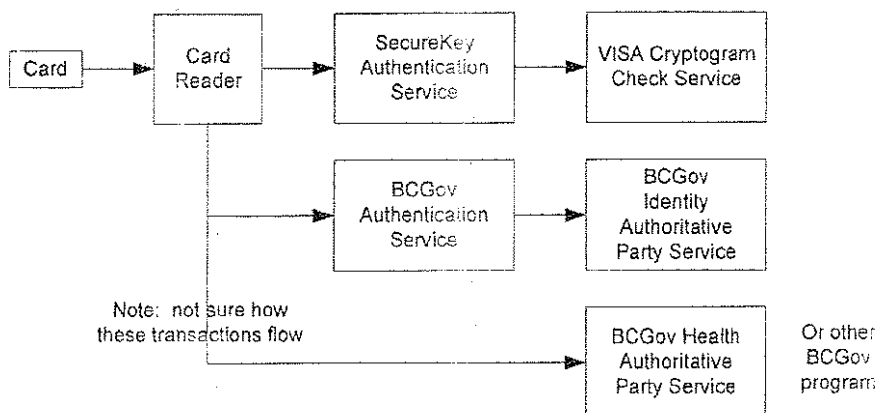
- Jeremy described to SecureKey the business context of the card project:
 - o CareCards are being replaced with smartcards, moving away from use of magnetic stripes
 - o citizens are being re-enrolled in Medical Services Plan (MSP) for healthcare insurance coverage
 - o identity proofing and photo capture will occur at a counter at the same time as driver licence renewal
 - o smartcards will be used for online and point of service authentication

Expiry date		Number - could be set to a specific date, e.g. 5 years from card issue - could be set to far off future data, and manage expiry in server controls instead
ATC	Application Transaction Counter, a number that records how many times the contactless chip has been used since the last time it synchronized its cryptogram	
Private Key	A key that is unique to the chip, cannot be copied or read from the chip, and is used in cryptographic functions	- set on chip when created in factory (chip supplier)
Application Items	Description	Process to set up/personalize
Cryptogram	Application that provides a cryptogram using the cryptogram calculation function on the secure element of the chip; application is common, i.e. not personalized	- could be loaded by card manufacturer; cryptogram should be read during card personalization and recorded somewhere - could be loaded by card producer before/during/after personalization
Updater	Optional application that can be used to set or change some data on the chip after card production (e.g. update expiry date); designed by card issuer; should be only run by card issuer Note: this may require contact-type chip so may not be suitable if BC card will only have contactless chip	- could be loaded by card manufacturer - could be loaded by card producer
Prepay	Optional application that can be used to enable financial transactions using the card Note: this may require contact-type chip so may not be suitable if BC card will only have contactless chip	- could be loaded by card manufacturer, provided they are EMV certified - could be loaded by card producer, but then would require EMV certification

- Andre's recommendation: chip personalization through association after card personalization
 - o After card is set with PAN and private key, loaded with cryptogram application (likely all done by card manufacturer), then IBM should use card/chip reader to associate/record the card's PAN with the printed card/barcode.
- Andre says Province of BC is first non-bank to do EMV cards and use SecureKey technology; all banks produce and personalize cards internally already
- Jeremy advises that no one engages with G&D regarding chip personalization
- Peter advises that we need card usage policy that say that if card readers can read the PAN, point of services are not allowed to use PAN for health card purposes (or other government programs).

Discussion on Chip Authentication

- SecureKey provides authentication service that brokers authentication with a VISA cryptogram checking service.
 - o It is unclear whether or how the SecureKey or VISA services get set up with data about a card during personalization process
- Patricia describes that they have done some discovery work on integrating SecureKey authentication with identity attribute services, so that attributes can be delivered to a card reader, e.g. a payment terminal application.



Outstanding issues:

- Key management – how does private key get set, who has public key, who is root certificate authority or intermediary certificate authorities, symmetric versus asymmetric keys, how does cryptogram relate to BIN or PAN?
- Certification and audit requirements – who needs to be certified for which parts of personalization, in order to maintain compliance with EMV?
- SecureKey card interface – is there mutual authn between card and card reader, i.e. is PAN encrypted or transmitted in clear between card and card reader; if encrypted – how and where is it decrypted?
- Overall architecture of ecosystem – how does Card issuer, SecureKey, VISA (and other) Cryptogram Check systems work together?
 - o How is chip personalization (PAN, keys, cryptogram) shared with SecureKey and VISA Cryptogram Check services; what data is set in which backend servers; what

- interfaces to set, lookup or validate with backend servers; what is the sequence of events to complete chip personalization with backend servers?
- Choices (if any) on setting data and loading applications – either by chip supplier, manufacturer or producer, before/during/after personalization; how to quality assure?
 - Card readers – What kind of card reader is required to simply read the card (read PAN), or read the card and validate the cryptogram (likely using SecureKey technology)?
 - o Note: IBM needs card readers (special or standard) to do quality check

ACTION ITEMS

- Andre/SecureKey to provide additional information (as described above) on these topics:
 - o Key management
 - o SecureKey card interface
 - o Overall architecture of ecosystem
 - o Card readers
 - o Example card file or specifications that IBM could use to produce such cards
- Chet/IBM to investigate and provide additional information (as described above) on these topics:
 - o Capabilities and choices to set data and load applications by their chip supplier, manufacturer
 - o Current compliance by chip supplier, manufacturer related to EMV
- Patricia to “own” the resolution of the chip-related architecture (personalization and authentication), and start documenting the discussion/solution
 - o John and Chet/IBM will help
 - o Andre/SecureKey will work closely with Patricia to resolve issues, provide info
- Patricia to include card usage policy in other project policy development
- Patricia to distribute information to workshop group
 - o Workshop minutes (done - these notes)
 - o Questions from Chet/IBM with answers from Andre/SecureKey (done - see appendix on next page)

**** Next Meeting:** TBD – after more information is provided by SecureKey

APPENDIX – IBM's QUESTIONS and ANSWERS

Questions provided by Sam Van der Merwe/ICBC on July 12, 2011

EMV and Chip Questions:

Answered by Ian Bailey/OCIO on July 12, 2011

1. Can we confirm that the current preference for a standard on the ISO 14443 chip is the EMV specification and that it does not require the pre-installed application compliant to ICAO 9303?

Yes EMV application only on ISO 14443 chip.

2. At this point do we know what type of (and how many) application(s) or future potential applications that are required on the chip?

We do not know but can imagine 2 or 3 other applications such as building access and smart card logon.

3. Do we need to implement full EMV certified cards? If we need to implement the full EMV Certified cards, we will need to meet specific standards on personalization of cards, data structure, transport keys, Key Management System, security systems etc. that we need to follow to comply with the standards.

or

Is the intent here to just use the EMVCo platform only ? i.e. Not full EMV, but follow the standard - reuse the data structures, use same key management, etc ? If so, am I correct to assume that we would still want to use inlays that are EMV certified?

Secure Key and TD can confirm but I don't believe we need to be fully EMV compliant since we are not doing payment transactions.

SecureKey Related Questions:

Answered by Andre Boysen/SecureKey on July 21, 2011

(some questions will be answered further later – Andre to follow up with Patricia)

4. What is the minimal EMV implementation that SecureKey requires to interface with the SecureKey device?

See Visa Contactless Spec V2
EMV Level 1 or Level 2 (VIS 4.2)
Card Number & Cryptogram

5. What is the data that will be required within the data structures ? Do we have a description of the client identifier that we intend to use ?

As per Visa Spec:
PAN - 16 Digit BIN as per TD Spec
Expiry Date
PAN Sequence Number
ATC (counter for contactless transactions)

6. Do we currently have a plan for dealing with authentication key management?

Tokens today are static single use devices. No key management required.

7. Has there been an implementation that we can leverage of a contactless card interfacing with the SecureKey technology that uses a partial EMV implementation?

Banks are using SecureKey for authentication applications – bank websites. GC will be following soon.

8. When interfacing with EMV chip, there may be more than one application on the chip. Is there an application the SecureKey expects? Is there a specific set of applications that SecureKey supports?

Visa Contactless Spec v2, which states the PPSE is the credit application Cryptogram. This is subject to use cases BC wants to support. To date, SK gets the identifier and checks the cryptogram.

9. What will we need to preload on the chip to enable the SecureKey technology?

Identifier & Cryptogram

10. Will the EMV implementation be expected to perform SDA offline data authentication?

?? No --- online service only

11. Will there be a CVM (customer verified method)? If so, I assume that it will be Offline PIN? If so, will it be a enciphered offline PIN or a plain text PIN?

Need to discuss with BC --- we have talked about server passcode --- depends on the required use cases (payment will require PIN)

12. Does SecureKey expect the cards to be unlocked? i.e does SecureKey expect to issue script commands to the card? e.g. PIN resets? other commands?

See TD discussion

Page 92 redacted for the following reason:

S14

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
Subject: FW: BCSC Forecast for September to November 2012
Date: Friday, July 13, 2012 8:13:18 AM

Patricia, here is the latest card forecast we received from IRIS/IBM this week. Thx. Chris

NEW Chipped Cards, New Artwork						
Date P3 required by IRIS from SK		Jul 24th 2012	Aug 1st 2012	Sep 1st 2012	Oct 1st 2012	
Date Stock is Delivered to IBM (ETA)		Jul 27th 2012	Sep. 15, 2012	Oct. 15, 2012	15-Nov-12	Total
	PREFIX					
BCSC Blue 1.1.1	A	500	99,500	160,000	150,000	410,000
BCSC Blue 1.2.1	F		30,000	40,000	20,000	90,000
DL/BCSC Blue 2.1	J		100,000	30,000	150,000	280,000
DL/BCSC Pink 2.2	P		15,000	0	0	15,000
DL/BCSC Green 2.3	H		30,000	0	0	30,000
Total		500	274,500	230,000	320,000	825,000

Cameron, Dianna LCTZ:EX

From: Moss, Jeremy LCTZ:EX
Sent: Friday, June 22, 2012 2:07 PM
To: 'Chris Chapman'; Wiebe, Patricia LCTZ:EX
Subject: RE: Embossing file prefix

I'm glad this appears to not be a problem. Don't worry about raising a "non-issue" - I read the email the same way you did.

However, I am still a little concerned. John mentions that all the card types identified in this email are chipped cards. There are 8 card types and 1 test card identified in the email, for a total of 9 cards. However, my understanding is there are only 5 chipped card types related to Services Card:

- non-photo
- standalone photo
- Combo DL
- Combo Learner DL
- Combo Novice DL

I do know that IBM also personalizes at least two (probably three) other chipped cards for ICBC that have nothing to do with the Services Card program:

- enhanced DL
- enhanced Learner DL (?)
- enhanced BCID

I'm wondering if Iris and IBM are confusing the two types of chipped cards, and trying to associate PANs with the "enhanced" cards? Either that, or I'm unaware of 3 other BC Services Card types.

Do you want to follow up with IBM to confirm?

Jeremy

-----Original Message-----

From: Chris Chapman [mailto:Chris.Chapman@securekey.com]
Sent: Friday, June 22, 2012 12:04 PM
To: Moss, Jeremy LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: FW: Embossing file prefix

So looks like they are adding new chip card types...this is not a big issue on our end. Sorry did not mean to raise a non-issue.

-----Original Message-----

From: Chris Chapman
Sent: Friday, June 22, 2012 3:01 PM
To: 'John Ouillette'
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

Thank you. So to confirm you are adding 3 new chip card variations?

-----Original Message-----

From: John Ouillette [mailto:ouillette@ca.ibm.com]

From: [Chris Chapman](#)
To: [Moss, Jeremy LCTZ:EX](#); [Wiebe, Patricia LCTZ:EX](#);
Subject: FW: Embossing file prefix
Date: Friday, June 22, 2012 2:08:17 PM

Here was the explanation from John.

Original Message

From: John Ouilette [<mailto:ouilette@ca.ibm.com>]
Sent: Friday, June 22, 2012 3:14 PM
To: Chris Chapman
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

Hi Chris,

Although ICBC has not requested that we produce a "Gold" card (3 versions) for them, we have created artwork in anticipation that we may get asked to add them at some time in the future. We are being pro active and planning for a possible future scenario.

Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

| >
| From: |
| >

> |
> |Chris Chapman <Chris.Chapman@securekey.com> |

> | >
| To: |
| >

> |
> |John Ouilette/CanWest/IBM@IBMCA |

> | >
| Cc: |
| >

> |
> |Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chet Watmough/CanWest/IBM@IBMCA, Maggie Au <maggie.au@securekey.com> |

> | >
| Date: |
| >

> |

|06/22/2012 12:04 PM

>
|
| Subject: |
| >

>
|RE: Embossing file prefix

>

Thank you. So to confirm you are adding 3 new chip card variations?

Original Message

From: John Ouilette [<mailto:ouilette@ca.ibm.com>]
Sent: Friday, June 22, 2012 2:59 PM
To: Chris Chapman
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

Hi Chris,

You are right in that IRIS is producing artwork for us that will be used for non chipped cards. However, all of the card types shown in this email are of chipped cards. IRIS and IBM do not require PANS for non chipped cards.

Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

| >
| From: |
| >

>

|Chris Chapman <Chris.Chapman@securekey.com>

>

| >
| To: |
| >

>

|John Ouilette/CanWest/IBM@IBMCA, Maggie Au <maggie.au@securekey.com>

>

| >
| Cc: |
| >

Cameron, Dianna LCTZ:EX

From: Moss, Jeremy LCTZ:EX
Sent: Friday, June 22, 2012 2:07 PM
To: 'Chris Chapman'; Wiebe, Patricia LCTZ:EX
Subject: RE: Embossing file prefix

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To: Moss, Jeremy LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: FW: Embossing file prefix

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To: 'John Ouillette'
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

Thank you. So to confirm you are adding 3 new chip card variations?

-----Original Message-----

From: John Ouillette [mailto:ouillette@ca.ibm.com]

> |

| Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chet Watmough/CanWest/IBM@IBMCA

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| Date: |

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| 06/22/2012 10:34 AM

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| Subject: |

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| RE: Embossing file prefix

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> |

John this is implying we are providing PANs for non chip cards. Is this what you are requesting?
 We will be doing the second option for the 17K batch.
 Thx. Chris

Original Message
 From: John Ouilette [<mailto:ouilette@ca.ibm.com>]
 Sent: Friday, June 22, 2012 1:03 PM
 To: Maggie Au
 Cc: Ayinde Yakubu; Chet Watmough; Chris Chapman
 Subject: RE: Embossing file prefix

Hi Maggie,

IBM has requested and IRIS has manufactured cards for the 17,000 batch containing all of the artwork types listed in the table immediately below.
 In addition to cards with prefix type A, F, J, P, H, T they have also manufactured cards with prefix type C, G and K. If SecureKey is able, without delay, to provide files with these additional 3 prefix types then please create files as follows:

No	Description	Prefix	# of
		PANS	
1	BCSC Blue Banner 1.1.1	A	2000
2	BCSC Pseudo Gold Banner 1.1.2	C	2000
3	BCSC Blue Banner 1.2.1	F	2000

	+	+	+	
4	BCSC Pseudo Gold Banner 1.2.2	G	2000	
	+	+	+	
5	DL/BCSC Blue Banner 2.1	J	2000	
	+	+	+	
6	DL/BCSC Pink Banner 2.2	P	2000	
	+	+	+	
7	DL/BCSC Green Banner 2.3	H	2000	
	+	+	+	
8	DL/BCSC Pseudo Gold Banner 2.4	K	2000	
	+	+	+	
9	White Test Card	T	1000	
	+	+	+	

If creating files with the additional prefix types will result in a delay then please distribute the 17,000 as follows:

No	Description	Prefix	# of
		PANS	
	+	+	+
1	BCSC Blue Banner 1.1.1	A	4000
	+	+	+
2	BCSC Pseudo Gold Banner 1.1.2	C	0
	+	+	+
3	BCSC Blue Banner 1.2.1	F	4000
	+	+	+
4	BCSC Pseudo Gold Banner 1.2.2	G	0
	+	+	+
5	DL/BCSC Blue Banner 2.1	J	4000
	+	+	+
6	DL/BCSC Pink Banner 2.2	P	2000
	+	+	+
7	DL/BCSC Green Banner 2.3	H	2000
	+	+	+
8	DL/BCSC Pseudo Gold Banner 2.4	K	0
	+	+	+
9	White Test Card	T	1000
	+	+	+

Please let me know which you will be doing and I will advise IRIS.

Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

| >
| From: |
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> |

|Maggie Au <maggie.au@securekey.com>
|

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| >
| To: |
| >

> |

|John Ouilette/CanWest/IBM@IBMCA, Chet Watmough/CanWest/IBM@IBMCA
|

> |

| >
| Cc: |
| >

> |

|Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chris Chapman <Chris.Chapman@securekey.com>
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| >
| Date: |
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|06/22/2012 08:12 AM
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| >
| Subject: |
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|RE: Embossing file prefix
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Hi John, Chet,

We need some clarification on the following chart from IRIS:

No	Description	Prefix
1	BCSC Blue Banner 1.1.1	A
2	BCSC Pseudo Gold Banner 1.1.2	C
3	BCSC Blue Banner 1.2.1	F
4	BCSC Pseudo Gold Banner 1.2.2	G
5	DL/BCSC Blue Banner 2.1	J
6	DL/BCSC Pink Banner 2.2	P
7	DL/BCSC Green Banner 2.3	H
8	DL/BCSC Pseudo Gold Banner 2.4	K
9	White Test Card	T

As per previous discussion, SecureKey will provide p3 file only for chip card, that is for prefix type A, F, J, P, H, T. Can you please confirm? In addition, can you please provide the quantity for each prefix type A, F, J, P, H? For test card (T), the quantity is 1000. Thanks in advance.

Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

From: Chris Chapman
Sent: Friday, June 22, 2012 9:13 AM
To: ouillette@ca.ibm.com; Chat
Cc: Maggie Au; Ayinde Yakubu
Subject: FW: Embossing file prefix
Importance: High

John, Chet,

Will you be providing the number of PANs/type for the June 22 batch? If yes then we need this asap.

Thx. Chris

From: Yeoh Suat Lay [<mailto:yeoh@iris.com.my>]

Sent: Friday, June 22, 2012 12:47 AM

To: Chris Chapman; 'nicholastan'

Cc: azwar@iris.com.my; 'Bahjat Aman'; 'Chat'; ouillette@ca.ibm.com; Ayinde Yakubu; Maggie Au; Eli Erlichman

Subject: RE: Embossing file prefix

Hi Chris,

1. Email dated 20/6 as attached gives list of prefix for total of 9

designs (including white card). Plse use the updated list.

2. No. of PANs for each card type should follow the monthly forecast from IBM.

3. Maximum PANs per data file is recommended to be 50,000.

Kindly let us know if you need further details.

Thanks and looking forward to receiving the data file from you by 22/6.

Regards
SI

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]

Sent: Thursday, June 21, 2012 8:18 PM

To: nicholastan; 'Yeoh Suat Lay '

Cc: azwar@iris.com.my; 'Bahjat Aman'; Chat; ouillette@ca.ibm.com; Ayinde Yakubu; Maggie Au; Eli Erlichman

Subject: RE: Embossing file prefix

Hi Nicholas, SL,

Can you please let us know, by completing the table below, how many PANs you would like for each card type?

Thx. Chris

From: nicholastan [<mailto:nicholas@iris.com.my>]

Sent: Thursday, June 07, 2012 5:43 AM

To: Maggie Au; Chris Chapman; Eli Erlichman

Cc: azwar@iris.com.my; 'Bahjat Aman'; 'Yeoh Suat Lay '; Chat; ouillette@ca.ibm.com

Subject: Embossing file prefix

No	Description	Prefix	# PANS	
1	BCSC Blue Banner 1.1.1	A	?	
2	BCSC Blue Banner 1.2.1	F	?	
3	DL/BCSC Blue Banner 2.1	J	?	
4	DL/BCSC Pink Banner 2.2	P	?	

5	DL/BCSC Green Banner 2.3	H		?
	+	+	+	
9	White Test Card	T	1000	
	+	+	+	

Dear Chris

For the 17K delivery. 1000 of the cards is white test card. The table above extracted from the Interface document didn't define prefix for white test card. I would like to suggest to use prefix 'T' for the white test card.

Best regards,
Nicholas Tan
Technical Manager
Sales Support
Iris Corporation Berhad
H/P: +6016 2611 220
DID: +603 8996 0788 (Ext: 1217)
Fax: +603 8996 0441
Email: Nicholas@iris.com.my

From: [Chris Chapman](#)
To: [Moss, Jeremy LCTZ:EX](#); [Wiebe, Patricia LCTZ:EX](#);
Subject: FW: Embossing file prefix
Date: Friday, June 22, 2012 12:04:14 PM

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Sorry did not mean to raise a non issue.

Original Message
From: Chris Chapman
Sent: Friday, June 22, 2012 3:01 PM
To: 'John Ouilette'
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

Thank you. So to confirm you are adding 3 new chip card variations?

Original Message
From: John Ouilette [<mailto:ouilette@ca.ibm.com>]
Sent: Friday, June 22, 2012 2:59 PM
To: Chris Chapman
Cc: Ayinde Yakubu; Chet Watmough; Maggie Au
Subject: RE: Embossing file prefix

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Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

| >
| From: |
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> |
> |Chris Chapman <Chris.Chapman@securekey.com> |

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| >
| To: |
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> |John Ouilette/CanWest/IBM@IBMCA, Maggie Au <maggie.au@securekey.com> |

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| >
| Cc: |
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|Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chet Watmough/CanWest/
IBM@IBMCA |

> |
| Date: |
| >

> |06/22/2012 10:34 AM |

> |
| Subject: |
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> |RE: Embossing file prefix |

> |

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We will be doing the second option for the 17K batch.
Thx. Chris

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Sent: Friday, June 22, 2012 1:03 PM
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Cc: Ayinde Yakubu; Chet Watmough; Chris Chapman
Subject: RE: Embossing file prefix

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2	BCSC Pseudo Gold Banner 1.1.2	C	2000
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4	BCSC Pseudo Gold Banner 1.2.2	G	2000
5	DL/BCSC Blue Banner 2.1	J	2000
6	DL/BCSC Pink Banner	P	2000

	2.2			
	+	+	+	
7	DL/BCSC Green Banner 2.3	H	2000	
	+	+	+	
8	DL/BCSC Pseudo Gold Banner 2.4	K	2000	
	+	+	+	
9	White Test Card	T	1000	
	+	+	+	

If creating files with the additional prefix types will result in a delay then please distribute the 17,000 as follows:

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		PANS	
	+	+	+
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	+	+	+
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	+	+	+
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Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

| >
| From: |

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>
|Maggie Au <maggie.au@securekey.com>
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|      >
| To:    |
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|John Ouilette/CanWest/IBM@IBMCA, Chet Watmough/CanWest/IBM@IBMCA
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|      >
| Cc:    |
|      >
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|Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chris Chapman <Chris.Chapman@securekey.com>
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| Date:   |
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|06/22/2012 08:12 AM
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| Subject: |
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|RE: Embossing file prefix
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|      +      +      |
| No  | Description | Prefix |
|      +      +      |

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	1.1.1	
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Cc: Maggie Au; Ayinde Yakubu
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Importance: High

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Sent: Friday, June 22, 2012 12:47 AM
To: Chris Chapman; 'nicholastan'
Cc: azwar@iris.com.my; 'Bahjat Aman'; 'Chat'; ouillette@ca.ibm.com; Ayinde Yakubu; Maggie Au; Eli Erlichman
Subject: RE: Embossing file prefix

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- designs (including white card). Plse use the updated list.
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 Subject: Embossing file prefix

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5	DL/BCSC Green Banner 2.3	H	?
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Best regards,
 Nicholas Tan
 Technical Manager
 Sales Support
 Iris Corporation Berhad
 H/P: +6016 2611 220
 DID: +603 8996 0788 (Ext: 1217)

Fax: +603 - 8996 0441
Email: Nicholas@iris.com.my

From: [Chris Chapman](#)
To: [Moss, Jeremy LCTZ:EX](#); [Wiebe, Patricia LCTZ:EX](#);
Subject: FW: Embossing file prefix
Date: Friday, June 22, 2012 11:51:19 AM

FYI. Just confirming SK is not expected to provide PANs for non chip enabled cards. From this note it looks like IBM is expecting us to do this. Can you please confirm. Type numbers 1,3,4,6,7 are chip enabled types.
 Thx. Chris

Original Message

From: John Ouilette [<mailto:ouilette@ca.ibm.com>]
 Sent: Friday, June 22, 2012 1:03 PM
 To: Maggie Au
 Cc: Ayinde Yakubu; Chet Watmough; Chris Chapman
 Subject: RE: Embossing file prefix

Hi Maggie,

IBM has requested and IRIS has manufactured cards for the 17,000 batch containing all of the artwork types listed in the table immediately below.

In addition to cards with prefix type A, F, J, P, H, T they have also manufactured cards with prefix type C, G and K. If SecureKey is able, without delay, to provide files with these additional 3 prefix types then please create files as follows:

No	Description	Prefix	# of PANS
1	BCSC Blue Banner 1.1.1	A	2000
2	BCSC Pseudo Gold Banner 1.1.2	C	2000
3	BCSC Blue Banner 1.2.1	F	2000
4	BCSC Pseudo Gold Banner 1.2.2	G	2000
5	DL/BCSC Blue Banner 2.1	J	2000
6	DL/BCSC Pink Banner 2.2	P	2000
7	DL/BCSC Green Banner 2.3	H	2000
8	DL/BCSC Pseudo Gold Banner 2.4	K	2000
9	White Test Card	T	1000

If creating files with the additional prefix types will result in a delay then please distribute the 17,000 as follows:

No	Description	Prefix	# of
		PANS	
1	BCSC Blue Banner 1.1.1	A	4000
2	BCSC Pseudo Gold Banner 1.1.2	C	0
3	BCSC Blue Banner 1.2.1	F	4000
4	BCSC Pseudo Gold Banner 1.2.2	G	0
5	DL/BCSC Blue Banner 2.1	J	4000
6	DL/BCSC Pink Banner 2.2	P	2000
7	DL/BCSC Green Banner 2.3	H	2000
8	DL/BCSC Pseudo Gold Banner 2.4	K	0
9	White Test Card	T	1000

Please let me know which you will be doing and I will advise IRIS.

Regards,

John Ouilette
Project Manager DPID
IBM Global Business Services

(250) 220 1159 Office
(250) 418 5279 Cell
(250) 952 5001 Client Site

>
From: |
>

>
|Maggie Au <maggie.au@securekey.com>

>
|>
|To: |
|>

>
|John Ouilette/CanWest/IBM@IBMCA, Chet Watmough/CanWest/IBM@IBMCA

>

| >
| Cc: |
| >

> |
> |Ayinde Yakubu <Ayinde.Yakubu@securekey.com>, Chris Chapman <Chris.Chapman@securekey.com>
> |

> |
| >
| Date: |
| >

> |
> |06/22/2012 08:12 AM
> |

> |
| >
| Subject: |
| >

> |
> |RE: Embossing file prefix
> |

>

Hi John, Chet,

We need some clarification on the following chart from IRIS:

No	Description	Prefix
1	BCSC Blue Banner 1.1.1	A
2	BCSC Pseudo Gold Banner 1.1.2	C
3	BCSC Blue Banner 1.2.1	F
4	BCSC Pseudo Gold Banner 1.2.2	G
5	DL/BCSC Blue Banner 2.1	J
6	DL/BCSC Pink Banner 2.2	P
7	DL/BCSC Green Banner 2.3	H
8	DL/BCSC Pseudo Gold Banner 2.4	K
9	White Test Card	T

| + + |

As per previous discussion, SecureKey will provide p3 file only for chip card, that is for prefix type A, F, J, P, H, T. Can you please confirm? In addition, can you please provide the quantity for each prefix type A, F, J, P, H? For test card (T), the quantity is 1000. Thanks in advance.

Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

From: Chris Chapman
Sent: Friday, June 22, 2012 9:13 AM
To: ouillette@ca.ibm.com; Chat
Cc: Maggie Au; Ayinde Yakubu
Subject: FW: Embossing file prefix
Importance: High

John, Chet,

Will you be providing the number of PANs/type for the June 22 batch? If yes then we need this asap.

Thx. Chris

From: Yeoh Suat Lay [<mailto:yeoh@iris.com.my>]
Sent: Friday, June 22, 2012 12:47 AM
To: Chris Chapman; 'nicholastan'
Cc: azwar@iris.com.my; 'Bahjat Aman'; 'Chat'; ouillette@ca.ibm.com; Ayinde Yakubu; Maggie Au; Eli Erlikhman
Subject: RE: Embossing file prefix

Hi Chris,

1. Email dated 20/6 as attached gives list of prefix for total of 9 designs (including white card). Plse use the updated list.
2. No. of PANs for each card type should follow the monthly forecast from IBM.
3. Maximum PANs per data file is recommended to be 50,000.

Kindly let us know if you need further details.

Thanks and looking forward to receiving the data file from you by 22/6.

Regards
SI

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Thursday, June 21, 2012 8:18 PM
To: nicholastan; 'Yeoh Suat Lay '
Cc: azwar@iris.com.my; 'Bahjat Aman'; Chat; ouillette@ca.ibm.com; Ayinde Yakubu; Maggie Au; Eli Erlikhman
Subject: RE: Embossing file prefix

Hi Nicholas, SL,

Can you please let us know, by completing the table below, how many PANs you would like for each card type?

Thx. Chris

From: nicholastan [<mailto:nicholas@iris.com.my>]
Sent: Thursday, June 07, 2012 5:43 AM

To: Maggie Au; Chris Chapman; Eli Erlikhman
 Cc: azwar@iris.com.my; 'Bahjat Aman'; 'Yeoh Suat Lay '; Chat; ouillette@ca.ibm.com
 Subject: Embossing file prefix

No	Description	Prefix	# PANS
1	BCSC Blue Banner 1.1.1	A	?
2	BCSC Blue Banner 1.2.1	F	?
3	DL/BCSC Blue Banner 2.1	J	?
4	DL/BCSC Pink Banner 2.2	P	?
5	DL/BCSC Green Banner 2.3	H	?
9	White Test Card	T	1000

Dear Chris

For the 17K delivery. 1000 of the cards is white test card. The table above extracted from the Interface document didn't define prefix for white test card. I would like to suggest to use prefix 'T' for the white test card.

Best regards,
 Nicholas Tan
 Technical Manager
 Sales Support
 Iris Corporation Berhad
 H/P: +6016 2611 220
 DID: +603 8996 0788 (Ext: 1217)
 Fax: +603 8996 0441
 Email: Nicholas@iris.com.my

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
Subject: FW: Visa docs request
Date: Tuesday, April 17, 2012 1:07:39 PM

This link has some good info. https://www.pcisecuritystandards.org/security_standards/documents.php

1. PCI Data Security Standards (PCI-DSS)
2. Payment Application Data Security Standards (PA-DSS)

I found these two.

Link: <https://www.pcisecuritystandards.org/>

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 28, 2012 11:28 AM
To: Bailey, Ian D LCTZ:EX
Subject: Fwd: handling returned mail...

Ian

How long does ICBC keep returned mail before destroying it?

Andre Boysen

Begin forwarded message:

From: Pierre Roberge <pierre.roberge@securekey.com>
Date: 28 February, 2012 14:26:19 EST
To: Andre Boysen <andre.boysen@securekey.com>
Subject: Re: handling returned mail...

Andre,

The current practice at ICBC for handling returned mailed out DL's is that they hold the returned mail for a period of time to allow for the person to contact them, update their mailing address, and have the card resent. This results in something like 80% of returned mail DL's finding their way to the rightful card holder. We want to continue with this practice and are wondering how this will fit into the card management lifecycle we are articulating in the contract.

options that come to mind for returned mail handling:

1. we only let SK know when a card has exceeded the max holding time period for returned mail and we also destroy the card
2. we let SK know each time when a card as been returned to us, when a card has been resent, and when it is destroyed.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, December 15, 2011 8:37 AM
To: Bailey, Ian D CITZ:EX
Subject: Fwd: We have received the sample 3/4size antennea

FYI.

Will keep you posted

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

Begin forwarded message:

From: Pierre Roberge <pierre.roberge@securekey.com>
Date: 15 December, 2011 11:35:11 EST
To: Andre Boysen <andre.boysen@securekey.com>, Greg Wolfond <greg@securekey.com>
Subject: We have received the sample 3/4size antennea

Testing will be performed this afternoon

Pierre A. Roberge, CTO and EVP Financial Solutions
Online Security Made Easy - SecureKey Technologies Inc.
pierre.roberge@SecureKey.com

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Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, December 12, 2011 12:56 PM
To: 'andre.boysen@securekey.com'
Cc: "greg.wolfond@securekey.com" (greg.wolfond@securekey.com)
Subject: half vs. full antennae

Issue of half vs. full antennae came up with IBM need to talk to you re rationale for full antenna and any costs in manufacturing of cards. Came up just now in meeting.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, March 27, 2012 2:39 PM
To: Bailey, Ian D LCTZ:EX
Subject: Healthcare use definition

Hi Ian

S22

S22 Sounds like the initial contract discussions have gone well.

Just following up on the discussion we had about definition for healthcare use cases. I was wondering if you had any luck with your ministry folks at coming up with one. Also, we have some ideas on how to implement that we would like to take you through.

Talk soon
Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

From: [Chris Chapman](#)
To: [Van der Merwe, Sam ICBC:EX;](#)
cc: [Wiebe, Patricia LCTZ:EX;](#) [Moss, Jeremy LCTZ:EX;](#)
[Dmitry Barinov;](#)
Subject: IBM site visit in Sept
Date: Friday, August 3, 2012 12:33:04 PM

Sam,

Hope your summer is going well.

Just wanted to check in on the potential dates of the IBM site visit we discussed a while back. The updated Security Requirements doc should be making its way to you shortly by the way.

Are you able to suggest some dates in mid-September so we can lock in our planning around the assessment? I also understand that an implementation strategy discussion might also be a good idea and can be combined with this visit while we are in town.

Thx very much, Chris

Chris Chapman,
SecureKey Technologies Inc - Online Security Made Easy.
chris.chapman@SecureKey.com

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Schedule A – Services

The Contractor will provide card management services to support the issuance and lifecycle management of the SecureKey enabled BC Services Card (“Service Card”) program.

Scope of Services

1. The Contractor must license a smartcard application that performs EMV cryptographic authentication (the “SecureKey Preferred Chip Application”) in combination with authentication services when the Service Card is presented to a SecureKey capable terminal. The Contractor must provide proof of license to the Province.
 - a. This license must provide the Province and its qualified and pre-approved suppliers the required rights and authorizations to facilitate the supply of Service Card to the Province..
2. The Contractor must also manage and assign a unique Primary Account Number (“PAN”) for each Service Card issued under this agreement by the Province.
3. The Contractor must define and maintain the Service Card configuration profile that supports the use of the Service Card under this program.
 - a. This configuration profile must comply with EMV standards and the provider network’s certification program. The Contractor must provide proof of compliance on an annual basis to the Province.
 - b. The Contractor must provide the following to the Province and its qualified and Pre-approved suppliers to support card personalization: the Service Card configuration profile, corresponding data for each Service Card and prepared personalization files.
 - i. This information must be provided in a secure manner and in compliance with Contractor, EMV standards and payment network best practices.
 - ii. Prepared personalization files must be provided in batches on a quarterly basis in accordance with the Province forecasted card personalization volumes.
 - iii. The Province may request that the Contractor provides this directly to its Contractor pre-approved qualified supplier.
4. The Contractor must define and maintain a card management database to support the issuance of Service Cards and authentication services.
 - a. This database must establish a card identifier for each personalized card, and maintain a mapping of the card identifier to the Primary Account Number (“PAN”) for each issued card based on data provided by the Province and its suppliers about card issuance.
 - b. This database must maintain the state of each personalized card, including but not limited to the states of being active, suspended, damaged, expired or cancelled.
 - c. This database must be used by the Contractor’s card authentication services so that cards marked as active can proceed with the authentication service, and other cards produces a failed authentication results. The Contractor must provide the Cardholder Identifier (or Persistent Anonymous Identifier, PAI) associated with a card in the authentication results. [NTD – define Card Identifier or PAI in the alternate - carry though contract]. The Province shall be solely responsible for the results obtained from the authentication service, and for all fees and expenses the Province incurs in relation to the Service Card.
 - d. The Contractor must provide a set of valid Cardholder identifiers to the Province and its pre-approved qualified suppliers to support card issuance.

- i. The Service Card personalization information must be provided in a secure manner and in compliance with the Contractor, EMV standards and payment network best practices.
 - ii. Card identifiers must be provided in batches on a quarterly basis in accordance with the Province forecasted card issuance volumes.
 - iii. The Province may request that the Contractor provides the Service Card personalization information directly to its pre-approved qualified supplier.
 - e. The Province and its pre-approved qualified suppliers must use the Contractor provided methods to share data between the various parties including the Contractor, the Province, the pre-approved qualified suppliers and notify the Contractor when:
 - i. Immediately when a Service Card is reported lost or stolen
 - ii. 3 months ahead of time before the Province plans to expire a particular Service Card
 - iii. The Province's supplier personalizes a Service Card
 - iv. The Province's supplier assigns a particular Service Card to a particular PAI
 - v. The Province's supplier changes the assignment between a particular Service Card and a particular PAI
 - vi. The Province's supplier sends a particular personalized Service Card from one location to another
 - vii. The Province's supplier sends the personalized Service Card directly to the cardholder
 - viii. Immediately when a Service Card has been activated by the cardholder
 - ix. Immediately when any data has been lost or compromised
 - x. Immediately when any Service Card can't be accounted for
 - f. The Province agrees not to store any Service Card data other than PAI
 - g. The Province's pre-approved qualified suppliers agree not to store permanently any Service Card data any longer than required for the Service Card personalization, and data mapping requirements.
 - h. The Province's pre-approved qualified suppliers agree to be responsible for the confidentiality, security and integrity of all the data provided by the Contractor
- 5. The Province agree to use the Contractor BIN under the following conditions:
 - a. The Contractor BIN and all PAN derived from are the property of the Contractor
 - b. The Province agree that the only use of the PAN is for the Service Card personalization and online authentication
 - c. The Province will use the Contractor BIN for non-payment authentication of credentials for the province's citizens only
 - d. The Contractor BIN may only be used for non-payment authentication of Service Cards enabled with Contractor specifications or software and originating from readers enabled with SecureKey technology and specifications or software and where only the Contractor or its designee is providing the authentication services for such credentials.
- 6. The Province shall be responsible for all aspects of customer service and will have a 7/24 service available to customers to report lost/stolen cards and/or fraudulent access to services or information with their Service Card.
- 7. The Province must comply with and shall be responsible for ensuring that its activities in connection with the Service Card comply with all applicable law, ordinances, governmental rules and regulation, including providing full and accurate disclosures of applicable terms and conditions of the Service Card to cardholders selected to participate.

8. The Contractor must co-operate with the Province on audits performed by the Province and its pre-approved qualified suppliers to ensure compliance with this contract, or to ensure that the program objectives are being met.
9. The Contractor may perform regular audits to ensure compliance of the Province and its pre-approved qualified suppliers to ensure compliance with the Contractors certification program and EMV chip application provider's standards, or to ensure that the program objectives are being met. The Province and its pre-approved qualified suppliers will co-operate with the Contractor on audits performed.
10. All the Province's qualified suppliers must be pre-approved by the Contractor.

Implementation Project

11. The Contractor must work with the Province to deliver the Service Card program into operations by September 30, 2012. The first Service Card will be issued by the Province on or after November 30, 2012.
12. The Province must provide a list of its qualified suppliers and contact points to the Contractor within two weeks of the contract award.
13. The Contractor must submit an implementation project plan to the Province within one month of the contract award. The Province and its pre-approved qualified suppliers will co-operate with the Contractor in the development of the implementation project plan.
 - i. The plan must describe the schedule of activities and milestones to deliver the services into operations.
 - ii. The plan must include contact points for key resources on the project.
 - iii. The Province and its pre-approved qualified suppliers must provide feedback within two weeks.
 - iv. The Contractor must provide an updated plan within two weeks addressing the Province's feedback.
14. The Contractor must submit progress reports on the implementation project plan on a monthly basis until approximately December 31, 2012, or as mutually-determined by the parties.
15. The Contractor must submit Service Card Issuance program overview and test strategy documentation to the Province within two months of the contract award.
 - i. The documentation must describe the program architecture of card personalization, issuance and lifecycle management, and how authentication services are enabled and will be supported.
 - ii. The documentation must include the chip specifications to support the smartcard application.
 - iii. The documentation must include any restrictions or conditions respecting the management of the configuration profile, corresponding Service Card data, personalization files, PAN data and card lifecycle
 - iv. The documentation must specify the technical interfaces, data exchange formats and security controls.
 - v. The documentation must describe the technical integration environments to support testing and operations.
 - vi. The documentation must describe the Contractor's test plans and the integrated test plans involving the Province and its pre-approved qualified suppliers.
 - vii. The Province and its pre-approved qualified suppliers must provide feedback within two weeks.

viii. The Contractor must provide updated documentation within two weeks addressing the Province's feedback.

16. The Contractor must perform tests and quality assurance measures of the prototype cards provided by the Province and its pre-approved qualified suppliers for the purpose of testing.
- i. The Contractor must test that the reference card application conforms to the configuration profile, and that the card can be authenticated using the Contractor's authentication service.
 - ii. The Contractor must provide the test report to the Province. (*timeframe TBD*)

While SecureKey will test the reference cards supplied by the Province for compliance, BC and its subcontractors are responsible for production of the cards.

17. The Contractor must reasonably support the Province and its pre-approved qualified suppliers' efforts to perform tests of their systems and the overall card issuance solution.
- i. The Contractor must supply a test configuration profile, corresponding Service Card data, personalization files, and a set of test card identifiers to the Province and its pre-approved qualified suppliers as required.
 - ii. The Province and its pre-approved qualified suppliers may provide feedback to the Contractor about defects or performance issues identified during testing.
 - iii. The Province may allow its pre-approved qualified suppliers to provide feedback directly to the Contractor.
 - iv. The Contractor will provide a plan to address defects or performance issues within two weeks.
18. The Contractor, the Province and its pre-approved qualified suppliers must perform tests and quality assurance measures of the services before delivering the services into operations by September 30, 2012. The Contractor, the Province and its pre-approved qualified suppliers must demonstrate that it has followed its test plans and that the services meet the stated requirements in this contract and the solution design documentation.

Service Operations

19. The Contractor's services must support the following forecasted card issuance volumes:

Timeframe	Forecast of Cards

(ICBC to provide data for the table above)

The Province will update the forecast on a quarterly basis for the following 12 months.

20. The Contractor must process the Service Card status updates from the Province and its pre-approved qualified suppliers in 24hrs or less after they are received.
21. The Contractor must notify the Province and its pre-approved qualified suppliers within 2 hours of any interruption in processing. The Province and its pre-approved qualified suppliers must provide contacts for technical support and co-operate with the Contractor in the resolution of interruptions.
22. The Contractor must provide a contact for technical support and must respond to the Province and its pre-approved qualified suppliers within 2 hours of a reported incident with the processing of card status updates.
- i. The Province may allow its qualified suppliers to report incidents directly to the Contractor.
 - ii. The Contractor must reasonably support the Province and its pre-approved qualified suppliers in resolving incidents.

23. The Contractor, the Province and its pre-approved qualified suppliers must report any security breaches or incidents to the Province and to the Contractor within 2 hours.
 - a. The Province and its pre-approved qualified suppliers must provide contacts for security incident management and co-operate with the Contractor in the investigation and resolution.
 - b. The Contractor must provide contacts for security incident management and co-operate with the Province and its pre-approved qualified suppliers in the investigation and resolution.
24. The Contractor the Province and its pre-approved qualified suppliers must provide contact points to the other parties to discuss and address incidents in the following areas:
 - i. Service incidents and problem management, including escalations;
 - ii. Service levels and disaster planning and execution.

Reporting Requirements

25. The Contractor must submit operations reports to the Province on a quarterly basis for the duration of the contract.
 - i. The operations report must include metrics on availability, scheduled outages and incidents.
 - ii. The operations report must include metrics on the number of cards being issued and managed.
 - iii. The Province or its suppliers may provide feedback to the Contractor about discrepancies or issues identified by the reports.
 - iv. The Contractor must provide a response to feedback within one week.
26. The Province and its pre-approved qualified suppliers must submit operations reports to the Contractor on a quarterly basis for the duration of the contract.
 - i. The operations report must include metrics on the number of cards being issued and managed.
 - ii. The Province and its pre-approved qualified suppliers must provide a response to feedback within one week.
 - iii.

Change Management

27. The Contractor should maintain secure and current technical systems, and may upgrade software and hardware over time. Where changes and system outages are required, the Contractor must provide at least one week notice to the Province and its pre-approved qualified suppliers.
 - i. The Province may allow the Contractor to inform its qualified suppliers directly about changes and outages that directly affect them.
 - ii. Where changes are required that impact the Province or its qualified suppliers, the Contractor must negotiate the change with the Province.
28. The Province and its pre-approved qualified suppliers or the Contractor may propose minor changes to the services. The Contractor will accommodate change requests where reasonable.
29. The Contractor must provide a technical integration environment to support testing of changes by the Province and its pre-approved qualified suppliers. The Contractor must provide reasonable support for the Province and its pre-approved qualified suppliers to perform testing on a pre-arranged scheduled basis.

End of Contract Responsibilities

30. The Contractor must transfer to the Province or its qualified supplier the current Service Card state for each active PAI maintained in the card management database, prior to contract expiry or termination. *(Should data be destroyed? Should data be retained for audit beyond contract expiry?)*[NTD – data retention is going to be key to verify authentication results for some period after termination – 24months?]

31. The Contractor must transfer to the Province the rights to continue to use the card application and the PAN until normal card expiry for any cards issued prior to contract expiry or termination.

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:

- a. Service Cards that reduce fraud
- b. Service Cards that enable secure in-person and online methods of access to services and information.

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

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:

Not applicable.

Schedule A – Services

[A1]

The Contractor will provide card management services to support the issuance and lifecycle management of the SecureKey enabled BC Services Card (“Service Card”) program.

Scope of Services

1. The Contractor must license a smartcard application that performs EMV cryptographic authentication (the “SecureKey Preferred Chip Application”) in combination with authentication services in financial payment networks when the Service Card is presented to a SecureKey capable terminal. The Contractor must provide proof of license license to the Province.
 - a. This license must provide the Province and its qualified and pre-approved suppliers the required rights and authorizations to use the EMV chip application that conforms to EMV standards and works on contactless smartcard technology facilitate the supply of Service Card to the Province.
2. ~~This license~~ The Contractor must also provide the rights and authorizations to manage and assign a unique Primary Account Number (“PAN”) for each Service Card issued card under this agreement by the Province. ~~[NTD – the PAN numbers may not be contiguous; the CMS can manage the card PANs as a set]~~
3. The Contractor must define and maintain ~~a financial payment network~~ the Service Card configuration profile ~~to support that supports the issuance of licensed cards and authentication services based on contactless smartcard technology~~ use of the Service Card under this program.
 - a. This configuration profile must comply with EMV standards and the provider network’s certification program. The Contractor must provide proof of compliance on an annual basis to the Province.
 - b. The Contractor must provide the following to the Province and its qualified and Pre-approved suppliers to support card personalization: ~~this the Service Card~~ configuration profile, corresponding security key data for each Service Card and prepared personalization files.
 - i. This information must be provided in a secure manner and in compliance with Contractor, EMV standards and payment network best practices.
 - ii. Prepared personalization files must be provided in batches on a quarterly basis in accordance with the Province forecasted card personalization volumes.
 - iii. The Province may request that the Contractor ~~or its EMV provider~~ provides this directly to its Contractor pre-approved qualified supplier.
4. The Contractor must define and maintain a card management database to support the issuance of ~~licensed cards~~ Service Cards and authentication services.
 - a. This database must establish a card identifier for each personalized card, and maintain a mapping of the card identifier to the Primary Account Number (“PAN”) for each issued card based on data provided by the Province and its suppliers about card issuance.
 - b. This database must maintain the state of each personalized card, including but not limited to the states of being active, suspended, damaged, expired or cancelled.
 - c. This database must be used by the Contractor’s card authentication services so that valid cards ~~produce successful~~ marked as active can proceed with the authentication results service, and invalid other cards ~~produce~~ produces a failed authentication results. The Contractor must provide the Card/Cardholder Identifier (or Persistent Account Identifier, PAI) associated with a card in the authentication results. [NTD – define Card Identifier or PAI in the alternate - carry though]

contract [A2]. The Province shall be solely responsible for the results obtained from the authentication service, and for all fees and expenses the Province incurs in relation to the Service Card.

- d. The Contractor must provide a set of valid cardCardholder identifiers to the Province and its pre-approved qualified suppliers to support card issuance.
 - i. ~~This~~The Service Card personalization information must be provided in a secure manner and in compliance with EMV chip provider~~the Contractor, EMV~~ standards and payment network best practices.
 - ii. Card identifiers must be provided in batches on a quarterly basis in accordance with the Province forecasted card issuance volumes.
 - iii. The Province may request that the Contractor provides ~~this~~the Service Card personalization information directly to its pre-approved qualified supplier.

~~e. The Contractor must provide a method for the~~ Province and its pre-approved qualified suppliers ~~to provide data to~~ must use the Contractor ~~about the following: personalized cards, issued cards with the mapped card identifier, damaged cards and cancelled cards.~~

~~i. This information must be provided in a secure manner and in compliance with EMV chip credential provider standards.~~

~~e. The Province may direct its methods to share data between the various parties including the Contractor, the Province, the pre-approved qualified suppliers and notify the Contractor when:~~

- ~~i. Immediately when a Service Card is reported lost or stolen~~
- ~~ii. 3 months ahead of time before the Province plans to expire a particular Service Card~~
- ~~iii. The Province's supplier personalizes a Service Card~~
- ~~iv. The Province's supplier assigns a particular Service Card to provide this a particular PAI~~
- ~~v. The Province's supplier changes the assignment between a particular Service Card and a particular PAI~~
- ~~vi. The Province's supplier sends a particular personalized Service Card from one location to another~~
- ~~ii-vii. The Province's supplier sends the personalized Service Card directly to the Contractor cardholder~~
- ~~viii. Immediately when a Service Card has been activated by the cardholder~~
- ~~ix. Immediately when any data has been lost or compromised~~
- ~~x. Immediately when any Service Card can't be accounted for~~

~~f. The Province agrees not to store any Service Card data other than PAI~~

~~g. The Province's pre-approved qualified suppliers agree not to store permanently any Service Card data any longer than required for the Service Card personalization, and data mapping requirements.~~

~~h. The Province's pre-approved qualified suppliers agree to be responsible for the confidentiality, security and integrity of all the data provided by the Contractor~~

5. The Province agree to use the Contractor BIN under the following conditions:

- a. The Contractor BIN and all PAN derived from are the property of the Contractor
- b. The Province agree that the only use of the PAN is for the Service Card personalization and online authentication
- c. The Province will use the Contractor BIN for non-payment authentication of credentials for the province's citizens only
- d. The Contractor BIN may only be used for non-payment authentication of Service Cards enabled with Contractor specifications or software and originating from readers enabled with SecureKey

technology and specifications or software and where only the Contractor or its designee is providing the authentication services for such credentials.

6. The Province shall be responsible for all aspects of customer service and will have a 7/24 service available to customers to report lost/stolen cards and/or fraudulent access to services or information with their Service Card.
7. The Province must comply with and shall be responsible for ensuring that its activities in connection with the Service Card comply with all applicable law, ordinances, governmental rules and regulation, including providing full and accurate disclosures of applicable terms and conditions of the Service Card to cardholders selected to participate.
- 5-8. The Contractor must co-operate with the Province on audits performed by the Province and its pre-approved qualified suppliers to ensure compliance with this contract, or to ensure that the program objectives are being met.
- 6-9. The Contractor may perform regular audits to ensure compliance of the Province and its pre-approved qualified suppliers, to ensure compliance with the Contractor's certification program and EMV chip application provider's standards, or to ensure that the program objectives are being met. The Province and its pre-approved qualified suppliers will co-operate with the Contractor on audits performed.
10. All the Province's qualified suppliers must be pre-approved by the Contractor.

Implementation Project

- 7-11. The Contractor must work with the Province to deliver the servicesService Card program into operations by September 30, 2012. The first cardsService Card will be issued by the Province on or after November 30, 2012.
- 8-12. The Province must provide a list of its qualified suppliers and contact points to the Contractor within two weeks of the contract award.
- 9-13. The Contractor must submit an implementation project plan to the Province within one month of the contract award. The Province and its pre-approved qualified suppliers will co-operate with the Contractor in the development of the implementation project plan.
 - i. The plan must describe the schedule of activities and milestones to deliver the services into operations.
 - ii. The plan must include contact points for key resources on the project.
 - iii. The Province and its pre-approved qualified suppliers must provide feedback within two weeks.
 - iv. The Contractor must provide an updated plan within two weeks addressing the Province's feedback.
- 10-14. The Contractor must submit progress reports on the implementation project plan on a monthly basis until approximately December 31, 2012, or as mutually-determined by the Provinceparties.
- 11-15. The Contractor must submit solution designService Card Issuance program overview and test strategy documentation to the Province within two months of the contract award. The Province and its qualified suppliers will co-operate with the Contractor in the development of the solution design and test strategy documentation.

- i. The documentation must describe the [solution program](#) architecture of card personalization, issuance and lifecycle management, and how authentication services are enabled and will be supported.
- ii. The documentation must include the chip specifications to support the smartcard application.
- iii. The documentation must include any restrictions or conditions respecting the management of the configuration profile, corresponding [security key Service Card](#) data, personalization files, PAN data and card lifecycle
- iv. The documentation must specify the technical interfaces, data exchange formats and security controls.
- v. The documentation must describe the technical integration environments to support testing and operations.
- vi. The documentation must describe the Contractor's test plans and the integrated test plans involving the Province and its [pre-approved](#) qualified suppliers.
- vii. The Province [and its pre-approved qualified suppliers](#) must provide feedback within two weeks.
- viii. The Contractor must provide updated documentation within two weeks addressing the Province's feedback.

~~12.16.~~ The Contractor must perform tests and quality assurance measures of the prototype cards provided by the Province and its [pre-approved](#) qualified suppliers for the purpose of testing.

- i. The Contractor must test that the [reference](#) card application conforms to the configuration profile, and that the card can be authenticated using the Contractor's authentication service.
- ii. The Contractor must provide the test report to the Province. (*timeframe TBD*)

While SecureKey will test the ~~cards~~ [reference cards supplied by the Province](#) for compliance, BC and its subcontractors are responsible for production of the cards.

~~13.17.~~ The Contractor must reasonably support the Province and its [pre-approved](#) qualified suppliers' efforts to perform tests of their systems and the overall card issuance solution.

- i. The Contractor must supply a test configuration profile, corresponding [security key Service Card](#) data, personalization files, and a set of test card identifiers to the Province and its [pre-approved](#) qualified suppliers as required.
- ii. The Province and its [pre-approved](#) qualified suppliers may provide feedback to the Contractor about defects or performance issues identified during testing.
- iii. The Province may allow its [pre-approved](#) qualified suppliers to provide feedback directly to the Contractor.
- iv. The Contractor will provide a plan to address defects or performance issues within two weeks.

~~14.18.~~ The Contractor, [the Province and its pre-approved qualified suppliers](#) must perform tests and quality assurance measures of the services before delivering the services into operations by September 30, 2012. The Contractor, [the Province and its pre-approved qualified suppliers](#) must demonstrate that it has followed its test plans and that the services meet the stated requirements in this contract and the solution design documentation.

Service Operations

~~15.19.~~ The Contractor's services must support the following forecasted card issuance volumes:

Timeframe	Forecast of Cards

(ICBC to provide data for the table above)

The Province [may will](#) update the forecast on ~~an annual~~ [quarterly](#) basis [for the following 12 months](#).

~~16-20.~~ The Contractor must process ~~card~~the Service Card status updates from the Province and its pre-approved qualified suppliers on the same day in 24hrs or less after they are received.

~~17-21.~~ The Contractor must notify the Province and its pre-approved qualified suppliers within 2 hours of any interruption in processing^[A3]. The Province and its pre-approved qualified suppliers must provide contacts for technical support and co-operate with the Contractor in the resolution of interruptions.

~~18-22.~~ The Contractor must provide a contact for technical support and must respond to the Province and its pre-approved qualified suppliers within 2 hours of a reported incident with the processing of card status updates.

- i. The Province may allow its qualified suppliers to report incidents directly to the Contractor.
- ii. The Contractor must reasonably support the Province and its pre-approved qualified suppliers in resolving incidents.

~~23.~~ The Contractor, the Province and its pre-approved qualified suppliers must report any security breaches or incidents to the Province and to the Contractor within 2 hours.

~~b-a.~~ The Province and its pre-approved qualified suppliers must provide contacts for security incident management and co-operate with the Contractor in the investigation and resolution.

~~b.~~ The Contractor must provide contacts for security incident management and co-operate with the Province and its pre-approved qualified suppliers in the investigation and resolution.

~~19-24.~~ The Contractor the Province and its pre-approved qualified suppliers must provide contact points to the Province other parties to discuss and address incidents in the following areas:

- i. Service incidents and problem management, including escalations;
- ii. Service levels and disaster planning and execution.

Reporting Requirements

~~20-25.~~ The Contractor must submit operations reports to the Province on a quarterly basis for the duration of the contract.

- i. The operations report must include metrics on availability, scheduled outages and incidents.
- ii. The operations report must include metrics on the number of cards being issued and managed.
- iii. The Province or its suppliers may provide feedback to the Contractor about discrepancies or issues identified by the reports.
- iv. The Contractor must provide a response to feedback within one week.

~~26.~~ The Province and its pre-approved qualified suppliers must submit operations reports to the Contractor on a quarterly basis for the duration of the contract.

~~i.~~ The operations report must include metrics on the number of cards being issued and managed.

~~ii.~~ The Province and its pre-approved qualified suppliers must provide a response to feedback within one week.

~~iii.~~

Change Management

~~21-27.~~ The Contractor should maintain secure and current technical systems, and may upgrade software and hardware over time. Where changes and system outages are required, the Contractor must provide at least one week notice to the Province and its pre-approved qualified suppliers.

- i. The Province may allow the Contractor to inform its qualified suppliers directly about changes and outages that directly affect them.

- ii. Where changes are required that impact the Province or its qualified suppliers, the Contractor must negotiate the change with the Province.

[A4]

22-28. The Province and its pre-approved qualified suppliers or the Contractor may propose minor changes to the services. The Contractor will accommodate change requests where reasonable.

23-29. The Contractor must provide a technical integration environment to support testing of changes by the Province and its pre-approved qualified suppliers. The Contractor must provide reasonable support for the Province and its pre-approved qualified suppliers to perform testing on a pre-arranged scheduled basis.

End of Contract Responsibilities

24-30. The Contractor must transfer to the Province or its qualified supplier all data the current Service Card state for each active PAI maintained in the card management database, prior to contract expiry or termination. *(Should data be destroyed? Should data be retained for audit beyond contract expiry?)[NTD – data retention is going to be key to verify authentication results for some period after termination – 24months?]*

25-31. The Contractor must transfer to the Province the rights to continue to use the card application and the PAN until normal card expiry for any cards issued prior to contract expiry or termination.

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:

~~a. Cards that are secure and trusted by citizens and relying parties;~~

~~b.a. Service Cards that reduce fraud and identity theft;~~

~~e.b. Service Cards that enable secure in-person and online methods of access to services and information.~~

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

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:

Not applicable.

Schedule A – Services^[A1]

^[A2]

The Contractor will provide card management services to support the issuance and lifecycle management of the SecureKey enabled BC Services Card (“Services Card”^[A3]) program.

There are two parts to this schedule. The first relates to issuing the cards (the inside). The second relates to authentication services of the cards in the field.

[NTD – BC is only planning to have two states for a card once activated – active an cancelled.]

Scope of Services

1. The Contractor must license a smartcard application that performs EMV cryptographic authentication (the “SecureKey Preferred Chip Application”) in combination with authentication services in financial payment networks when the Service Card is presented to a SecureKey capable terminal. The Contractor must provide proof of license to the Province.
 - a. This license must provide the Province and its qualified and pre-approved suppliers the required rights and authorizations to use the EMV chip application that conforms to EMV standards and works on contactless smartcard technology facilitate the supply of Service Card to the Province.
2. ^[A4]This license The Contractor must also provide the rights and authorizations to manage and assign a unique Primary Account Number (“PAN”) for each Service Card issued card under this agreement by the Province. [NTD – the PAN numbers may not be contiguous; the CMS can manage the card PANs as a set]
3. The Contractor must define and maintain a financial payment network the Service Card configuration profile to support that supports the issuance of licensed cards and authentication services based on contactless smartcard technology use of the Service Card under this program.
 - a. This configuration profile must comply with EMV standards and the provider network’s certification program. The Contractor must provide proof of compliance on an annual basis to the Province.
 - b. The Contractor must provide the following to the Province and its qualified and Pre-approved suppliers to support card personalization: this the Service Card configuration profile, corresponding security key data^[A5] for each Service Card and prepared personalization files.
 - i. This information must be provided in a secure manner and in compliance with Contractor, EMV standards and aligned with payment network best practices. The Contractor will keep the Province abreast of these best practices.
 - ii. Prepared personalization files must be provided in batches on a quarterly basis in accordance with the Province forecasted card personalization volumes.
 - iii. The Province may request that the Contractor or its EMV provider provides this directly to its Contractor pre-approved qualified supplier.
4. The Contractor must define and maintain a card management database to support the issuance of licensed cards Service Cards and authentication services.
 - a. This database must establish a card identifier for each personalized card, and maintain a mapping of the card identifier to the Primary Account Number (“PAN”) for each issued card based on data provided by the Province and its suppliers about card issuance.
 - b. This database must maintain the state of each personalized card, including but not limited to the states of being active, suspended, damaged, expired or cancelled.

- c. This database must be used by the Contractor's card authentication services so that ~~valid~~ cards produce successful authentication results, and ~~invalid~~ other cards produce a failed authentication results. The Contractor must provide the ~~Card~~ Cardholder Identifier (or Persistent Account Identifier, PAI) associated with a card in the authentication results. [NTD – define Card Identifier or PAI in the alternate - carry though contract][A6]. The Province shall be solely responsible for the results obtained from the authentication service, and for all fees and expenses the Province incurs in relation to the Service Card.[A7]
- d. The Contractor must provide a set of valid ~~card~~ Cardholder Identifiers to the Province and its ~~pre-approved~~ qualified suppliers to support card issuance.
 - i. ~~This~~The Service Card personalization information must be provided in a secure manner and in compliance with ~~EMV chip provider~~ the Contractor, EMV standards and payment network best practices.
 - ii. Card identifiers must be provided in batches on a quarterly basis in accordance with the Province forecasted card issuance volumes.
 - iii. The Province may request that the Contractor provides ~~this~~ the Service Card personalization information directly to its ~~pre-approved~~ qualified supplier.
- ~~e. The Contractor must provide a method for the Province and its pre-approved qualified suppliers to provide data to~~ must use the Contractor about the following: ~~personalized cards, issued cards with the mapped card identifier, damaged cards and cancelled cards.~~
 - ~~i. This information must be provided in a secure manner and in compliance with EMV chip credential provider standards.~~
- e. The Province may direct its methods to share data between the various parties including the Contractor, the Province, the ~~pre-approved~~ qualified suppliers and notify the Contractor when:
 - i. Within 24 hours ~~Immediately~~ when a Service Card is reported lost or stolen [A8]
 - ii. 3 months ahead of time before the Province plans to expire (and/or cancel?) a particular Service Card [A9]
 - iii. The Province's supplier personalizes a Service Card
 - iv. The Province's supplier assigns a particular Service Card to provide this a particular PAI
 - v. The Province's supplier changes the assignment between a particular Service Card and a particular PAI
 - vi. The Province's supplier sends a particular personalized Service Card from one card production location to another
 - ~~ii-vii.~~ The Province's supplier sends the personalized Service Card directly to the Contractor, cardholder [Delete - This is tied to step iv – once the card it is read it is mailed]
 - viii. Immediately when a Service Card has been activated by the cardholder [DELETE – there is no activation]
 - ix. Immediately when any data has been lost or compromised
 - x. Immediately when any Service Card can't be accounted for
- f. [A10] The Province agrees not to store any Service Card data other than PAI
- g. The Province's ~~pre-approved~~ qualified suppliers agree not to store permanently any Service Card data any longer than required for the Service Card personalization, and data mapping requirements.
- h. ~~The Province's pre approved qualified suppliers agree to be responsible for the confidentiality, security and integrity of all the data provided by the Contractor~~ [A11]

5. The Province agree to use the Contractor BIN [A12] under the following conditions:

- a. The Contractor BIN and all PAN derived from are the property of the Contractor

- b. The Province agree that the only use of the PAN is for the Service Card personalization and-online authentication [A13]
- c. The Province will use the Contractor BIN for non-payment authentication of credentials for the province's citizens only[A14]

6. The Contractor BIN may only be used for non-payment authentication of Service Cards enabled with Contractor specifications or software and originating from readers enabled with SecureKey technology and specifications or software and where only the Contractor or its designee is providing the authentication services for such credentials.

7. The Province shall be responsible for all aspects of customer service and will have a 7/24 service available to customers to report lost/stolen cards and/or fraudulent/suspicious access to services or information with their Service Card.[A15][A16]

8. The Province must comply with and shall be responsible for ensuring that its activities in connection with the Service Card comply with all applicable law, ordinances, governmental rules and regulation, including providing full and accurate disclosures of applicable terms and conditions of the Service Card to cardholders selected to participate.

5-9. The Contractor must co-operate with the Province on audits performed by the Province and its pre-approved qualified suppliers to ensure compliance with this contract, or to ensure that the program objectives are being met.

6-10. The Contractor may perform regular audits to ensure compliance of the Province and its pre-approved qualified suppliers, to ensure compliance with the Contractors certification program and EMV chip application provider's standards, or to ensure that the program objectives are being met. The Province and its pre-approved qualified suppliers will co-operate with the Contractor on audits performed.

11. All the Province's qualified suppliers must be pre-approved by the Contractor.

Implementation Project

7-12. The Contractor must work with the Province to deliver the servicesService Card program into operations by September 30, 2012. The first cardsService Card will be issued by the Province on or after November 30, 2012.

8-13. The Province must provide a list of its qualified suppliers and contact points to the Contractor within two weeks of the contract award.

9-14. The Contractor must submit an implementation project plan to the Province within one month of the contract award. The Province and its pre-approved qualified suppliers will co-operate with the Contractor in the development of the implementation project plan.

- i. The plan must describe the schedule of activities and milestones to deliver the services into operations.
- ii. The plan must include contact points for key resources on the project.
- iii. The Province and its pre-approved qualified suppliers must provide feedback within two weeks.
- iv. The Contractor must provide an updated plan within two weeks addressing the Province's feedback.

10-15. The Contractor must submit progress reports on the implementation project plan on a monthly basis until approximately December 31, 2012, or as mutually-determined by the Provinceparties.

~~11.16.~~ The Contractor must submit ~~solution design~~Service Card Issuance program overview~~two solution design plans~~ and test strategy ~~documentation documents~~ to the Province within two months of the contract award. The first solution design will detail the card management system and the second will provide details for authentication solution. ~~The Province and its qualified suppliers will co-operate with the Contractor in the development of the solution design and test strategy documentation.~~

- i. The documentation must describe the solution program architecture of card personalization, issuance and lifecycle management, and how authentication services are enabled and will be supported.
- ii. The documentation must include the chip specifications to support the smartcard application.
- iii. The documentation must include any restrictions or conditions respecting the management of the configuration profile, corresponding security keyService Card data, personalization files, PAN data and card lifecycle
- iv. The documentation must specify the technical interfaces, data exchange formats and security controls.
- v. The documentation must describe the technical integration environments to support testing and operations.
- vi. The documentation must describe the Contractor's test plans and the integrated test plans involving the Province and its pre-approved qualified suppliers.
- vii. The Province and its pre-approved qualified suppliers must provide feedback within two weeks.
- viii. The Contractor must provide updated documentation within two weeks addressing the Province's feedback.

~~12.17.~~ The Contractor must perform tests and quality assurance measures of the prototype cards provided by the Province and its pre-approved qualified suppliers for the purpose of testing.

- i. The Contractor must test that the prototype card conforms to the reference card application, ~~conforms to~~ the configuration profile, and that the card can be authenticated using the Contractor's authentication service.
- ii. The Contractor must provide the test report to the Province. (timeframe TBD)^[A17]
While SecureKey will test the cards, reference cards supplied by the Province for compliance, BC and its subcontractors are responsible for production of the cards. ^[A18]

~~13.18.~~ The Contractor must reasonably support the Province and its pre-approved qualified suppliers' efforts to perform tests of their systems and the overall card issuance solution.

- i. The Contractor must supply a test configuration profile, corresponding security keyService Card data, personalization files, and a set of test card identifiers to the Province and its pre-approved qualified suppliers as required.
- ii. The Province and its pre-approved qualified suppliers may provide feedback to the Contractor about defects or performance issues identified during testing.
- iii. The Province may allow its pre-approved qualified suppliers to provide feedback directly to the Contractor.
- iv. The Contractor will provide a plan to address defects or performance issues within two weeks.

~~14.19.~~ The Contractor, the Province and its pre-approved qualified suppliers must perform tests and quality assurance measures of the services before delivering the services into operations by September 30, 2012. The Contractor, the Province and its pre-approved qualified suppliers must demonstrate that it has followed its test plans and that the services meet the stated requirements in this contract and the solution design documentation.

Service Operations

20. The Contractor's services must support the following forecasted card issuance volumes:

Timeframe	Forecast of Cards
November 30, 2012 to December 31, 2012	100,000
January 1, 2013 to December 31, 2013	1,200,000
January 1, 2014 to December 31, 2014	1,260,000
January 1, 2015 to December 31, 2015	1,190,000
January 1, 2016 to December 31, 2016	1,200,000
January 1, 2017 to December 31, 2017	1,200,000

15.

Timeframe	Forecast of Cards

(ICBC to provide data for the table above)

The Province ~~may~~will update the forecast on ~~an annual~~a quarterly basis for the following 12 months.

~~16-21.~~ The Contractor must process ~~card~~the Service Card status updates from the Province and its pre-approved qualified suppliers on the same day in 24hrs or less after~~within one business day they are received~~.

~~17-22.~~ The Contractor must notify the Province and its pre-approved qualified suppliers within 2 hours of any interruption in processing^[A19]. The Province and its pre-approved qualified suppliers must provide contacts for technical support and co-operate with the Contractor in the resolution of interruptions.

~~18-23.~~ The Contractor must provide a contact for technical support and must respond to the Province and its pre-approved qualified suppliers within 2 hours of a reported incident with the processing of card status updates.

- i. The Province may allow its qualified suppliers to report incidents directly to the Contractor.
- ii. The Contractor must reasonably support the Province and its pre-approved qualified suppliers in resolving incidents.

24. The Contractor, the Province and its pre-approved qualified suppliers must report any security breaches or incidents to the Province and to the Contractor within 2 hours.

~~b-a.~~ The Province and its pre-approved qualified suppliers must provide contacts for security incident management and co-operate with the Contractor in the investigation and resolution.

b. The Contractor must provide contacts for security incident management and co-operate with the Province and its pre-approved qualified suppliers in the investigation and resolution.

~~19-25.~~ The Contractor the Province and its pre-approved qualified suppliers must provide contact points to the Province~~other parties~~ to discuss and address incidents in the following areas:

- i. Service incidents and problem management, including escalations;
- ii. Service levels and disaster planning and execution.

Reporting Requirements ^[A20]

~~20-26.~~ The Contractor must submit operations reports to the Province on a quarterly basis for the duration of the contract.

- i. The operations report must include metrics on availability, scheduled outages and incidents.
- ii. The operations report must include metrics on the number of cards being issued and managed.
- iii. The Province or its suppliers may provide feedback to the Contractor about discrepancies or issues identified by the reports.
- iv. The Contractor must provide a response to feedback within one week.

27. The Province and its pre-approved qualified suppliers must submit operations reports to the Contractor on a quarterly basis for the duration of the contract.

- i. The operations report must include metrics on the number of cards being issued and managed.
- ii. The Province and its pre-approved qualified suppliers must provide a response to feedback within one week.
- iii.

Change Management

21-28. The Contractor should maintain secure and current technical systems, and may upgrade software and hardware over time. Where changes and system outages are required, the Contractor must provide at least one week notice to the Province and its pre-approved qualified suppliers.

- i. The Province may allow the Contractor to inform its qualified suppliers directly about changes and outages that directly affect them.
- ii. Where changes are required that impact the Province or its qualified suppliers, the Contractor must negotiate the change with the Province.

[A21]

22-29. The Province and its pre-approved qualified suppliers or the Contractor may propose minor changes to the services. The Contractor will accommodate change requests where reasonable.

23-30. The Contractor must provide a technical integration environment to support testing of changes by the Province and its pre-approved qualified suppliers. The Contractor must provide reasonable support for the Province and its pre-approved qualified suppliers to perform testing on a pre-arranged-mutually-agreed-scheduled basis.

End of Contract Responsibilities

24-31. The Contractor must transfer to the Province or its qualified supplier all data the current Service Card state for each active PAI maintained in the card management database, prior to contract expiry or termination. (Should data be destroyed? Should data be retained for audit beyond contract expiry?)[NTD – data retention is going to be key to verify authentication results for some period after termination – 24months?][A22]

25-32. The Contractor must transfer to the Province the rights to continue to use the card application and the PAN until normal card expiry for any cards issued prior to contract expiry or termination.

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:~~

- ~~a. Cards that are secure and trusted by citizens and relying parties;~~
- ~~b. Service Cards that reduce fraud and identity theft;~~
- ~~c. Service Cards that enable secure in-person and online methods of access to services and information.~~

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

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:

Not applicable.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, February 22, 2012 9:18 AM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX; Chris Chapman
Subject: IT Services - SecureKey - Schedule A v0 7-TrackChanges
Attachments: IT Services - SecureKey - Schedule A v0 7-TrackChanges.docx

Here are the results of the Sched A overview.

Thanks for the time

Andre

BC Services Card Authentication Services Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as at July 13, 2012



STATUS

			Issues and Risks
	SK	LCTZ	
SK Access Platform			LCTZ and SK re-forecast milestones in progress.
Security			
Overall Relationship			

CONTRACTUAL OBLIGATIONS

Authentication Milestones	Forecast Date	Current Status	Previous Status	Comments
1. Authentication interface functional design complete	May 31, 2012			Meeting to be held Thurs July 12. Design 80% complete.
2. Security Design complete	May 31, 2012			See above.
3. User Interface design complete	June 30, 2012			Re-plan in progress. Prototyping in progress. Documentation to follow.
4. Reporting Design complete	June 30, 2012			Re-plan in progress. Need discussion on reporting requirements, billing terms.
5. SK to provide test env with test harness, test without services card	July 1, 2012			Delivered and in progress with issues being investigated.
6. SK to provide test env for testing with Services Card	Oct 15, 2012			
7. Supplier integration testing complete	Dec 15, 2012			
8. Authentication Services are production ready	Jan 2, 2012			
9. SK security testing complete	Jan 15, 2012			
10. Authentication Services is in full operation in accordance with agreement, SLA in effect.	Feb 1, 2013			
Terminal Milestones	Forecast Date	Current Status	Previous Status	Comments
USB Terminal testing. Start October 15	Dec 15, 2012			
USB Terminal available for purchase	Dec 16, 2012			

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

Authentication Milestones	Forecast Date	Current Status	Previous Status	Comments
Province to sign off on USB Terminal test report	Dec 16, 2012			

Accomplishments this Reporting Period (ending July 13):

- UI Prototype provided supporting Use Cases and demonstrating interaction models.
- Reviewed Authentication Functional Spec and Security Design and identified remaining issues, next steps.
- Test Harness delivered to LCTZ. Issues being investigated.
- Health dual card reader (terminal) high level design discussed.
- Patricia in Toronto week of July 9th-13th to move forward on Authentication release plans/scope.

Plans for Next Reporting Period (ending July 27):

- Working group meetings to be established to discuss scope and strategy related gaps
- Continue to re-plan milestones and detailed project work.
- Continue to work on all outstanding deliverables.

Other Issues:

- Interest in counter card reader (terminal) to support passcode management
- Interest in non-NFC enabled phones for second factor authentication
- RP onboarding strategy and its program effects on delivering terminals, transaction volume

LEGEND:



Completed



On track



Minor issue /
Behind Schedule



Major issue /
Overdue



Not started

BC Services Card Authentication Services Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as at Aug 14, 2012





STATUS

			Issues and Risks
	SK	LCTZ	
SK Access Platform			LCTZ and SK to complete re-forecast milestones.
Security			
Overall Relationship			

CONTRACTUAL OBLIGATIONS

Authentication Milestones	Forecast Date	Current Status	Previous Status	Comments
1. Authentication interface functional design complete	May 31, 2012 TBC Sept 15			Re-plan and refining scope in progress.
2. Security Design complete	May 31, 2012 TBC Sept 15			See above.
3. User Interface design complete	June 30, 2012 TBC Sept 30			Re-plan in progress.
4. Reporting Design complete	June 30, 2012 TBC Sept 30			Re-plan in progress.
5. SK to provide test env with test harness, test without services card	July 1, 2012	Incomplete	Incomplete	Test Harness fix pending. Sandbox available for testing.
6. SK to provide test env for testing with Services Card	Oct 15, 2012			
7. Supplier integration testing complete	Dec 15, 2012			
8. Authentication Services are production ready	Jan 2, 2012			
9. SK security testing complete	Jan 15, 2012			
10. Authentication Services is in full operation in accordance with agreement, SLA in effect.	Feb 1, 2013			
Terminal Milestones	Forecast Date	Current Status	Previous Status	Comments
USB Terminal testing. Start October 15	Dec 15, 2012			Planning underway

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

Authentication Milestones	Forecast Date	Current Status	Previous Status	Comments
USB Terminal available for purchase	Dec 16, 2012			
Province to sign off on USB Terminal test report	Dec 16, 2012			

Accomplishments this Reporting Period (ending Aug 14):

- UI Prototype updated supporting Use Cases and demonstrating interaction models.
- Reporting design discussion with progress on o/s issues.
- IBM assessment date confirmed Sept 27 2012.

Plans for Next Reporting Period (ending Aug 24):

- Working group meetings to be established to discuss scope and strategy related gaps.
- Continue to re-plan milestones and detailed project work.
- Facilitate RP onboarding strategy discussion

Other Issues/items:

- Test Harness delivered to LCTZ however issues prevented LCTZ from using it. Test Harness fix pending. Sandbox environment available.
- Need to confirm and formalize Scope changes if required: Use Cases, Non-NFC devices, Passcode mgt.

LEGEND:  Completed  On track  Minor issue / Behind Schedule  Major issue / Overdue  Not started

BC Services Card Authentication Services Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as at Aug 29, 2012

STATUS

			Issues and Risks
	SK	LCTZ	
SK Access Platform			LCTZ and SK to complete re-forecast milestones.
Security			
Overall Relationship			

CONTRACTUAL OBLIGATIONS/ PROJECT MILESTONES

Contractual Obligations/Authentication	Forecast Date	Current Status	Previous Status	Comments
1. Authentication interface functional design complete	May 31, 2012 TBC Sept 15			Re-plan and refining scope in progress.
2. Security Design complete	May 31, 2012 TBC Sept 15			See above.
3. User Interface design complete	June 30, 2012 TBC Sept 30			Re-plan in progress.
4. Reporting Design complete	June 30, 2012 TBC Sept 30			Re-plan in progress.
5. SK to provide test env with test harness, test without services card	July 1, 2012		Incomplete	Test Harness available. Sandbox with tokens, cards available. Date: Aug 18
6. SK to provide test env for testing with Services Card	Oct 15, 2012			
7. Supplier integration testing complete	Dec 15, 2013			
8. Authentication Services are production ready	Jan 2, 2013			
9. SK security testing complete	Jan 15, 2013			
10. Authentication Services is in full operation in accordance with agreement, SLA in effect.	Feb 1, 2013			

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

Contractual Obligations/Tokens	Forecast Date	Current Status	Previous Status	Comments
USB Terminal testing. Start October 15	Dec 15, 2012			Planning underway
USB Terminal available for purchase	Dec 16, 2012			
Province to sign off on USB Terminal test report	Dec 16, 2012			

Project Milestones	Forecast Date	Current Status	Previous Status	Comments / Mitigations
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Accomplishments this Reporting Period (ending Aug 29):

- Facilitated RP onboarding strategy discussion
- Delivered Sandbox with cards, tokens
- Hugh, Andre visit to Victoria
- Andre, Chris, Ayinde: Workshop held Aug 28/29

Plans for Next Reporting Period (ending Sept 7):

- Continue to re-plan milestones and detailed project work.

Other Issues/items:

- Need to confirm and formalize Scope changes if required: Use Cases, Non-NFC devices, Passcode mgt.

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

BC Services Card Card Management / Production Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as of July 13, 2012






STATUS

						Issues and Risks
	SK	IRIS	IBM	LCTZ	ICBC	
Card Mgt System						
Security						Program Wide Security Design feedback from LCTZ received and draft in progress.
Overall Relationship						N/A

CONTRACTUAL OBLIGATIONS

Milestone	Forecast Date	Current Status	Previous Status	Comments / Mitigations
1. Services Card Update interface functional and Security Design	Apr 15, 2012			
2. Personalization Service Provider Services Card Status Update interface functional and security design complete	Apr 15, 2012			
3. Program wide Security Card manufacturing and production Security design complete	May 31, 2012			ToC framework good. SK to continue drafting. Date TBD
4. Sign off "sample white" test Services Cards by SK	June 1, 2102			
5. SK to provide production personalization data file to IRIS for first production batch	Aug 1, 2012			CMS Acceptance delayed. No impact to Aug 1 delivery.
6. SK to sign off production Services Card	Sept 1, 2012			Discussion about providing signoff earlier.
7. Card Management Services re production ready	Nov 30, 2012			
8. Card management services have been fully accepted by LCTZ in accordance with the SOW and are in full operation, and the Service Levels for such services are in effect	Dec 2, 2012			

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

	Card Run Name	SecureKey Card Perso Input file to IRIS	Card Delivery From IRIS to IBM	Test Case	Primary Receiver	Sample Size	Status
1	Sample White Cards Rough	4/30/2012	5/10/2012	Inside Works	SK	20	
2	Sample White Cards Final	5/5/2012	18-May	Inside Works	SK	20	Cancelled. Batch 3 date moved fwd.
3	Candidate Production (Test Keys)	18-May	31-May (changed from 15-Jun)	Combined	IBM/SK	60/20	June 1 
4	UAT Stock Cards (Test Keys)	22-Jun	15-Jul	Combined	IBM	17000	June 25 
5	Candidate Production (Production Keys)	1-Aug	15-Aug	Combined	IBM/SK	500/20	
6	First Full Production Run	1-Aug	15-Sep	Live	IBM	345000	

Accomplishments this Reporting Period (ending July 13):

- CMS IAS integration test planning in progress. Test plans/details shared with LCTZ.
- CMS Acceptance - BellID July 9 release tested and addressed critical and required items for acceptance.
- CMS Key Manager and HSM promoted to Production.
- Production Key Exchange initiated with IRIS, VISA

Plans for Next Reporting Period (ending July 27):

- Production files creation in progress to support Aug 1 delivery dates
- Production key exchange with IRIS complete
- CMS EMV Token Manager promoted to Production
- CMS IAS integration testing in progress.
- Transition Design document complete.

Other Issues:

- CMS Promotion to production has been delayed as a result of code issues from BellID release June 22. Will be put into Production July 17.

LEGEND:



Completed



On track



Minor issue / Behind Schedule



Major issue / Overdue



Not started

BC Services Card Card Management / Production Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as of Aug 14, 2012








STATUS

						Issues and Risks
	SK	IRIS	IBM	LCTZ	ICBC	
Card Mgt System						
Security						SK provided draft Aug 3. IBM assessment date Sept 27
Overall Relationship						N/A

CONTRACTUAL OBLIGATIONS

Milestone	Forecast Date	Current Status	Previous Status	Comments / Mitigations
1. Services Card Update interface functional and Security Design	Apr 15, 2012			
2. Personalization Service Provider Services Card Status Update interface functional and security design complete	Apr 15, 2012			
3. Program wide Security Card manufacturing and production Security design complete	May 31, 2012 July 27, 2012			SK provided draft Aug 3.
4. Sign off "sample white" test Services Cards by SK	June 1, 2102			
5. SK to provide production personalization data file to IRIS for first production batch	Aug 1, 2012			
6. SK to sign off production Services Card	Sept 1, 2012			SK working towards Aug 17.
7. Card Management Services are production ready	Nov 30, 2012			
8. Card management services have been fully accepted by LCTZ in accordance with the SOW and are in full operation, and the Service Levels for such services are in effect	Dec 2, 2012			

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

	Card Run Name	SecureKey Card Perso Input file to IRIS	Card Delivery From IRIS to IBM	Test Case	Primary Receiver	Sample Size	Status
1	Sample White Cards Rough	4/30/2012	5/10/2012	Inside Works	SK	20	
2	Sample White Cards Final	5/5/2012	18-May	Inside Works	SK	20	Cancelled. Batch 3 date moved fwd.
3	Candidate Production (Test Keys)	18-May	31-May (changed from 15-Jun)	Combined	IBM/SK	60/20	June 1 
4	UAT Stock Cards (Test Keys)	22-Jun	15-Jul	Combined	IBM	17000	June 25 
5	Candidate Production (Production Keys)	1-Aug July 25	15-Aug July 30	Combined	IBM/SK	500/20	July 25 
6	First Full Production Run	1-Aug	15-Sep Sep 22	Live	IBM	345000 274500	Aug 1 
7	Second Full Production Run	1-Sept	15-Oct	Live	IBM	230000	
8	Third Full Production Run	1-Oct	15-Nov	Live	IBM	320000	

Accomplishments this Reporting Period (ending Aug 14):

- Production files sent Aug 1 to IRIS for 274.5K PANs
- Picked up Candidate Production Card batch and delivered to IBM.
- Started Candidate Production Card batch verification
- CMS IAS integration testing in progress

Plans for Next Reporting Period (ending Aug 24):

- CMS IAS integration testing completion

Other Issues:

- CMS IAS file encryption solution issues. XML file encryption algorithm options provided. Confirmation pending.

LEGEND:  Completed  On track  Minor issue / Behind Schedule  Major issue / Overdue  Not started

BC Services Card Card Management / Production Status Report for the LCTZ/SecureKey Joint Operations Committee

Dashboard as of Aug 29, 2012

STATUS

						Issues and Risks
	SK	IRIS	IBM	LCTZ	ICBC	
Card Mgt System						
Security						
Overall Relationship						N/A

CONTRACTUAL OBLIGATIONS/PROJECT MILESTONES

Contractual Obligations	Forecast Date	Current Status	Previous Status	Comments / Mitigations
1. Services Card Update interface functional and Security Design	Apr 15, 2012			
2. Personalization Service Provider Services Card Status Update interface functional and security design complete	Apr 15, 2012			
3. Program wide Security Card manufacturing and production Security design draft	May 31, 2012 July 27, 2012			SK provided draft Aug 3.
3.1 Program wide Security Card manufacturing and production Security design signed off	Oct 30, 2012			Will be completed when IBM assessment has been performed. Draft complete Oct 15.
4. Sign off "sample white" test Services Cards by SK	June 1, 2102			
5. SK to provide production personalization data file to IRIS for first production batch	Aug 1, 2012			
6. SK to sign off production Services Card	Sept 1, 2012			
7. Card Management Services are production ready	Nov 30, 2012			
8. Card management services have been fully accepted by LCTZ in accordance with the SOW and are in full operation, and the Service Levels for such services are in effect	Dec 2, 2012			

LEGEND: Completed On track Minor issue / Behind Schedule Major issue / Overdue Not started

Project Milestones	Forecast Date	Current Status	Previous Status	Comments / Mitigations
1. IAS/CMS interface testing	Sept 30, 2012			
2. Transition File testing	Oct 30, 2012			
3. Status Update Integration testing				
4. IBM Production key exchange				
5. IAS/CMS SFTP Production key exchange				
6. Service Management procedures in place				

Accomplishments this Reporting Period (ending Aug 29):

- Production files sent Aug 1 to IRIS for 274.5K PANs
- Candidate Production Card batch signed off
- CMS IAS integration testing in progress





Plans for Next Reporting Period (ending Sept 7):

- Production files to IRIS for 230K PANs.
- IBM Security Assessment Checklist sent to ICBC.

Other Issues:

- CMS IAS file encryption solution issues. XML file encryption algorithm options provided. Confirmation pending.

CARD PRODUCTION SCHEDULE

	Card Run Name	SecureKey Card Perso Input file to IRIS	Card Delivery From IRIS to IBM	Test Case	Primary Receiver	Sample Size	Status
5	Candidate Production (Production Keys)	1-Aug July 25	15-Aug July 30	Combined	IBM/SK	500/20	July 25 
6	First Full Production Run	1-Aug	15-Sep Sep 22	Live	IBM	345000 274500	Aug 1 
7	Second Full Production Run	1-Sept	15-Oct	Live	IBM	230000	
8	Third Full Production Run	1-Oct	15-Nov	Live	IBM	320000	

LEGEND:  Completed  On track  Minor issue / Behind Schedule  Major issue / Overdue  Not started

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, September 23, 2011 2:31 PM
To: andre.boysen@securekey.com
Cc: XT:Thomson, Kathy CITZ:EX
Subject: meet next week

Importance: High

Andre,

Kathy and I just met with our senior management and we have approval to proceed with next step. We very much want Securekey (you and Greg) to come to Victoria next week to work with us on contract(s) structure, statement of work/service we are buying, and cost estimates. We have a board meeting on Thursday at which we would like to report on significant progress. Is this doable?

Call me if you want to.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, March 8, 2012 10:04 AM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: Milestone Plan from SecureKey
Attachments: SecureKey BC Project HL Milestones-final.pdf

Hi Ian

Here is the milestone plan from SK

Needs review and integration from IBM and IRIS.
Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 23, 2012 7:30 AM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Cc: Jaime Shapiro; Chris Chapman; Pierre Roberge
Subject: MSA V3
Attachments: SecureKey-Citizens' Services MSA V3 - SK to BC comments (Feb 22, 2012).docx

Hi Ian, Patricia

Here is an updated version of the MSA which includes all the changes we have talked about in the last call.

S14

There are still some changes from Sched A that need to bubble up in to this agreement. Once Sched A Part 1 and 2 settle we can move all the changes in one go.

Jaime is just doing a review of Sched A Part1 (the one we changed yesterday) and we will have it out to you soon.

I am working on Sched A Part 2. Hope to have that out to you soon as well.

Thx

Andre

UPDATED to Align with iSC Release Mgt approach

changed fiscal year:	Project Yr 0		Project Yr 1		Project Yr 2		Project Yr 3		Project Yr 4		Project Yr 5		Project Yr 6					
	FY11/12 Cards	Licence	FY12/13 Cards	Licence	13/14	Licence	Fy 14/15	Licence	Fy 15/16	Licence	fy 16/17	Licence	fy 17/18	Licence				
Cards in circulation			1 400 000		2 400 000		3 400 000		4 400 000		4 400 000		4 400 000					
Chip Authentication Licence Costs	Base Licence	\$ 500 000	\$ 1 000 000		\$ 2 000 000		\$ 2 000 000		\$ 2 000 000		\$ 2 000 000		\$ 2 000 000					
Total	Cards with Health Care Utilization	0%	0%	10%	240 000	\$ 480 000	30%	1 020 000	\$ 2 040 000	40%	1 760 000	\$ 3 520 000	50%	2 200 000	\$ 4 400 000	65%	2 860 000	\$ 5 720 000
CAP (limit for year)		\$ 500 000	\$ 1 000 000		\$ 2 000 000		\$ 3 000 000		\$ 4 000 000		\$ 4 000 000		\$ 4 000 000		\$ 5 500 000			
cost recoverable from Health/operating	Reestimated Health Costs for chip authentication	\$ 500 000	\$ 1 000 000		\$ 2 000 000		\$ 3 000 000		\$ 4 000 000		\$ 4 000 000		\$ 4 000 000		\$ 5 500 000			
Card Production	New Grand Total over 6 fiscals	\$ 20 000 000																

SecureKey Costing	SC	initial expectations	Difference from hitl project	gov year 0 + gov year 1	SC year 0	SCV0	SCV1	SCV2	SCV3	SCV4	SCV5								
						\$ 2 000 000	\$ 2 200 000	\$ 2 800 000	\$ 3 800 000	\$ 5 200 000	\$ 6 500 000								
						\$ 500 000	\$ 200 000	\$ 200 000	\$ 200 000	\$ 1 200 000	\$ 1 000 000								
		Additional Chip Authentication Non Health Use					Incremental Non Health uses	5%	51 000	\$ 102 000	10%	176 000	\$ 352 000	10%	220 000	\$ 440 000	10%	286 000	\$ 572 000
		Net Additional Payment to SC					No Double dip for paying Card Health users			\$ 102 000		\$ 352 000		\$ 440 000		\$ 572 000			
							Health Cap derived from offering identity service												

████████████████████

\$ 20 000 000

████████████████████

\$ 22 500 000
\$ 2 500 000
\$ 20 000 000

\$ 1 466 000
\$ 1 466 000
\$ 21 466 000

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, October 21, 2011 11:06 AM
To: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: NewModelForAuthentcationEstimatesSecureKey-V5.xlsx
Attachments: NewModelForAuthentcationEstimatesSecureKey-V5.xlsx

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, January 9, 2012 2:10 PM
To: 'andre.boysen@securekey.com'
Subject: NOI and pricing?

Importance: High

Andre,

We are getting close to issuing NOI...likely this week. I was checking my sent items/inbox to see if we exchanged the latest pricing model as agreed at our last conference call on that topic. Do you have such an email?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, February 2, 2012 10:19 AM
To: 'Greg Wolfond'; 'andre.boysen@securekey.com'
Subject: NOI had no challenges.

NOI has closed and no challenge. Contract development needs to start...back to you soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 4, 2011 2:20 PM
To: 'andre.boysen@securekey.com'; 'greg.wolfond@securekey.com'
(greg.wolfond@securekey.com)
Subject: numbers

Andre, Greg,

Peter, Kevena and I are meeting with Dave Nikolejsin at 4:30pm our time to discuss the spreadsheet vs. our budget. Will get back to you after that.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, November 18, 2011 11:39 AM
To: John Ouilette (ouilette@ca.ibm.com)
Cc: XT:Vanhelvoirt, Joy; ICBC CITZ:IN; andre.boysen@securekey.com;
'greg.wolfond@securekey.com' (greg.wolfond@securekey.com); Nikolejsin, Dave CITZ:EX
Subject: Order Cards now and do contracts for paywave later.
Importance: High

John,

I discussed the approved approach for ordering cards now and doing contracts for paywave app later with Greg and Andre at SecureKey this morning. Greg asked that you check back with them to make sure everyone is on the same page with respect to the chip specification. If you could please contact Andre and/or Greg asap that would be great.

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, December 8, 2011 10:19 AM
To: 'andre.boysen@securekey.com'
Subject: out of country storage

Andre,

The PAN and PAI can be stored outside of Canada I confirmed that with Charmaine.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, February 16, 2012 11:06 PM
To: andre.boysen@securekey.com; Greg Wolfond
Cc: Bamford, Kevena LCTZ:EX
Subject: Point of service devices...

Andre, Greg,

Our estimate of Health care points of service is 15,000. Not sure if this is relevant to pricing but gives an order of magnitude.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, February 24, 2012 11:58 AM
To: Bailey, Ian D LCTZ:EX
Cc: Greg Wolfond
Subject: Pricing update

Hi Ian

We are open to your option to switch proposal. We are going to add some words to make the intent clear.

Back to you shortly on this.

Thx

a

-----Original Message-----

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Friday, February 24, 2012 2:56 PM
To: Chris Chapman; Wiebe, Patricia LCTZ:EX
Cc: Andre Boysen
Subject: RE: Contract update

Thanks Chris.

-----Original Message-----

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Friday, February 24, 2012 11:55 AM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Cc: Andre Boysen
Subject: RE: Contract update

Ian, Patricia,

Here you are...took a bit longer to get the comments sorted out on this end.

In this version we have an updated MSA and Sched A with parts 1 and 2 drafted for your review.

Thanks and have a good weekend.

Chris

-----Original Message-----

From: Andre Boysen
Sent: Thursday, February 23, 2012 8:13 PM
To: Ian D LCTZ:EX Bailey; Patricia LCTZ:EX Wiebe
Cc: Chris Chapman
Subject: Contract update

Hi Ian

We now have complete MSA and sched a prts 1 and 2 - nearing final draft got the lawyers - just your review.

Just need to clean up a few comments

Will have something out first thing

Sorry for the delay.

S22

Chris is carrying the ball to get this to you

Andre Boysen

EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy

+16472872544

Page 168 redacted for the following reason:

S14

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, June 7, 2012 9:54 AM
To: Bailey, Ian D LCTZ:EX
Cc: Bamford, Kevena LCTZ:EX
Subject: Re: 2012-06-XX BC Contract v3 draft

Will make the edit

Thanks to you both

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-06-07, at 12:40, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Recommend into text say:

New BC Services Card to provide secure chip-based access government services

Ian Bailey
Executive Director & Chief Information Security Officer
Office of Chief Information Officer
Ministry of Labour, Citizens' Services and Open Government
Phone (250) 387-8053
Cell S17

From: Bamford, Kevena LCTZ:EX
Sent: Thursday, June 7, 2012 9:22 AM
To: 'andre.boysen@securekey.com'
Cc: Bailey, Ian D LCTZ:EX
Subject: FW: 2012-06-XX BC Contract v3 draft

One more edit on the first sentence

We should not be describing these as Health cards....the intent is that they are broader than this.

From: Bamford, Kevena LCTZ:EX
Sent: Tuesday, June 5, 2012 9:37 AM
To: Bamford, Kevena LCTZ:EX
Subject: FW: 2012-06-XX BC Contract v3 draft

From: Bamford, Kevena LCTZ:EX
Sent: Tuesday, June 5, 2012 9:37 AM
To: 'andre.boysen@securekey.com'

Cc: Bailey, Ian D LCTZ:EX

Subject: FW: 2012-06-XX BC Contract v3 draft

Andre

We have made the following edits to the press release.

I have set up some time tomorrow to discuss, if required.

Please advise if you would like keep our meeting tomorrow and walk through these changes, or discuss anything else about the PR.

Kevena.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, December 14, 2011 1:48 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: Antennae Size

Please do
A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

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On 2011-12-14, at 16:29, "Bailey, Ian D CITZ:EX" <lan.Bailey@gov.bc.ca> wrote:

Thanks very much Andre are you ok if I share your note with ICBC?

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, December 14, 2011 11:42 AM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: Antennae Size

Hi Ian

The most important message is that antennae size has nothing do with certification - any size will pass certification. The size is about performance - no size is mandated by the spec. The next message is that IRIS needs propose its configuration for certification - Visa does not certify things in the abstract. The spec we provided gives them choices for vendors to source chips from. They need to pick one.

What is unique in the BC project is not antennae size but the use of polycarbonate. Polycarbonate is a more robust and expensive plastic which has not been used in the past by financial institutions for Visa card, for reasons of cost. Solely based on the fact that a new material will be used for the card construction, the newly created card product will need to go through some levels of certification at Visa. SecureKey is working diligently with Visa to make this process as smooth as possible.

Status update

1- We have spoke with Inside Secure, which IRIS is considering as a chip and prelam provider. Inside has years of experience with contactless card and is also the number one vendor of contactless cards in North America. Inside is aware of the Visa process for certification and will be working with Visa and SecureKey to get the approved antenna and prelam certified.

2- While We are still waiting for sample cards from Iris for internal testing and validation purposes, we have arranged to get sample cards directly from Inside to test immediately the performance of a Visa pre-approved 3/4 size antennae. The test will give us a clear understanding of the user experience

based on reader with less power and smaller reader-antenna such as mobile device.

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, March 1, 2012 12:40 PM
To: Bailey, Ian D LCTZ:EX
Subject: Re: available for a call..

Sure

Andre Boysen
EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy

+16472872544

On 2012-03-01, at 15:38, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

> we need to have a call with ICBC tomorrow to make sure the right things happen between now and May 15th with IRIS and yourselves and VISA. Can I call you now?

>

>

>

> From: Andre Boysen [andre.boysen@securekey.com]
> Sent: March 1, 2012 12:32 PM
> To: Bailey, Ian D LCTZ:EX
> Subject: Re: available for a call..

>

> Just getting on a plane back.

>

> Land at 7pm

>

> Can do a call after that

> A

>

> -----

> Andre Boysen
> EVP Digital Identity and Authentication Services SecureKey - Online
> Security Made Easy

>

> +16472872544

>

> On 2012-03-01, at 15:30, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

>

>> Andre, are you available for a call at 5pm your time?

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, November 17, 2011 8:31 AM
To: 'Pierre Roberge'; Wiebe, Patricia CITZ:EX; 'Maggie Au'; 'Andre Boysen'
Cc: 'Heather Neale'
Subject: RE: Bc - updated document for process flow

Not at this time. But the project board meeting went well and all recommendations were accepted. Stay tuned.

From: Pierre Roberge [mailto:pierre.roberge@securekey.com]
Sent: Thursday, November 17, 2011 8:13 AM
To: Wiebe, Patricia CITZ:EX; Maggie Au; Andre Boysen
Cc: Heather Neale; Bailey, Ian D CITZ:EX
Subject: Re: Bc - updated document for process flow

Thanks Patricia

It is ok with you if SecureKey approach directly ICBC to discuss the MBUN aspect of the flow?

Regards

Pierre A. Roberge, CTO
Online Security Made Easy - SecureKey Technologies Inc.
pierre.roberge@SecureKey.com

From: Wiebe, Patricia CITZ:EX [mailto:Patricia.Wiebe@gov.bc.ca]
Sent: Thursday, November 17, 2011 11:10 AM
To: Maggie Au; Pierre Roberge; Andre Boysen
Cc: Heather Neale; Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>
Subject: RE: Bc - updated document for process flow

Thank you I accept these drawings as representing our discussion, and a good proposed solution for moving forward to support card issuance and lifecycle management of the BC Services Card.

As mentioned in our concalls, we still need to determine whether ICBC is willing to send MBUN in the card request process, and whether IBM is willing to send MBUN-PAN mapping files direct to SecureKey.

Thanks,
Patricia

Patricia Wiebe, Director, Identity and Information Architecture and Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

From: Maggie Au [mailto:maggie.au@securekey.com]
Sent: Tuesday, November 15, 2011 2:21 PM
To: Wiebe, Patricia CITZ:EX; Bailey, Ian D CITZ:EX; Pierre Roberge; Andre Boysen

Cc: Heather Neale
Subject: RE: Bc - updated document for process flow

Hello all:

Attached please find the updated flow as per our discussion today.

Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

From: Maggie Au
Sent: Tuesday, November 15, 2011 9:58 AM
To: Pierre Roberge; Andre Boysen; Ian Bailey; Patricia CITZ:EX Wiebe
Subject: RE: Bc - updated document for process flow

Hi all,

I've made a minor change to the process flow document. Note #2 was added to the Note section in scenario 3 to indicate that the card replacement step will be similar to that in scenario 2.

<< File: BC Service Card Flow 2011 v5b.pdf >>

Thanks,
Maggie

From: Pierre Roberge
Sent: Tuesday, November 15, 2011 2:42 AM
To: Andre Boysen; Ian Bailey; Maggie Au; Patricia CITZ:EX Wiebe
Subject: RE: Bc - updated document for process flow

Good morning Everybody

<< File: Visio-BC Service Card Flow 2011 v5a.pdf >>

Find attached the proposed updated flow. All lines in purple can be removed to simplify the flow if MBUN integrity check prior to sending the card in the mail was not required.

Talk to you later today

Best regards

Pierre A. Roberge, CTO and EVP Financial Solutions
Online Security Made Easy - SecureKey Technologies Inc.
pierre.roberge@SecureKey.com

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-----Original Appointment-----

From: Andre Boysen

Sent: Monday, November 14, 2011 19:17

To: Andre Boysen; Ian Bailey; Maggie Au; Patricia CITZ:EX Wiebe; Pierre Roberge

Subject: Bc - updated document for process flow

When: Tuesday, November 15, 2011 11:00-12:00 (UTC-05:00) Eastern Time (US & Canada).

Where: Conf call

Toll-free Dial-in number: S15, S17 / Conference ID: S15, S17

Local dial-in number: S15, S17 / Conference ID: S15, S17

Global toll-free dial-in number: S15, S17 / Conference ID: S15, S17

Conference ID: S15, S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, November 18, 2011 3:04 PM
To: 'Greg Wolfond'
Subject: RE: Bc - updated document for process flow

Ok talk to you Monday it's late for you.

From: Greg Wolfond [mailto:greg@securekey.com]
Sent: Friday, November 18, 2011 3:03 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: Bc - updated document for process flow

Sure not urgent.. Is there a good time for you? Monday is ok too.

g

From: Bailey, Ian D CITZ:EX [mailto:Ian.Bailey@gov.bc.ca]
Sent: Friday, November 18, 2011 06:02 PM
To: Greg Wolfond
Subject: RE: Bc - updated document for process flow

Ok in a meeting now...

From: Greg Wolfond [mailto:greg@securekey.com]
Sent: Friday, November 18, 2011 2:22 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: Bc - updated document for process flow

Thanks Ian,

I have a quick question for you. Pls call when you get a chance.

416 270 1919

g

From: Bailey, Ian D CITZ:EX [mailto:Ian.Bailey@gov.bc.ca]
Sent: Friday, November 18, 2011 04:11 PM
To: Greg Wolfond
Cc: Andre Boysen; Wiebe, Patricia CITZ:EX <Patricia.Wiebe@gov.bc.ca>; Pierre Roberge; Maggie Au
Subject: FW: Bc - updated document for process flow

Greg, Andre,

Further to our conversation this morning on completing the card activation/deactivation interaction design. I've talked with Patricia and we think this high level design is good. We haven't yet shared with ICBC or IBM and we can't do that right now not until they get their card stock ordered so there is the caveat that the parties may change but we

agree that the interactions need to take place. There is still the detailed design to do what protocols, data elements, error handling/reconciliation, etc. Did you want us to work on the detailed design now we can do that.

Ian.

From: Maggie Au [<mailto:maggie.au@securekey.com>]
Sent: Tuesday, November 15, 2011 2:21 PM
To: Wiebe, Patricia CITZ:EX; Bailey, Ian D CITZ:EX; Pierre Roberge; Andre Boysen
Cc: Heather Neale
Subject: RE: Bc - updated document for process flow

Hello all:

Attached please find the updated flow as per our discussion today.

Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

From: Maggie Au
Sent: Tuesday, November 15, 2011 9:58 AM
To: Pierre Roberge; Andre Boysen; Ian Bailey; Patricia CITZ:EX Wiebe
Subject: RE: Bc - updated document for process flow

Hi all,

I've made a minor change to the process flow document. Note #2 was added to the Note section in scenario 3 to indicate that the card replacement step will be similar to that in scenario 2.

<< File: BC Service Card Flow 2011 v5b.pdf >>

Thanks,
Maggie

From: Pierre Roberge
Sent: Tuesday, November 15, 2011 2:42 AM
To: Andre Boysen; Ian Bailey; Maggie Au; Patricia CITZ:EX Wiebe
Subject: RE: Bc - updated document for process flow

Good morning Everybody

<< File: Visio-BC Service Card Flow 2011 v5a.pdf >>

Find attached the proposed updated flow. All lines in purple can be removed to simplify the flow if MBUN integrity check prior to sending the card in the mail was not required.

Talk to you later today

Best regards

Pierre A. Roberge, CTO and EVP Financial Solutions
Online Security Made Easy - SecureKey Technologies Inc.
pierre.roberge@SecureKey.com

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-----Original Appointment-----

From: Andre Boysen

Sent: Monday, November 14, 2011 19:17

To: Andre Boysen; Ian Bailey; Maggie Au; Patricia CITZ:EX Wiebe; Pierre Roberge

Subject: Bc - updated document for process flow

When: Tuesday, November 15, 2011 11:00-12:00 (UTC-05:00) Eastern Time (US & Canada).

Where: Conf call

Toll-free Dial-in number: S15, S17 / Conference ID: S15, S17

Local dial-in number: S15, S17 / Conference ID: S15, S17

Global toll-free dial-in number: S15, S17 / Conference ID: S15, S17

Conference ID: S15, S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, September 29, 2011 1:20 PM
To: 'Andre Boysen'
Subject: RE: bc noi text

Ok...got it...back to you soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, September 29, 2011 1:20 PM
To: Bailey, Ian D CITZ:EX
Subject: Fw: bc noi text

Hi Ian

Had to use S22 because our network is acting up

Anyway, have a look
Andre Boysen

From: Andre Boysen [<mailto:> S22
Sent: Thursday, September 29, 2011 04:18 PM
To: Andre Boysen
Subject: bc noi text

--

+++++

Andre Boysen

S22

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, September 29, 2011 1:58 PM
To: 'Andre Boysen'
Subject: RE: bc noi text

Importance: High

Andre this looks right to me. One question what is meant by "secure key to provide card management system". Also is terminalisation a common term and does this include the usb tokens for home use?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, September 29, 2011 1:20 PM
To: Bailey, Ian D CITZ:EX
Subject: Fw: bc noi text

Hi Ian

Had to use S22 because our network is acting up

Anyway, have a look
Andre Boysen

From: Andre Boysen [<mailto:> S22]
Sent: Thursday, September 29, 2011 04:18 PM
To: Andre Boysen
Subject: bc noi text

--

+++++

Andre Boysen

S22

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 16, 2012 7:05 AM
To: Bailey, Ian D CITZ:EX; Greg Wolfond
Subject: RE: BC Pricing Discussion

9:30 PST would work well Ian, if you can swing it.
Both Greg and I are available.

-----Original Message-----

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, February 16, 2012 10:04 AM
To: Greg Wolfond; Andre Boysen
Subject: Re: BC Pricing Discussion

I think I can g

----- Original Message -----

From: Greg Wolfond [<mailto:greg@securekey.com>]
Sent: Thursday, February 16, 2012 03:20 AM
To: Andre Boysen <andre.boysen@securekey.com>; Bailey, Ian D CITZ:EX
Subject: BC Pricing Discussion

Hi Andre, Ian,

Realized I have a 330 to 5pm meeting. Can we move the call earlier today?

The 1230- 330est (930-1230pst window would work well)

215 pst would also work.

Let me know

g

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 4, 2011 11:55 AM
To: 'Greg Wolfond'; 'Andre Boysen'
Subject: RE: call today?

I'll setup a conf call..then people can join if they can make it.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Greg Wolfond [<mailto:greg@securekey.com>]
Sent: Tuesday, October 4, 2011 11:55 AM
To: Bailey, Ian D CITZ:EX; Andre Boysen
Subject: Re: call today?

Sure Ian,

Let's talk at 1pm your time. Call your office?

g

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From: Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>
To: Greg Wolfond; Andre Boysen
Sent: Tue Oct 04 14:40:49 2011
Subject: call today?

Greg, Andre,

I'm asking if we can have a call at 1pm or 1:30pm our time Peter would like to join in and he can't until that time. I'll also ask Kathy Thomson of ICBC and our purchasing consultants Richard Poutney and Mike Kishimoto to join as well not sure if they can attend. I will setup conf call if ok with you?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, March 14, 2012 2:59 PM
To: Bailey, Ian D LCTZ:EX
Subject: Re: card expiry question

Let me look in to it

++++
Andre Boysen

On 2012-03-14, at 16:35, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

Just a heads up that Pierre raised an issue with paywave expiry. Our business process for driver's license requires a minimum of 6.5 year expiry. This time will account for manufacturing, shipping, stocking, early renewal, and the 5 year expiry period. I thought we were on the same page on this item. If we need to get on the phone on this one then let's do that soon.

Thanks, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, December 19, 2011 12:00 PM
To: 'Andre Boysen'; Wiebe, Patricia CITZ:EX
Subject: RE: Card update

Ok thanks Andre.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Monday, December 19, 2011 11:38 AM
To: Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: Card update

Hi Ian

The initial status seems positive a ¾ antennae will meet the performance needs.

The final result may not come until January.

This test is not the final test but it is a good start. Testing in Polycarbonate will still needs to be completed by Iris once we complete our work

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, November 21, 2011 10:13 AM
To: Andre Boysen; Chet Watmough
Cc: John Ouilette; Pierre Roberge; Bailey, Ian D CITZ:EX
Subject: RE: Chip for the BC Services Card

Hi Chet

I confirm that the chip specification below is what is required for BC.
Please proceed with the order when you are ready.

Thanks
Andre

-----Original Message-----

From: Andre Boysen
Sent: Monday, November 21, 2011 11:51 AM
To: 'Chet Watmough'
Cc: John Ouilette
Subject: RE: Chip for the BC Services Card

Hi Chet, John

Thanks for the call Friday, it was a good discussion. Sorry for the abrupt end, mobile coverage in s22 is spotty at times.

I will verify the card details with Pierre and get back to you.
Thanks
Andre

-----Original Message-----

From: Chet Watmough [<mailto:cwatmoug@ca.ibm.com>]
Sent: Friday, November 18, 2011 6:38 PM
To: Andre Boysen
Cc: John Ouilette
Subject: Chip for the BC Services Card

Hi Andre,

As per our conversation this afternoon, here are the details for the chip that we are planing on moving forward with for the BC Services Card. IRIS will be ordering the Oberthur Technologies 4k Chrysalis Flybuy V2.0. This chip meets the technical specifications brought forward and is also found in the Visa Approved Contactless-Only Card list from October 2011.

Your call was breaking up towards the end so let us know if you would like to continue the discussion next week or if there are any questions or issues that we need to address.

Chet Watmough
Senior I/T Architect
Application Services, Victoria
IBM Global Business Services
Phone: 250 220 1055
Cell 250-213-6752
E-mail: cwatmoug@ca.ibm.com

BC Services Card Project Card Personalization Workshop

July 18, 2011, 2:30– 5:00 pm

S15

Attendee List

Ministry of Labour, Citizens' Services and Open Government (LCTZ)	Patricia Wiebe (chair and minutes), Peter Watkins, Doug Collinge, Steve Shulhan
SecureKey	Andre Boysen, Mike Stephenson (from TD Merchant Services, on behalf of SecureKey)
Ministry of Health (MH)	Jeremy Moss, Guy Friswell (each for part of meeting)
Insurance Corporation of British Columbia (ICBC)	Sam Van der Merwe
IBM (on behalf of ICBC)	Chet Wainmough, John Ouillette
Sierra (on behalf of LCTZ)	Roger Fabi, Greg Turner

This is version 1.1. It includes omissions and corrections received after initial distribution of minutes, noted in red.

AGENDA

- Review current card production process by ICBC/IBM
- Discuss how chip personalization can be incorporated in current card production process
- Identify data on chips and in servers to enable chip authentication with SecureKey technology

OBJECTIVES

- Achieve common understanding among stakeholders of card/chip personalization process
- Identify new/changed requirements re: how chips will be used with SecureKey technology
- Position IBM to prototype a set of demo cards that can work with SecureKey technology

DISCUSSION

Note: This workshop included some advanced technical discussion that was not fully explained or documented. These minutes likely contain technical mistakes; however the minutes are intended to express the general technical concepts discussed. A discussion/solution paper will be drafted next that will endeavour to correctly and more fully describe the technical discussion.

Business Context

- Jeremy described to SecureKey the business context of the card project:
 - o CareCards are being replaced with smartcards, moving away from use of magnetic stripes
 - o citizens are being re-enrolled in Medical Services Plan (MSP) for healthcare insurance coverage
 - o identity proofing and photo capture will occur at a counter at the same time as driver licence renewal
 - o smartcards will be used for online and point of service authentication

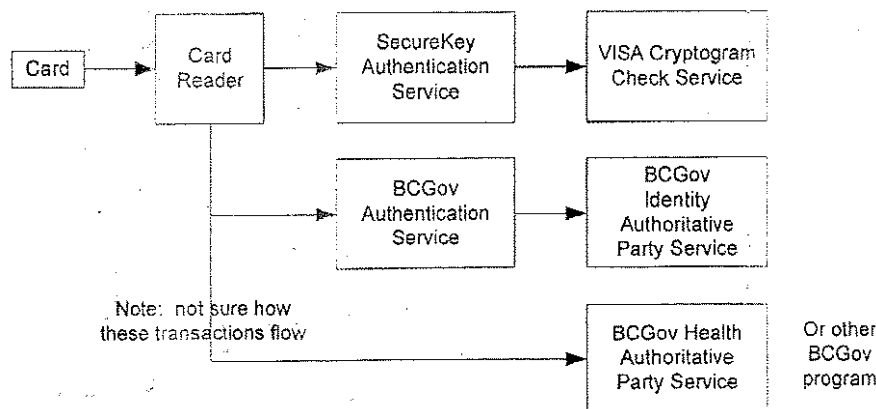
Data Items	Description	Process to set up/personalize
PAN	Primary Account Number, 16 digits long; first 4-6 digits are Bank Identification Number; next 10-12 digits are Card Number	<ul style="list-style-type: none"> - could be set by card manufacturer and assigned to cardholder after card personalization - could be blank from card manufacturer and assigned to cardholder during personalization - card issuer can develop their own scheme for setting card numbers
PAN Sequence Number	Optional number that can be used to track replacement cards	<ul style="list-style-type: none"> - card issuer can develop their own scheme for managing replacement cards within PAN or using PAN Sequence Number
Expiry date		<ul style="list-style-type: none"> - could be set to a specific date, e.g. 5 years from card issue - could be set to far off future date, and manage expiry in server controls instead
ATC	Application Transaction Counter, a number that records how many times the contactless chip has been used since the last time it synchronized its cryptogram	
Private Key	A key that is unique to the chip, cannot be copied or read from the chip, and is used in cryptographic functions	<ul style="list-style-type: none"> - set on chip when created in factory (chip supplier)
Application Items	Description	Process to set up/personalize
Cryptogram	Application that provides a cryptogram using the cryptogram calculation function on the secure element of the chip; application is common, i.e. not personalized	<ul style="list-style-type: none"> - could be loaded by card manufacturer; cryptogram should be read during card personalization and recorded somewhere - could be loaded by card producer before/during/after personalization
Updater	Optional application that can be used to set or change some data on the chip after card production (e.g. update expiry date); designed by card issuer; should be only run by card issuer	<ul style="list-style-type: none"> - could be loaded by card manufacturer - could be loaded by card producer

	Note: this may require contact-type chip so may not be suitable if BC card will only have contactless chip	
Prepay	Optional application that can be used to enable financial transactions using the card Note: this may require contact-type chip so may not be suitable if BC card will only have contactless chip	- could be loaded by card manufacturer, provided they are EMV certified - could be loaded by card producer, but then would require EMV certification

- Andre's recommendation: chip personalization through association after card personalization
 - o After card is set with PAN and private key, loaded with cryptogram application (likely all done by card manufacturer), then IBM should use card/chip reader to associate/record the card's PAN with the printed card/barcode.
- Andre says Province of BC is first non-bank to do EMV cards and use SecureKey technology; all banks produce and personalize cards internally already
- Jeremy advises that no one engages with G&D regarding chip personalization
- Peter advises that we need card usage policy that say that if card readers can read the PAN, point of services are not allowed to use PAN for health card purposes (or other government programs).

Discussion on Chip Authentication

- SecureKey provides authentication service that brokers authentication with a VISA cryptogram checking service.
 - o It is unclear whether or how the SecureKey or VISA services get set up with data about a card during personalization process
- Patricia described that they have done some discovery work on integrating SecureKey authentication with identity attribute services, so that attributes can be delivered to a card reader, e.g. a payment terminal application.



Outstanding issues:

- Key management – how does private key get set, who has public key, who is root certificate authority or intermediary certificate authorities, symmetric versus asymmetric keys, how does cryptogram relate to BIN or PAN?
- Certification and audit requirements – who needs to be certified for which parts of personalization, in order to maintain compliance with EMV?
- SecureKey card interface – is there mutual authn between card and card reader, i.e. is PAN encrypted or transmitted in clear between card and card reader; if encrypted – how and where is it decrypted?
- Overall architecture of ecosystem – how does Card issuer, SecureKey, VISA (and other) Cryptogram Check systems work together?
 - o How is chip personalization (PAN, keys, cryptogram) shared with SecureKey and VISA Cryptogram Check services; what data is set in which backend servers; what interfaces to set, lookup or validate with backend servers; what is the sequence of events to complete chip personalization with backend servers?
- Choices (if any) on setting data and loading applications – either by chip supplier, manufacturer or producer, before/during/after personalization; how to quality assure?
- Card readers – What kind of card reader is required to simply read the card (read PAN), or read the card and validate the cryptogram (likely using SecureKey technology)?
 - o Note: IBM needs card readers (special or standard) to do quality check

ACTION ITEMS

- Andre/SecureKey to provide additional information (as described above) on these topics:
 - o Key management
 - o SecureKey card interface
 - o Overall architecture of ecosystem
 - o Card readers
 - o Example card file or specifications that IBM could use to produce such cards
- Chet/IBM to investigate and provide additional information (as described above) on these topics:
 - o Capabilities and choices to set data and load applications by their chip supplier, manufacturer
 - o Current compliance by chip supplier, manufacturer related to EMV
- Patricia to "own" the resolution of the chip-related architecture (personalization and authentication), and start documenting the discussion/solution.
 - o John and Chet/IBM will help
 - o Andre/SecureKey will work closely with Patricia to resolve issues, provide info
- Patricia to include card usage policy in other project policy development
- Patricia to distribute information to workshop group
 - o Workshop minutes (done - these notes)
 - o Questions from Chet/IBM with answers from Andre/SecureKey (done - see appendix on next page)
- Peter to discuss using the card for financial transactions with the CIO

**** Next Meeting:** TBD – after more information is provided by SecureKey

APPENDIX – IBM's QUESTIONS and ANSWERS

Questions provided by Sam Van der Merwe/ICBC on July 12, 2011

EMV and Chip Questions:

Answered by Ian Bailey/OCCIO on July 12, 2011

1. Can we confirm that the current preference for a standard on the ISO 14443 chip is the EMV specification and that it does not require the pre-installed application compliant to ICAO 9303?

Yes EMV application only on ISO 14443 chip.

2. At this point do we know what type of (and how many) application(s) or future potential applications that are required on the chip?

We do not know but can imagine 2 or 3 other applications such as building access and smart card logon.

3. Do we need to implement full EMV certified cards? If we need to implement the full EMV Certified cards, we will need to meet specific standards on personalization of cards, data structure, transport keys, Key Management System, security systems etc. that we need to follow to comply with the standards.

or

Is the intent here to just use the EMVCo platform only? i.e. Not full EMV, but follow the standard - reuse the data structures, use same key management, etc? If so, am I correct to assume that we would still want to use inlays that are EMV certified?

Secure Key and TD can confirm but I don't believe we need to be fully EMV compliant since we are not doing payment transactions.

SecureKey Related Questions:

Answered by Andre Boysen/SecureKey on July 21, 2011

(some questions will be answered further later – Andre to follow up with Patricia)

4. What is the minimal EMV implementation that SecureKey requires to interface with the SecureKey device?

See Visa Contactless Spec V2
EMV Level 1 or Level 2 (VIS 4.2)
Card Number & Cryptogram

5. What is the data that will be required within the data structures? Do we have a description of the client identifier that we intend to use?

As per Visa Spec:
PAN - 16 Digit BIN as per TD Spec
Expiry Date
PAN Sequence Number
ATC (counter for contactless transactions)

6. Do we currently have a plan for dealing with authentication key management?

Tokens today are static single use devices. No key management required.

7. Has there been an implementation that we can leverage of a contactless card interfacing with the SecureKey technology that uses a partial EMV implementation?

Banks are using SecureKey for authentication applications – bank websites. GC will be following soon.

8. When interfacing with EMV chip, there may be more than one application on the chip. Is there an application the SecureKey expects? Is there a specific set of applications that SecureKey supports?

Visa Contactless Spec v2, which states the PPSE is the credit application Cryptogram. This is subject to use cases BC wants to support. To date, SK gets the identifier and checks the cryptogram.

9. What will we need to preload on the chip to enable the SecureKey technology?

Identifier & Cryptogram

10. Will the EMV implementation be expected to perform SDA offline data authentication?

?? No --- online service only

11. Will there be a CVM (customer verified method)? If so, I assume that it will be Offline PIN? If so, will it be a enciphered offline PIN or a plain text PIN?

Need to discuss with BC --- we have talked about server passcode --- depends on the required use cases (payment will require PIN)

12. Does SecureKey expect the cards to be unlocked? i.e does SecureKey expect to issue script commands to the card? e.g. PIN resets? other commands?

See TD discussion

Watkins, Peter CITZ:EX

From: Wiebe, Patricia CITZ:EX
Sent: July-27-11 8:30 PM
To: 'Andre Boysen'
Cc: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: Followup on Chip Personalization

Importance: High

Hi Andre

It's been a week since your visit here, and several days since I posted the meeting minutes with specific questions. I'm under pressure to have this figured out and shared with ICBC/IBM and Health within a few weeks. How are you going to help me get answers?

- What information can you provide me with now?
- Who can you provide to me as technical contacts?

Also, you referred to compliance with the VISA EMV specifications (Visa Contactless Spec V2, EMV Level 1 or Level 2 (VIS 4.2)) – these are not available on the internet without our organization seeking a licence from VISA, which I don't think we have time for and who knows if it costs money. Can you share a copy with me?

I need a good start on information from you by end of this week.

Thanks,
Patricia

Patricia Wiebe, A/Director, Identity and Information Architecture & Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile S17 Email: Patricia.Wiebe@gov.bc.ca

Watkins, Peter CITZ:EX

From: Greg Wolfond <greg@securekey.com>
Sent: September-27-11 5:32 PM
To: Bailey, Ian D CITZ:EX; Andre Boysen; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: Soo, Jaslyn
Subject: RE: Securekey conference call

Thanks Ian,

This is good. We are on the right track. Lets have a conversation early next week once you've seen the draft.

g

Greg Wolfond
CEO SecureKey Technologies Inc.
416 214 6451

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tue 9/27/2011 5:41 PM
To: Andre Boysen; Greg Wolfond; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: 'Soo, Jaslyn'
Subject: RE: Securekey conference call

Minutes of meeting today:

- Objective is to get crunchy descriptions of what we need to buy to start procurement process
- General agreement on the 3 contract structure
 1. BIN + EMV rights (ICBC)
 2. Services to support Card Personalization and activation (IBM)
 3. Authentication and Broker Services (Citizen Services)
- Detailed descriptions of the 3 procurements is needed and Andre to develop 1st drafts for end of day Friday
- Andre to contact Ian/Patricia for any feedback, clarification, etc if needed to accomplish 1st draft
- Recognition that procurement of 1 and 2 is very time critical in order to order 1M cards in November.
- Recognition that the 3 services are dependent on each other, both from a procurement justification perspective and from a deal perspective for Securekey.

Let me know if I've got this wrong and I'll update.

Also, is it time to bring IBM to the table? Kathy, Greg?

Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

-----Original Appointment-----

From: McDonald, Seanna CITZ:EX **On Behalf Of** Bailey, Ian D CITZ:EX

Sent: Monday, September 26, 2011 2:09 PM

To: Bailey, Ian D CITZ:EX; 'Andre Boysen'; 'greg@securekey.com'; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX

Cc: 'Soo, Jaslyn'

Subject: Securekey conference call

When: Tuesday, September 27, 2011 1:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: S15

Conference Call Dial in S15, S17

Participant ID S15, S17

Contract 3 – Authentication Services

- SecureKey to provide card validation services
 - Card validation services for Citizen Services for all network transactions where a CareCard has been presented for service. Support for direct-consumer and provider-mediated transactions.
 - Enables the CareCard credential to be used for the online authentication service with CBS for selected third-party transactions when presented by the user.

- SecureKey to access to existing CBS credentials
 - BC will be able to offer existing customers of the CBS service by accepting consumer credentials already enrolled.

- SecureKey to provide access to network terminals
 - Enables BC to use deployed SecureKey terminals for authentication services. The CBS service has a broad range of consumer terminals as well as access to commercial partner networks.

- SecureKey to provide custom terminalisation services when required
 - Support BC in defining a proprietary terminal version compliant with CBS network specifications. The terminal will need to support existing applications that depend on the current magstripe terminal as well as support for the new contactless CareCard.

Watkins, Peter CITZ:EX

From: Andre Boysen <andre.boysen@securekey.com>
Sent: October-11-11 8:22 AM
To: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: bc noi text (3) ?
Attachments: bc noi text (3).docx

Hi Ian

Here is the next draft the contract sections for the NOI

Give me a call if you have questions.
Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, October 21, 2011 9:07 AM
To: 'Andri Boysen'
Subject: Accepted: Comments on last BC revision of the model

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, October 21, 2011 7:31 AM
To: Andre Boysen
Cc: Bamford, Kevena CITZ:EX (Kevena.Bamford@gov.bc.ca); Watkins, Peter CITZ:EX
Subject: Accepted: Comments on last BC revision of the model

Thanks Andre,

kevena should be on the call as well.

Cameron, Dianna LCTZ:EX

From: Moss, Jeremy LCTZ:EX
Sent: Tuesday, August 7, 2012 5:37 PM
To: 'Chris Chapman'
Cc: Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: Draft JOC Meeting Minutes
Attachments: 2012-07 27 record - draft 2.docx

Hi Chris,

Please see the attached draft JOC meeting minutes from July 27th. We can discuss on our phone call this Thurs.

Jeremy Moss
Program Development Director
Provincial IDIM Program | Office of the CIO
Ministry of Labour, Citizens' Services and Open Government

jeremy.moss@gov.bc.ca
desk phone: 250-387-1581
cell phone: S17



Minutes

Joint Operations Committee (JOC) Meeting

S15

Friday, July 27, 2012, 11 a.m.

Attendees:

LCTZ	Wiebe, Patricia	Moss, Jeremy	
SecureKey	Boysen, Andre	Chapman, Chris	Neale, Heather
ICBC	van der Merwe, Sam		
Regrets	Bamford, Kevena	Bailey, Ian	
Recorder	Adlhoch, Grietje (LCTZ)		

Item #	Discussion	Actions
1	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	<input checked="" type="checkbox"/> Date of next meeting was added to the agenda.
2	Approve Minutes & Review Action Items <ul style="list-style-type: none"> Minutes were approved Action Items were updated 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Terms of Reference (TOR) for JEC <ul style="list-style-type: none"> Jeremy advised that Kevena wishes to wait until re-planning of the authentication/Rel 2 is done, as there is no urgency to convene the JEC. 	Kevena to update draft JEC TOR, contact Dave, Greg and Fred for JEC agenda items, and schedule the first JEC meeting. ON HOLD PENDING REL 2 RE-PLANNING
4	Security Design Sign-off <ul style="list-style-type: none"> Chris advised that the <i>Program wide Security Card manufacturing and production Security design</i> draft due July 27th is still in progress and that he will check with Eli on getting this done today. 	Chris to check status of draft <i>Program wide Security Card manufacturing and production Security design</i> draft with Eli today.

Item #	Discussion	Actions
CONT'D	<ul style="list-style-type: none"> • Patricia and Jeremy supported Chris's update and added that although work is in progress on Rel 2 it often does not get the attention needed because of the focus on Rel 1 issues. • SecureKey (Chris) and LCTZ (Patricia and Jeremy) recognize that Rel 2 re-planning needs to be a priority over the next 3 weeks. • Chris advised that a test harness was provided to LCTZ on July 1st but that it was unusable due to code bugs which never allowed it to function properly. SecureKey will resolve the bug issues over the next couple of days to have a working test harness by next Tuesday or Wednesday; making sure that the functionality needed is there to move forward. He also advised that SecureKey is working on a sandbox environment to enable testing and development. • The draft requirements of another counter-card reader concept that may be of interest to BC to support in person passcode management fulfillment needs was sent to Patricia July 27. Patricia has responded to Chris. 	<p>Chris to confirm timelines of sandbox environment early next week, after tokens received and tested by SecureKey.</p>
6	<p>Dual Reader Update</p> <ul style="list-style-type: none"> • Patricia advised that she has a meeting scheduled with Health architects on Monday and will give a quick status report to SecureKey afterwards. If Health has any hurdles they need to be cleared first before SecureKey starts working on this. 	<p>Patricia to send status report to SecureKey after her meeting with Health architects.</p>

Item #	Discussion	Actions
	<ul style="list-style-type: none"> <li data-bbox="398 427 1389 580">• <u>BMO CSP software</u> – As a follow up to discussions when Patricia was in Toronto recently, Chris asked if LCTZ is considering this passcode strategy as an option for citizens to set up their passcode at a counter. Patricia advised that BC will likely not pursue this option. 	

Actions to bring forward:

- Mid-August: Chris to work with Andre, Ian and Kevena to set up an initial discussion between GoC and BC, later in August.
- September: Chris to check if IRIS Checklist report can be shared with ICBC .

Cameron, Dianna LCTZ:EX

From: Moss, Jeremy LCTZ:EX
Sent: Wednesday, July 18, 2012 8:21 AM
To: 'Chris Chapman'; Wiebe, Patricia LCTZ:EX; Adlhoch, Grietje A LCTZ:EX
Subject: For our meeting today: SK / LCTZ PM notes from 2012-07-06
Attachments: 2012-07-18 Agenda - SK LCTZ PM Group.docx; 2012 07 06 Record - draft rev layout.docx; 2012-07-13 JOC Minutes draft V2.docx

Hi Chris, Patricia and Grietje,

Sorry for the last minute materials, but Grietje has prepared an agenda for us, and has a new, streamlined record of our discussion & action items, more closely aligned with our JOC format. I think it will be easier to use going forward, but wanted your thoughts as well.

Also, I'm attaching the draft JOC meeting minutes from our meeting on 2012-07-13. We don't have to review them today, but wanted Chris to have them before I left today,

S22

S22

Talk to you later today.

Jeremy

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, July 17, 2012 10:22 AM
To: Moss, Jeremy LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

Jeremy, attached are reformatted minutes and an agenda for your consideration.

Cheers,

G

From: Moss, Jeremy LCTZ:EX
Sent: Tuesday, July 17, 2012 8:56 AM
To: Adlhoch, Grietje A LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

Thx!

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, July 17, 2012 8:54 AM
To: Moss, Jeremy LCTZ:EX
Subject: RE: SK / LCTZ PM notes from 2012-07-06

I'll do a draft and you can decide based on that.



SECUREKEY/LCTZ PROJECT MANAGEMENT GROUP
July 18, 2012 Teleconference Meeting
SecureKey: Chris Chapman
LCTZ: Jeremy Moss, Patricia Wiebe & Grietje Adlhoeh

No.	Item	Lead
1.	Agenda Review	Jeremy
2.	Approve Minutes and Review Action Items	Jeremy
3.	JOC Meetings	Jeremy
4.	CMS Update / Project Dashboard	Chris
5.	Authentication Update / Project Dashboard	Chris
6.	Transition File	Chris/Patricia
7.	Actions/Next Steps/Other Updates	All

**SecureKey/LCTZ Project Management Group
Teleconference Meeting**
Friday, July 6, 2012, 10 a.m.

Attendees:

LCTZ Wiebe, Patricia Moss, Jeremy
SecureKey Chapman, Chris
Recorder Adlhoch, Grietje (LCTZ)

Item	Discussion	Actions
1.	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	
2.	Approve Minutes and Review Action Items <ul style="list-style-type: none"> Minutes were approved Action items were updated 	
3.	Document Sign-Offs / Approvals <ul style="list-style-type: none"> Patricia has feedback to discuss with SK. 	<ul style="list-style-type: none"> Chris to set up a meeting and SK will return update to LCTZ
4.	CMS Integration Testing <ul style="list-style-type: none"> SK probably ready to finish STP connection July 11/12. 	<ul style="list-style-type: none"> Jeremy to get update from Jason for next teleconference call Patricia to forward email to Jeremy and Chris regarding outstanding issues with STP connection
5.	USB keys <ul style="list-style-type: none"> Patricia and Chris will discuss when she's in Toronto (July 9-13). 	
6.	JSON document	<ul style="list-style-type: none"> Patricia to finish another pass through the document, meet with Chris to resolve any issues, finalize the document and start sign off process
7.	Security Design Sign-Off	
8.	ICBC Security Checklist / Site Visit <ul style="list-style-type: none"> Discrete report work being deferred to September Chris working with IBM to include part of ICBC technical design (in advance of a site visit) in the security design document 	<ul style="list-style-type: none"> Chris to follow up on removing 3rd party agent from ICBC's security checklist

Minutes

Joint Operations Committee (JOC) Meeting

S15

Friday, July 13, 2012, 11 a.m.

Attendees:

LCTZ	Bamford, Kevena	Bailey, Ian	Wiebe, Patricia	Moss, Jeremy
SecureKey	Boysen, Andre	Chapman, Chris		
ICBC	van der Merwe, Sam			
Regrets	Neal, Heather			
Recorder	Adlhoch, Grietje (LCTZ)			

Item #	Discussion	Actions
1	Agenda Review <ul style="list-style-type: none"> Agenda was reviewed and accepted 	
2	Approve Minutes & Review Action Items <ul style="list-style-type: none"> Minutes were approved Action Items were updated 	
3	Terms of Reference (TOR) for JEC <ul style="list-style-type: none"> Kevena will be starting work on these actions as a priority. 	Kevena to update draft JEC TOR, contact Dave, Greg and Fred for JEC agenda items, and schedule the first JEC meeting. OUTSTANDING
4	Security Design Sign-off <ul style="list-style-type: none"> SecureKey and LCTZ met in Toronto this past week. LCTZ provided feedback and SecureKey is working to complete the next draft, and expect to return the document to the Province (LCTZ) on July 27. 	Aehle to incorporate LCTZ feedback in next draft of the <i>Program wide Security Card manufacturing and production Security design</i> document and send to LCTZ (Patricia) by July 27 th .

Item #	Discussion	Actions
	<p>Authentication Project Dashboard</p> <ul style="list-style-type: none"> SecureKey and LCTZ met during week of July 9th to work on the JSON Functional Spec document. Revisions were made, some outstanding sections completed and scope changes added. The document is back in SecureKey's hands for next steps. Overall dashboard status unchanged Milestone 1, <i>Authentication interface functional design complete</i>: 80% complete; potential scope changes will be discussed between SecureKey and LCTZ. Milestone 3, <i>User Interface design complete</i>: Fair progress on prototyping. UI team met with LCTZ in Toronto this week. It will be fairly iterative with completion date not formalized. Two weeks needed to complete next cycle in prototype. Milestone 4, <i>Reporting Design complete</i>: Several items discussed this past week. There are a number of decisions the Province needs to make moving forward on billing related terms and requirements. A joint conversation between SecureKey and LCTZ is needed to clarify long list of requirements. Decisions are key to moving forward. Milestone 5, <i>SK to provide test env with test harness, test without services card</i>: There are some issues with the test harness that SecureKey is working on; initially connectivity problems and then code related issues. Yellow status is to reflect that the harness was not "clean" and might require code changes to remedy that. Work is in progress to sort this out ASAP. 	<p>Chris to send next draft of JSON Functional Spec document to Province (Patricia)</p> <p>Patricia and Chris to provide more detailed update regarding re-forecast milestones in a couple of days.</p> <p>Jeremy to set up a meeting next week with Andre, Ian, Patricia, Chris and himself to look at the Reporting Requirements and work through options.</p>

Item #	Discussion	Actions
9	<p>Actions / Next Steps</p> <ul style="list-style-type: none"> • ICBC advised that the IBM facility received 17,000 production cards with test PAN from IRIS July 12. The IBM data card printers have the chip module(s) working. • The IBM PAN data management document that will feed into the security document is being looked at by SecureKey. Aehle requested a conference call with Chet to review the PAN data management document. • SecureKey is working on sorting out the PAN encryption. Exchange of PAN number going pretty well between SecureKey and IRIS. SecureKey trying to get everything locked into Production mode to deliver August 1 batches. • Potential BC job action impact on ICBC's development schedule being monitored. ICBC is proceeding with Point of Service training and trying to work something out with the union. The possibility of a labor disruption has been raised as a risk to the ADM project board with quantification estimates of the risk. • SecureKey asked if the Province would be interested in having a conversation with Govt of Canada representatives regarding the Relying Party on-boarding process they use; as something to possibly leverage / apply to the BC scenario. LCTZ said yes they would definitely be interested. It was noted that GC uses a gateway that all RPs connect to and by having a broker in the middle, could increase privacy aspect whereas BC has a single sign on that all RPs are connected to. Possible knowledge to be learned from GC might be around the technical aspect of efficiencies and tools to use, internal marketing and mandate to get parties to the table. <p>ACTION: Chris to work with Andre, Ian and Kevena to set up an initial discussion later in August between GC and BC.</p>	

BF in September: Chris to check if IRIS Checklist report can be shared with ICBC

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, November 21, 2011 10:13 AM
To: Andre Boysen; Chet Watmough
Cc: John Ouilette; Pierre Roberge; Bailey, Ian D CITZ:EX
Subject: RE: Chip for the BC Services Card

Hi Chet

I confirm that the chip specification below is what is required for BC.
Please proceed with the order when you are ready.

Thanks
Andre

-----Original Message-----

From: Andre Boysen
Sent: Monday, November 21, 2011 11:51 AM
To: 'Chet Watmough'
Cc: John Ouilette
Subject: RE: Chip for the BC Services Card

Hi Chet, John

Thanks for the call Friday, it was a good discussion. Sorry for the abrupt end, mobile coverage in S22 is spotty at times.

I will verify the card details with Pierre and get back to you.
Thanks
Andre

-----Original Message-----

From: Chet Watmough [<mailto:cwatmoug@ca.ibm.com>]
Sent: Friday, November 18, 2011 6:38 PM
To: Andre Boysen
Cc: John Ouilette
Subject: Chip for the BC Services Card

Hi Andre,

As per our conversation this afternoon, here are the details for the chip that we are planing on moving forward with for the BC Services Card. IRIS will be ordering the Oberthur Technologies 4k Chrysalis Flybuy V2.0. This chip meets the technical specifications brought forward and is also found in the Visa Approved Contactless-Only Card list from October 2011.

Your call was breaking up towards the end so let us know if you would like to continue the discussion next week or if there are any questions or issues that we need to address.

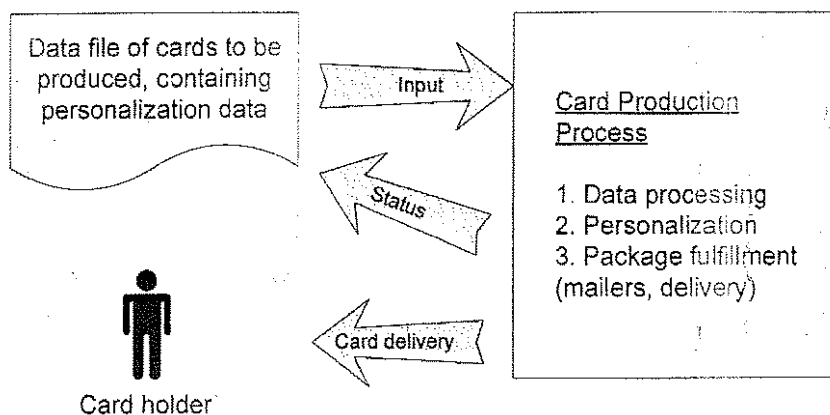
Chet Watmough
Senior I/T Architect
Application Services, Victoria
IBM Global Business Services
Phone: 250 220 1055
Cell 250-213-6752
E-mail: cwatmoug@ca.ibm.com

Discussion on Current Card Production Processes

- Chet described current process to produce BC Enhanced Driver Licence (EDL) which uses an RFID chip to communicate a personalized identifier at a US border crossing:
 - o Cards have several machine readable zones: 2D barcode, mag stripe, chip for EDL
 - o Card stock is serialized, for inventory and lifecycle management
 - o Cards are produced in batches, with personalization data sent in files from ICBC to IBM, then status data returned to ICBC
 - o Card production includes personalization, quality checks through the process, and delivery
- IBM uses IRIS as a card manufacturer; they are EMV co certified; IRIS uses Alien Higgs as a chip supplier

Discussion on Chip Personalization

- Mike showed a diagram that illustrated the general card production process, something like this:



- Smartcard chips store data, perform processing using applications, and have a secure element which stores secrets (keys) and performs cryptographic functions. The cryptogram acts as a digital signature of the chip.

Data Items	Description	Process to set up/personalize
PAN	Primary Account Number, 16 digits long; first 4-6 digits are Bank Identification Number; next 10-12 digits are Card Number	<ul style="list-style-type: none"> - could be set by card manufacturer and assigned to cardholder after card personalization - could be blank from card manufacturer and assigned to cardholder during personalization - card issuer can develop their own scheme for setting card numbers
PAN Sequence Number	Optional number that can be used to track replacement cards	<ul style="list-style-type: none"> - card issuer can develop their own scheme for managing replacement cards within PAN or using PAN Sequence

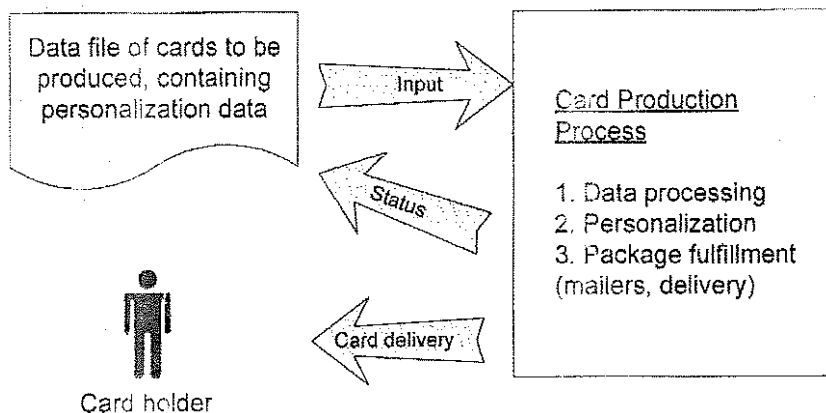
- Andre asked about whether it was BC's vision to use the new card for financial transactions.
 - o He recommended that it be considered now during chip design phase and it would be a minimal increment.
 - o Peter advised that this has not been in scope of the project for the past two years, and could jeopardize the public acceptance of the new card.
 - o After further discussion, it was discovered that designing the new card for financial transactions meant:
 - using a contactless chip for authentication AND a contact chip for financial transactions, and,
 - additional certification.
- Peter will discuss the issue with the CIO, but we are to continue with the current thinking that
 - o The new card will only have a contactless chip
 - o No financial transactions will be done using the card

Discussion on Current Card Production Processes

- Chet described current process to produce BC Enhanced Driver Licence (EDL) which uses an RFID chip to communicate a personalized identifier at a US border crossing:
 - o Cards have several machine readable zones: 2D barcode, mag stripe, chip for EDL
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Discussion on Chip Personalization

- Mike showed a diagram that illustrated the general card production process, something like this:



- Smartcard chips store data, perform processing using applications, and have a secure element which stores secrets (keys) and performs cryptographic functions. The cryptogram acts as a digital signature of the chip.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, February 15, 2012 11:11 AM
To: 'Andre Boysen'; 'Chris Chapman'
Subject: RE: Contract schedules

Yes Thursday afternoon is clear right now from 1pm to 4pm.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, February 14, 2012 5:50 PM
To: Bailey, Ian D CITZ:EX; Chris Chapman
Subject: Contract schedules

Hi Ian

There are 5 schedules planned for the MSA (master services agreement). This is based on the previous version of the contract, but I am not expecting it to change with the new draft we get from our lawyer.

Schedule	Description	Comments
A	Project Overview and Services	Review - First draft attached - start with NOI - needs more discussion about how broad/narrow we go here.
B	Project Implementation Plan	Review - There is a lot of content - will cut what is not required
C	Fees	Both - Need to discuss w Greg and based on email
D	BC Citizens Services Security Provisions	BC to provide
E	BC Privacy Protection	BC to provide
F	Card Specification	SK - We have this - need to get it in schedule form.

Take a look and we can talk about next steps. Do you have a time in mind to go over the fees?
Thurs PM PST or Friday?
Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, October 13, 2011 11:19 AM
To: 'Andre Boysen'; XT:Thomson, Kathy CITZ:EX
Cc: 'Jaime Shapiro'
Subject: RE: Contracts

Ok, thanks.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, October 13, 2011 11:08 AM
To: Bailey, Ian D CITZ:EX; XT:Thomson, Kathy CITZ:EX
Cc: Jaime Shapiro
Subject: RE: Contracts

Hi Ian

We will include all the relevant sections in our draft to you. My point was that the GC contract is not a single document it is a collection of documents the refer to each other. We would like to build a single agreement that includes all the relevant sections so it be easier to read and manage from.

A

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, October 13, 2011 2:01 PM
To: Andre Boysen; XT:Thomson, Kathy CITZ:EX
Cc: jaime.shaprio@securekey.com
Subject: RE: Contracts

Andre,

I would think the federal government contract would be relevant for the citizen services contract, were you thinking not relevant to contract 1?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, October 13, 2011 7:37 AM
To: XT:Thomson, Kathy CITZ:EX; Bailey, Ian D CITZ:EX
Cc: jaime.shaprio@securekey.com
Subject: Contracts

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, October 13, 2011 11:29 AM
To: 'Andre Boysen'
Subject: RE: Contracts

Andre,

Did we ever get a contract with you when we did the original proof of concept work? You would have seen our standard boiler plate for a contract.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, October 13, 2011 11:08 AM
To: Bailey, Ian D CITZ:EX; XT:Thomson, Kathy CITZ:EX
Cc: Jaime Shapiro
Subject: RE: Contracts

Hi Ian

We will include all the relevant sections in our draft to you. My point was that the GC contract is not a single document it is a collection of documents the refer to each other. We would like to build a single agreement that includes all the relevant sections so it be easier to read and manage from.

A

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Sent: Thursday, October 13, 2011 2:01 PM
To: Andre Boysen; XT:Thomson, Kathy CITZ:EX
Cc: jaime.shapiro@securekey.com
Subject: RE: Contracts

Andre,

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Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, October 13, 2011 7:37 AM
To: XT:Thomson, Kathy CITZ:EX; Bailey, Ian D CITZ:EX

Cc: jaime.shaprio@securekey.com

Subject: Contracts

Hi Kathy

To get a proper template for our agreement will take about one week with our lawyer. What we did with the Federal Gov was based on the RFP and not really well suited to our needs here.

Is this ok? Or do you need something sooner?

Thanks

Andre

Pages 219 through 220 redacted for the following reasons:

s14

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, January 24, 2012 5:03 PM
To: 'Chris.Chapman@securekey.com'
Subject: Re: Draft Agenda for SecureKey visit Jan 26/27

Thanks Chris.

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Tuesday, January 24, 2012 04:24 PM
To: Wiebe, Patricia CITZ:EX
Cc: Bailey, Ian D CITZ:EX; Andre Boysen <andre.boysen@securekey.com>
Subject: RE: Draft Agenda for SecureKey visit Jan 26/27

Patricia, Ian,

I have attached an agenda for our session - more of a framework as I am sure the discussion will move around a bit nad we can adjuust as needed.

We'll be starting at 9am 36 York Mills Rd Suite 500. I will be there at 8:30 and can be reached at 416 986 3727 if you need to call.

We will be having an early dinner at 5:30 at S15 Thurs evening which will get you back to the hotel at a decent hour. The restaurant is very near the office.

Have a safe flight. See you Thursday,

Chris

From: Wiebe, Patricia CITZ:EX [Patricia.Wiebe@gov.bc.ca]
Sent: Tuesday, January 24, 2012 12:11 AM
To: Chris Chapman
Cc: Bailey, Ian D CITZ:EX; Andre Boysen
Subject: RE: Draft Agenda for SecureKey visit Jan 26/27

Hi Chris

Sorry for the delay in responding. Our admin booked our travel arrangements today. We will arrive in Toronto Wednesday at midnight, and fly home Friday at 2pm. That means we will be able to have workshop time with you all day Thursday and Friday morning until noon. We will stay at the S22

S22 Please advise if we will be meeting at a different SecureKey office location.

Your agenda seems fine. I suggest that we focus Thursday morning on describing our respective visions and roadmaps, and Thursday afternoon on the near-term design goals. Inevitably after a night to "sleep on it" we will come back with refinements and things to discuss further. So I suggest Friday morning is to review the design we discussed on Thursday and then mobilize it into an action plan for completing design and proceeding with development.

Looking forward to meeting you later this week,
Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Monday, January 23, 2012 12:29 PM

To: Wiebe, Patricia CITZ:EX
Subject: FW: Draft Agenda for SecureKey visit Jan 26/27

Patricia,
Just checking in on my note from Friday. Have you had a chance to review the draft agenda?
If you are able to send your travel plans and where you and Ian are staying in Toronto that would be helpful.
Regards, Chris

From: Chris Chapman
Sent: Friday, January 20, 2012 11:14 AM
To: Wiebe, Patricia; (Ian.Bailey@gov.bc.ca)
Cc: Andre Boysen (andre.boysen@securekey.com)
Subject: Draft Agenda for SecureKey visit Jan 26/27

Ian, Patricia,

Here is a draft agenda for your visit next week. Please send along your comments and input on the high level segments. Once we confirm these items I can work out some timing and a few more details with you. Would you mind also sharing your travel itinerary so we can schedule the start/stop? Thanks very much. Looking forward to meeting and working with you next week.
Regards,

Chris

Draft Agenda:

Item	Owner	Outcome
Intro/Objectives	Skey/BC	Introductions, agree on what we want to accomplish
Overview of BC Scope/Projects:	BC	<ul style="list-style-type: none">• BC Vision and rollout strategy• Priorities for solutions and channels• Pilots/projects to close the gap and bring the vision to life
BC update on Card Program/Sponsorship etc	BC	Update Skey on key changes, developments with BC Gov and priorities
CBS 2.0 Vision and Roadmap	Skey	Walkthrough, Level set of CBS 2.0 platform
Skey business update	Skey	Update BC on key changes, developments with Skey
Design Workshop priority scenarios.	Skey/BC	<ul style="list-style-type: none">• Design and develop a solution that can be implemented now• Solution meets BC's requirements for chip and passcode authentication of BC Services Card• Solution is extensible for mobile, no-plug-ins, single-sign-on, etc.
Close out		Next Steps/Project meeting frequency etc.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 18, 2011 1:00 PM
To: 'Andre Boysen'
Subject: RE: Draft contract?

Were you and Andre going to get back to us soon on the \$'s negotiation?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 18, 2011 12:53 PM
To: Bailey, Ian D CITZ:EX
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: RE: Draft contract?

Hi Ian

I was on a call this morning and I have another in the morning to get this completed.

Let me get through tomorrow morning and update you again.
Andre

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tuesday, October 18, 2011 1:26 PM
To: Andre Boysen
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: Draft contract?

Andre,

Just a reminder that you were going to send Kathy and us draft contracts. How soon do you think you could get that?

Thx, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, October 18, 2011 1:05 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: Draft contract?

Yes. We are coming back on that as well. The contract has influence on this a bit for us.
We will be back in the next few days.

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tuesday, October 18, 2011 4:00 PM
To: Andre Boysen
Subject: RE: Draft contract?

Were you and Andre going to get back to us soon on the \$'s negotiation?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 18, 2011 12:53 PM
To: Bailey, Ian D CITZ:EX
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: RE: Draft contract?

Hi Ian

I was on a call this morning and I have another in the morning to get this completed.

Let me get through tomorrow morning and update you again.
Andre

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tuesday, October 18, 2011 1:26 PM
To: Andre Boysen
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: Draft contract?

Andre,

Just a reminder that you were going to send Kathy and us draft contracts. How soon do you think you could get that?

Thx, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch

Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, October 19, 2011 10:24 AM
To: Bailey, Ian D CITZ:EX
Subject: RE: Draft contract?

Hi Ian Kathy

We are making good progress on a draft. Hoping for something Friday from the lawyer.

A

"Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Were you and Andre going to get back to us soon on the \$'s negotiation?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 18, 2011 12:53 PM
To: Bailey, Ian D CITZ:EX
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: RE: Draft contract?

Hi Ian

I was on a call this morning and I have another in the morning to get this completed.

Let me get through tomorrow morning and update you again.
Andre

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tuesday, October 18, 2011 1:26 PM
To: Andre Boysen
Cc: XT:Thomson, Kathy CITZ:EX; Fast Gordon, Audra SSBC:EX
Subject: Draft contract?

Andre,

Just a reminder that you were going to send Kathy and us draft contracts. How soon do you think you could get that?

Thx, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, April 25, 2012 9:12 AM
To: Bamford, Kevena LCTZ:EX
Cc: Bailey, Ian D LCTZ:EX; Chris Chapman
Subject: RE: Establishment of the Joint Operations Committee

Hi Kevena

Thanks for the note.

I am thinking Fridays at 11AM PST would be a good slot. We can move to after lunch if that works better. For now Chris and I will be present for SK. We can amend attendees as we get in to the project content.

Talk soon
Andre

From: Bamford, Kevena LCTZ:EX [<mailto:Kevena.Bamford@gov.bc.ca>]
Sent: Tuesday, April 24, 2012 4:24 PM
To: Andre Boysen
Cc: Bailey, Ian D LCTZ:EX; Bamford, Kevena LCTZ:EX
Subject: Establishment of the Joint Operations Committee

Hi Andre

We would like to established the formal JOC meetings.

I believe that we established in the MSA that we would meet bi-weekly during project activities and the move to monthly during operations or stabilization after the project work is complete.

Please advise if there is a time block that will work on a regularly bi-weekly basis that we can schedule.

Please also advise who you would like to attend I think we stated that at a minimum that we wanted yourself, Ian and myself However we anticipate that Patricia should be involved as well as we will include someone for Shared Services (our operations side of the house). As such, we expect you may want to include someone like Chris Chapman, etc.

We will also want to establish the JEC, however we will get this one set up first.

Thanks
Kevena.

Pages 228 through 229 redacted for the following reasons:

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Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 11, 2011 1:51 PM
To: 'Greg Wolfond'; 'Andre Boysen'; Watkins, Peter CITZ:EX; Bamford, Kevena LCTZ:EX
Subject: RE: Follow up on Model - Call

I can make 3:30pm work. Kevena, Peter, are you available?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Greg Wolfond [<mailto:greg@securekey.com>]
Sent: Tuesday, October 11, 2011 1:48 PM
To: Andre Boysen; Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: Re: Follow up on Model - Call

Andre 330 pst works for me.

g

Online Security Made Easy - SecureKey

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 11, 2011 04:45 PM
To: Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>; Peter Watkins <peter.watkins@gov.bc.ca>
Cc: Greg Wolfond
Subject: Follow up on Model - Call

Hi Ian, Peter

Greg and I would like to do another iteration on the card model. We have looked at what you have done and tried to accommodate the changes in the model.

When do you want to have a call? How about tonight between 3:30 PST?
Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 11, 2011 2:12 PM
To: 'Greg Wolfond'; 'Andre Boysen'; Watkins, Peter CITZ:EX
Subject: RE: Follow up on Model - Call

Me too...Are we conferencing?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Greg Wolfond [<mailto:greg@securekey.com>]
Sent: Tuesday, October 11, 2011 1:48 PM
To: Andre Boysen; Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: Re: Follow up on Model - Call

Andre 330 pst works for me.

g

[Online Security Made Easy - SecureKey](#)

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 11, 2011 04:45 PM
To: Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>; Peter Watkins <peter.watkins@gov.bc.ca>
Cc: Greg Wolfond
Subject: Follow up on Model - Call

Hi Ian, Peter

Greg and I would like to do another iteration on the card model. We have looked at what you have done and tried to accommodate the changes in the model.

When do you want to have a call? How about tonight between 3:30 PST?
Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, January 11, 2012 10:11 AM
To: 'Andre Boysen'
Subject: RE: follow up

Can you call my cell phone S17 at 12:10 pm PST today?

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, January 11, 2012 10:04 AM
To: Bailey, Ian D CITZ:EX
Subject: follow up

Hi Ian

Do you have time for a quick chat today?
Want to follow up on pricing and noi discussion
A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, December 16, 2011 10:05 AM
To: Bailey, Ian D CITZ:EX
Subject: Re: Follow-up

Working on it

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2011-12-16, at 12:20, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

I'll be thinking about the loss of browser plug-in architecture over the next while...things I'm wondering about...

Javascript/ajax soap interaction with your pc host software instead of plug-in architecture.

From: Wiebe, Patricia CITZ:EX
Sent: Thursday, December 15, 2011 8:17 PM
To: 'Maggie Au'; 'Andre Boysen'
Cc: 'Heather Neale'; Bailey, Ian D CITZ:EX
Subject: RE: Follow-up

Hi Maggie, Andre

Thank you I'm glad I came and met with you and your team also.
Here are the slides that I shared with you while I was there, for your internal use (under our confidentiality agreement, of course).

I will answer your questions below inline.

I explained the things that I learned yesterday with Ian, such as the browser-plug-in issue. We would like to hear more about the technical method/protocol for calling back/push to the token or phone. Can you send me something on this ASAP, perhaps even an email description, so we can understand, and then later discuss further.

Thanks,
Patricia

Patricia Wiebe, Director, Identity and Information Architecture and Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

From: Maggie Au [<mailto:maggie.au@securekey.com>]
Sent: Thursday, December 15, 2011 3:14 PM
To: Wiebe, Patricia CITZ:EX
Cc: Heather Neale
Subject: Follow-up

Hi Patricia,

It was my pleasure to meet you in person yesterday. We had a great discussion yesterday and we shared our vision and roadmap. In the next week, we will provide you an update on the design document with descriptions.

There are a few items that we need your feedback on:

- Whether it is okay for CSB to get encrypted data and provide a pass through to the RP.

[PW] This will require further discussion internally, so I cannot give a quick answer. We haven't yet spent much time discussing SecureKey as an identity broker or identity agent.

- Whether the serial number on the back of the service card is unique? Currently the format is "a00000000".

[PW] The card serial number is unique. For your reference it is "inventory control number" in the AAMVA standard.

I also have some questions with regard to the card production project. We ran out of time yesterday!

- Do you know when we can share the flow with ICBC/IBM/IRIS?

[PW] We anticipate that some very important decisions are to be made in the next week or two about who's in charge of what part of the project/implementation. And anticipate that it will be in our favour. ☺ This will pave the way for workshops where we can make progress on the design. Hopefully in January.

- In order to have a new driver's license, the request must go through ICBC and IBM and the user will get the physical card from mail. No driver's license will be issued at the branch or service center. Is this right?

[PW] The process to get a photo card requires a counter visit, including registration and identity proofing, taking a photo, asking some questions, etc. Overnight the ICBC systems analyze the photos in their facial recognition system to search for potential duplicates. If successful, the next day or two, the card can be produced, then mailed. They aim for 3 day turnaround.

So, they never issue a card at the counter. But they do issue an interim driver licence on paper i.e. a paper that gives you permission to drive for 60 days that the police will accept if they check you.

- Do we need to have a PIN on the card? In the future to support the use on the terminal?

[PW] We've debated this at length before with Andre and Pierre. We do not think it is good design for us to put a PIN on the chip. Mostly because of the challenges with setting, changing and maintaining the PIN. We will continue to pursue and implement a "network" (i.e. server-based) passcode that is paired with a card account.

- IBM mentioned that they require to have one year of supply in inventory. Can the period be shorter?

[PW] This is their current practice and gives ICBC and IBM comfort. This may be in the ICBC-IBM contract. We can inquire again... but first why do you want the period to be shorter?

Thank you very much for your time to visit us in person. If there is anything else that you need, please let me know.

Best Regards,
Maggie Au
Professional Services
SecureKey Technologies Inc.
+1.416.477.5625 x5018

<BC Services Card and SecureKey Authentication Workshop 20111214.pptx>

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, January 17, 2012 3:04 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: Full Antennae in cards

Hi Ian

It sounds like IBM is referring to the ID-1 dimension as defined in the ISO/IEC 7810 standard (85.60 x 53.98)

If this is what they are referring to, then the answer is yes, this is what is needed.

Thx
Andre

-----Original Message-----

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tuesday, January 17, 2012 10:18 AM
To: Andre Boysen
Subject: FW: Full Antennae in cards
Importance: High

Andre, see below re Class 1 antenna. Please confirm you are good with this.

Thanks, Ian.

From: Thomson, Kathy [Kathy.Thomson@icbc.com]
Sent: January 17, 2012 6:25 AM
To: Bailey, Ian D CITZ:EX
Subject: FW: Full Antennae in cards

Ian can u confirm.

.....
Kathy Thomson
Director, Provincial Licensing
Driver Licensing Division
ICBC building trust. driving confidence.
.....
910 Government street |
Victoria | British Columbia | V8W 3Y8
telephone: 250-414-7625
facsimile: 250-978-8007 | mobile: 250-812-0387

-----Original Message-----

From: Van Der Merwe, Sam
Sent: Monday, January 16, 2012 3:22 PM
To: Thomson, Kathy
Subject: RE: Full Antennae in cards

Hi Kathy,
We (IBM) will provide a full ID-1 sized antenna, also known as a Class 1 antenna

Thanks

Sam

.
. . .

-----Original Message-----

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]

Sent: Monday, January 16, 2012 11:16 AM

To: Thomson, Kathy; Bamford, Kevena LCTZ:EX

Cc: andre.boysen@securekey.com; Bell, Carolyn P HLTH:EX; Wiebe, Patricia CITZ:EX

Subject: Full Antennae in cards

Kathy,

This note is to confirm our request to have the full antennae chip in the BC Services Card and Combo Card since all indications are that our manufacturer IRIS can produce these cards and our card authentication service provider SecureKey provides readers that work best with the full antenna.

Thanks, Ian.

This email and any attachments are intended only for the named recipient and may contain confidential and/or privileged material.

Any unauthorized copying, dissemination or other use by a person other than the named recipient of this communication is prohibited.

If you received this in error or are not named as a recipient, please notify the sender and destroy all copies of this email immediately.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, January 19, 2012 10:48 AM
To: 'Andre Boysen'
Cc: Watkins, Peter CITZ:EX
Subject: RE: fya

Andre, I talked to Greg and he says someone at SK is on it and will write something for us.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, January 19, 2012 10:46 AM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Re: fya

Ian

Let us look on to it

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-01-19, at 13:10, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Greg, see below.

We know that your technology is different in many ways from what is described at ITWorld Canada - but wondering if SK has a story on vulnerability or not with this Trojan.

From: Nikolejsin, Dave CITZ:EX
Sent: Thursday, January 19, 2012 9:53 AM
To: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Cc: MacKenzie, Kelly L CITZ:EX
Subject: fya

We need a defense ready for this...

http://www.itworldcanada.com/news/trojan-can-hijack-smart-cards-says-researcher/144700?sub=323012&utm_source=323012&utm_medium=govt&utm_campaign=enews

Dave Nikolejsin
Chief Information Officer
Province of British Columbia
tel: (250) 387 8509 fax: (250) 387 1940
Dave.Nikolejsin@gov.bc.ca

This email message, including any attachments, is confidential. It is intended only for the use of the person or persons to whom it is addressed unless I have expressly authorized otherwise. If you have received this communication in error, please delete the message, including any attachments, and notify me immediately by email or telephone.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, December 12, 2011 1:10 PM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Re: half vs. full antennae

I am on it.

Andre Boysen

On 2011-12-12, at 15:56, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Issue of half vs. full antennae came up with IBM need to talk to you re rationale for full antenna and any costs in manufacturing of cards. Came up just now in meeting.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, February 27, 2012 9:19 PM
To: Bailey, Ian D LCTZ:EX
Cc: Wiebe, Patricia LCTZ:EX; Pierre Roberge; Chris Chapman
Subject: Re: handling returned mail...

Pierre will have to check our partner agreement for direction

I agree 1 makes sense.

I will get back to you

Andre Boysen
EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy
+16472872544

On 2012-02-27, at 23:30, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

> Andre,

>

> The current practice at ICBC for handling returned mailed out DL's is that they hold the returned mail for a period of time to allow for the person to contact them, update their mailing address, and have the card resent. This results in something like 80% of returned mail DL's finding their way to the rightful card holder. We want to continue with this practice and are wondering how this will fit into the card management lifecycle we are articulating in the contract.

>

> options that come to mind for returned mail handling:

> 1. we only let SK know when a card has exceeded the max holding time

> period for returned mail and we also destroy the card 2. we let SK know each time when a card as been returned to us, when a card has been resent, and when it is destroyed.

>

> I think our preference is 1.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, March 2, 2012 10:21 AM
To: Bailey, Ian D LCTZ:EX
Subject: Re: handling returned mail...

Thanks Ian

I will check

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-03-02, at 13:19, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

Sorry to take so long but I believe the answer is 1 year (seems pretty long doesn't it). So if you need us to notify you of receiving returned mail and putting in the safe let me know asap. Do you have a card state value in your card management system you can use for this?

Ian

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, February 28, 2012 11:28 AM
To: Bailey, Ian D LCTZ:EX
Subject: Fwd: handling returned mail...

Ian

How long does ICBC keep returned mail before destroying it?

Andre Boysen

Begin forwarded message:

From: Pierre Roberge <pierre.roberge@securekey.com>
Date: 28 February, 2012 14:26:19 EST
To: Andre Boysen <andre.boysen@securekey.com>
Subject: Re: handling returned mail...

Andre,

The current practice at ICBC for handling returned mailed out DL's is that they hold the returned mail for a period of time to allow for the person to contact them, update their mailing address, and have the card resent. This results in something like 80% of returned mail DL's finding their way to the rightful card holder.

We want to continue with this practice and are wondering how this will fit into the card management lifecycle we are articulating in the contract.

options that come to mind for returned mail handling:

1. we only let SK know when a card has exceeded the max holding time period for returned mail and we also destroy the card
2. we let SK know each time when a card as been returned to us, when a card has been resent, and when it is destroyed.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, February 17, 2012 4:54 PM
To: Wiebe, Patricia CITZ:EX
Cc: Bailey, Ian D CITZ:EX; Bamford, Kevena LCTZ:EX
Subject: Re: IT Services - SecureKey - Schedule A v0.1 (Authn).docx

Thanks

Will get going on it.

A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-02-17, at 18:17, "Wiebe, Patricia CITZ:EX" <Patricia.Wiebe@gov.bc.ca> wrote:

Hi Andre

Ian and I have finished drafting the authentication services schedule. As discussed on the phone, this is in addition to the card management services schedule. We can merge these two schedules later if it makes sense. It intentionally does not include credential brokering and access to payment terminals at this time, as we think that should be a later contract schedule.

Please review and provide feedback as soon as possible. We're done writing for the day! 😊

Patricia Wiebe, Director, Identity and Information Architecture and Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

<IT Services - SecureKey - Schedule A v0.1 (Authn).docx>

Pages 244 through 247 redacted for the following reasons:

S14

s14

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Sunday, September 25, 2011 5:08 PM
To: 'andre.boysen@securekey.com'
Subject: Re: meet next week

Ok 5pm monday

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Saturday, September 24, 2011 03:06 PM
To: Bailey, Ian D CITZ:EX
Cc: 'greg.wolfond@securekey.com' <greg.wolfond@securekey.com>; Andre Boysen <andre.boysen@securekey.com>
Subject: Re: meet next week

Hi Ian

It is hard to get out on short notice but greg and I can do a call tues 4-6 EST. If you and I can talk monday to make sure I have all pieces we can be more productive on tues. Does 5PM monday work?

A

Andre Boysen

From: Andre Boysen
Sent: Friday, September 23, 2011 05:36 PM
To: Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>
Subject: Re: meet next week

Great news
Checking w greg

"Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

Kathy and I just met with our senior management and we have approval to proceed with next step. We very much want Securekey (you and Greg) to come to Victoria next week to work with us on contract(s) structure, statement of work/service we are buying, and cost estimates. We have a board meeting on Thursday at which we would like to report on significant progress. Is this doable?

Call me if you want to.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Sunday, September 25, 2011 9:48 PM
To: Andre Boysen
Cc: XT:Thomson, Kathy CITZ:EX
Subject: RE: meet next week

Importance: High

Andre,

S22

S13

Actually, can we talk at 4pm (1pm my time)? I was on my BB and missed the eastern time part.

Ian

From: Andre Boysen [andre.boysen@securekey.com]
Sent: September 25, 2011 9:21 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: meet next week

thx

talk then

Andre Boysen

On 2011-09-25, at 20:08, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Ok 5pm monday

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Saturday, September 24, 2011 03:06 PM
To: Bailey, Ian D CITZ:EX
Cc: 'greg.wolfond@securekey.com' <greg.wolfond@securekey.com>; Andre Boysen <andre.boysen@securekey.com>
Subject: Re: meet next week

Hi Ian

It is hard to get out on short notice but greg and I can do a call tues 4-6 EST. If you and I can talk monday to make sure I have all pieces we can be more productive on tues. Does 5PM monday work?

A

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To: Bailey, Ian D CITZ:EX <Ian.Bailey@gov.bc.ca>
Subject: Re: meet next week

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Checking w greg

"Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

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Call me if you want to.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Sunday, April 1, 2012 9:00 AM
To: Bahjat Aman; 'Chet Watmough'; 'John Ouilette'; Bailey, Ian D LCTZ:EX
Cc: Pierre Roberge; 'Lee Chee Heong'; 'Yeoh Suat Lay'; 'nicholastan'; azwar@iris.com.my; Kirk Fergusson; Chris Chapman; Dmitry Barinov
Subject: RE: Meeting in IRIS Malaysia

Hello Bahjat

SecureKey will be attending the meeting in Malaysia between May 7th and May 9th. Attending from SecureKey will be:
Chris Chapman Project manager
Dmitry Barinov Chief Security Officer
Andre Boysen Business lead
There may be one other person from SecureKey attending with details to follow.

We should get going on meeting logistics and agenda. Chris will contact you under separate email to get this going.
Looking forward to our visit there.
Andre

From: Bahjat Aman [mailto:bahjat@iris.com.my]
Sent: Monday, March 26, 2012 9:03 PM
To: Andre Boysen; 'Chet Watmough'; 'John Ouilette'
Cc: Pierre Roberge; 'Lee Chee Heong'; 'Yeoh Suat Lay'; 'nicholastan'; azwar@iris.com.my
Subject: RE: Meeting in IRIS Malaysia

Hi Andre et al,

In that case we will defer the meeting in May, as it is better for SecureKey to firm up the contract with the client first before we proceed. I would suggest either 7th to 9th of May or 14th to 16th of May for the meeting, as long as both IBM and SecureKey are available on the dates.

Thank you and looking forward for your confirmation.

Best regards,
Bahjat Aman
Senior Manager, International Sales
IRIS Malaysia
Office: +603 899 60788
Mobile: +60123063671



From: Andre Boysen [mailto:andre.boysen@securekey.com]
Sent: Monday, March 26, 2012 11:08 PM
To: Bahjat Aman; 'Chet Watmough'; 'John Ouilette'
Cc: Pierre Roberge; 'Lee Chee Heong'; 'Yeoh Suat Lay'; nicholastan; azwar@iris.com.my
Subject: RE: Meeting in IRIS Malaysia

Hi Bahjat

Unfortunately I think we will have to defer this meeting.

S22

S22

Also, we are getting close and we still do not have confirmation. Can we plan for a date in May? Please let me know if you have a time that works.

Andre

From: Bahjat Aman [<mailto:bahjat@iris.com.my>]
Sent: Tuesday, March 13, 2012 9:40 PM
To: Andre Boysen; 'Chet Watmough'; 'John Ouilette'
Cc: Pierre Roberge; 'Lee Chee Heong'; 'Yeoh Suat Lay'; nicholastan; azwar@iris.com.my
Subject: Re: Meeting in IRIS Malaysia

Hi Andre,

Thank you for the confirmation.

Hi John/Chet,

Appreciate if you could confirm whether you can make it to IRIS on the 9th to 10th April for the face to face meeting between IRIS-IBM-SecureKey.

Thank you.

Best regards,

Bahjat Aman

Senior Manager, International Sales

IRIS Malaysia

Office: +603 899 60788

Mobile: +60123063671



From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, March 13, 2012 11:37 PM
To: Bahjat Aman
Cc: Pierre Roberge; Chet Watmough; John Ouilette; Lee Chee Heong; Yeoh Suat Lay
Subject: [SPAM detected by FortiMail] Re: Meeting in IRIS Malaysia

Hello Bahjat.

We are pleased to confirm we attend a meeting on April 9th or 10th.

Attending will be Dmitry Barinov and myself. I may one other associate with me

Please confirm one of these dates will work.

Thanks

Andre

Andre Boysen

+16472872544

On 2012-02-21, at 21:34, "Bahjat Aman" <bahjat@iris.com.my> wrote:

Dear All,

We would like to invite you and your esteemed colleague(s) to IRIS Malaysia for a face to face meeting for the *British Colombia Service Card Project* and other potential project(s) in the near future that we can collaborate together. We have been working closely for the current project, in which I believe it is best for us to have a face to face meeting to introduce on each other's company. The tentative agenda:

1. Introduce IRIS and its capability in the **Trusted Identity Sector** (National ID Cards, Driver's License, ePassport, Border Control etc.) to SecureKey/IBM.
2. Introduction of SecureKey and IBM to our top management in IRIS.
3. IRIS Facility tour in our complex.
4. Discussion of the current project direction.
 - a. Personalization of the cards (Exchange of activities between IRIS-SecureKey-IBM)
 - b. Project deliverables
 - c. Others
5. Moving forward:
 - a. Discussion on expanding the current success of the BCSC project and future adoption in other provinces in Canada/USA.
 - b. Other potential project(s).

Tentatively, it would be great if we can meet up by third week of March or early April, as the direction of the BCSC project will be clearer by then. It will be our honor to host you guys in IRIS and of course visit our beautiful country, Malaysia...

Looking forward for your positive reply and confirmation.

Best regards,

Bahjat Aman

Senior Manager, International Sales

IRIS Malaysia

Office: +603 899 60788

Mobile: +60123063671

<image001.jpg>

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, January 9, 2012 6:03 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: NOI and pricing?

Hi Ian

That is great news

I talked to Peter before the holidays. He said that the changes we asked for have been incorporated (we max out at \$2,00 but Health does not have to pay full freight on their own)

We should try to do a call this week. When do you have time?

A

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, January 09, 2012 5:10 PM
To: Andre Boysen
Subject: NOI and pricing?
Importance: High

Andre,

We are getting close to issuing NOI...likely this week. I was checking my sent items/inbox to see if we exchanged the latest pricing model as agreed at our last conference call on that topic. Do you have such an email?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, January 11, 2012 6:41 AM
To: Bailey, Ian D CITZ:EX
Subject: RE: NOI and pricing?

Thanks Ian
Just checking against our notes.
Will be back shortly

-----Original Message-----

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, January 09, 2012 11:03 PM
To: Andre Boysen
Cc: Greg Wolfond; Bamford, Kevena LCTZ:EX; Watkins, Peter CITZ:EX
Subject: RE: NOI and pricing?

Andre,

Here is a spreadsheet that outlines our understanding of pricing as per our last call.

Ian.

From: Andre Boysen [andre.boysen@securekey.com]
Sent: January 9, 2012 6:03 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: NOI and pricing?

Hi Ian

That is great news

I talked to Peter before the holidays. He said that the changes we asked for have been incorporated (we max out at \$2,00 but Health does not have to pay full freight on their own)

We should try to do a call this week. When do you have time?

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Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, February 2, 2012 12:09 PM
To: 'Andre Boysen'
Cc: 'Greg Wolfond'
Subject: RE: NOI had no challenges.

Yes please Andre our contracts people have asked for this in both pdf and word formats.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, February 2, 2012 10:21 AM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Re: NOI had no challenges.

Ian

Thanks for the update. That is fantastic

I am working on getting you the updated contracts

A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-02-02, at 13:19, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

NOI has closed and no challenge. Contract development needs to start...back to you soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 2, 2012 10:21 AM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Re: NOI had no challenges.

Ian

Thanks for the update. That is fantastic

I am working on getting you the updated contracts

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Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

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Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, December 8, 2011 5:18 PM
To: 'andre.boysen@securekey.com'
Subject: Re: out of country storage

Ok

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, December 08, 2011 03:36 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: out of country storage

Thanks for getting this for me.

We should probably touch base tomorrow if you have time.

A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2011-12-08, at 13:18, "Bailey, Ian D CITZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre,

The PAN and PAI can be stored outside of Canada I confirmed that with Charmaine.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, December 8, 2011 3:36 PM
To: Bailey, Ian D CITZ:EX
Subject: Re: out of country storage

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A

Andre Boysen
EVP Digital Identity and Authentication Services
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+16472872544

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Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, April 5, 2012 1:06 PM
To: Bailey, Ian D LCTZ:EX
Cc: Bamford, Kevena LCTZ:EX; Crane, David
Subject: RE: passcode setup and usage

Thanks.
Just reviewing but looks good.

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, April 05, 2012 4:02 PM
To: Andre Boysen
Cc: Bamford, Kevena LCTZ:EX; Crane, David
Subject: passcode setup and usage

Andre,

We've developed this language re passcode setup. Please consider.

For certainty, the use of a Services Card in setting a first passcode for a Services Card will not constitute access to Health Related Services or Non-Health Related Services or both and no Usage Fees are payable in respect of such a transaction. The use of a Services Card in making additional changes to the passcode for the Services Card will constitute access to Health Related Services if the Services Card is also used to access a Health Related Service within the same 12 month period (commencing on first use of the Services Card in a fiscal year); otherwise the use of a Services Card for additional changes to the passcode for the Services Card will constitute access to Non-Health Related Services and Usage Fees are payable in respect of such use in accordance with this SOW if it is the first use of the Service Card within the past 12 months.

Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, February 17, 2012 5:20 AM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond; Bamford, Kevena LCTZ:EX
Subject: Re: Point of service devices...

Thanks

It helps

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-02-17, at 2:06, "Bailey, Ian D CITZ:EX" <ian.Bailey@gov.bc.ca> wrote:

Andre, Greg,

Our estimate of Health care points of service is 15,000. Not sure if this is relevant to pricing but gives an order of magnitude.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Friday, February 24, 2012 12:56 PM
To: 'andre.boysen@securekey.com'
Cc: 'greg@securekey.com'
Subject: Re: Pricing update

Ok thx

----- Original Message -----

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Friday, February 24, 2012 11:58 AM
To: Bailey, Ian D LCTZ:EX
Cc: Greg Wolfond <greg@securekey.com>
Subject: Pricing update

Hi Ian

We are open to your option to switch proposal. We are going to add some words to make the intent clear.

Back to you shortly on this.

Thx

a

-----Original Message-----

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Friday, February 24, 2012 2:56 PM
To: Chris Chapman; Wiebe, Patricia LCTZ:EX
Cc: Andre Boysen
Subject: RE: Contract update

Thanks Chris.

-----Original Message-----

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Friday, February 24, 2012 11:55 AM
To: Bailey, Ian D LCTZ:EX; Wiebe, Patricia LCTZ:EX
Cc: Andre Boysen
Subject: RE: Contract update

Ian, Patricia,

Here you are...took a bit longer to get the comments sorted out on this end.

In this version we have an updated MSA and Sched A with parts 1 and 2 drafted for your review.

Thanks and have a good weekend.

Chris

-----Original Message-----

From: Andre Boysen
Sent: Thursday, February 23, 2012 8:13 PM
To: Ian D LCTZ:EX Bailey; Patricia LCTZ:EX Wiebe
Cc: Chris Chapman
Subject: Contract update

Hi Ian

We now have complete MSA and sched a prts 1 and 2 - nearing final draft got the lawyers - just your review.

Just need to clean up a few comments

Will have something out first thing

Sorry for the delay. S22

Chris is carrying the ball to get this to you

Andre Boysen
EVP Digital Identity and Authentication Services SecureKey - Online Security Made Easy

+16472872544

Pages 265 through 266 redacted for the following reasons:

S14

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, October 25, 2011 2:14 PM
To: 'Andre Boysen'
Subject: RE: SCA - Am I officially on my own?

Importance: High

I think so. Our legislation passed today so I think the NOI will be on the street during the conference.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, October 25, 2011 2:12 PM
To: Bailey, Ian D CITZ:EX
Subject: SCA - Am I officially on my own?

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, September 27, 2011 2:41 PM
To: 'Andre Boysen'; 'greg@securekey.com'; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: 'Soo, Jaslyn'
Subject: RE: Securekey conference call

Minutes of meeting today:

- Objective is to get crunchy descriptions of what we need to buy to start procurement process
- General agreement on the 3 contract structure
 1. BIN + EMV rights (ICBC)
 2. Services to support Card Personalization and activation (IBM)
 3. Authentication and Broker Services (Citizen Services)
- Detailed descriptions of the 3 procurements is needed and Andre to develop 1st drafts for end of day Friday
- Andre to contact Ian/Patricia for any feedback, clarification, etc if needed to accomplish 1st draft

S13

Let me know if I've got this wrong and I'll update.

Also, is it time to bring IBM to the table? Kathy, Greg?

Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

-----Original Appointment-----

From: McDonald, Seanna CITZ:EX **On Behalf Of** Bailey, Ian D CITZ:EX
Sent: Monday, September 26, 2011 2:09 PM
To: Bailey, Ian D CITZ:EX; 'Andre Boysen'; 'greg@securekey.com'; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: 'Soo, Jaslyn'
Subject: Securekey conference call
When: Tuesday, September 27, 2011 1:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: SSBC WTS R W109D, 20 persons, managed by WTS Facilities at 4000 Seymour

Conference Call Dial in # S15, S17
Participant ID # S15, S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 21, 2012 1:16 PM
To: Wiebe, Patricia LCTZ:EX
Cc: Bailey, Ian D LCTZ:EX; Greg Wolfond; Chris Chapman
Subject: Re: SecureKey-Citizens' Services MSA - comments from Ian and Patricia

Hi Patricia

Can we do 4:30 PST?

Greg won't be on the call

Thanks

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-02-21, at 15:07, "Wiebe, Patricia LCTZ:EX" <Patricia.Wiebe@gov.bc.ca> wrote:

Hi Andre here is our first pass review of the MSA. Note we have not reviewed with our legal people this is just our feedback. You will see that we made some wording changes to make things clearer (at least in our minds), and added some comments for us to discuss further.

Can we get together for a concall later today? Propose a time and we'll make ourselves available.

p.s. how are the schedules coming along?

Patricia

<SecureKey-Citizens' Services MSA (CLEAN V1) - pwiebe comments3.doc>

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, February 8, 2012 2:08 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012

Good. I will get that amendment in.

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Wednesday, February 08, 2012 5:07 PM
To: Andre Boysen
Cc: Chris Chapman
Subject: RE: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012

I think one is best.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, February 8, 2012 2:07 PM
To: Bailey, Ian D CITZ:EX
Cc: Chris Chapman
Subject: RE: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012

Ok, we can work with that.

Do we want a single contract or two keep them as two separate agreements.
Andre

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Wednesday, February 08, 2012 5:05 PM
To: Andre Boysen
Cc: Chris Chapman
Subject: RE: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012
Importance: High

I may have forgot to tell you that ICBC would now prefer that our Ministry hold the contract(s) or did I tell you that already!

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, February 8, 2012 1:26 PM
To: Bailey, Ian D CITZ:EX
Cc: Chris Chapman
Subject: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012

Hi Ian

Here a draft close to what you we sent during the last iteration.
It is focused on getting the ICBC part right. We are working on the Citizen Services agreement as well.

Chris Chapman and I are working on getting the schedule populated. Our lawyer is amending the agreement to reflect our updated design decisions. This should surface in the next day or so; I was hoping to have it already.

Once this draft is completed we will get the updated CS agreement to you.

I hope this works

Andre

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Wednesday, October 26, 2011 7:16 PM
To: XT:Thomson, Kathy CITZ:EX; 'andre.boysen@securekey.com'
Subject: Re: SecureKey-ICBC Chip Card Agreement (v3)

Thanks Andre.

From: Thomson, Kathy [<mailto:Kathy.Thomson@icbc.com>]
Sent: Wednesday, October 26, 2011 06:15 PM
To: 'andre.boysen@securekey.com' <andre.boysen@securekey.com>; Bailey, Ian D CITZ:EX
Subject: Re: SecureKey-ICBC Chip Card Agreement (v3)

Thanks Andre.

Kathy Thomson
Director, Provincial Licensing.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Wednesday, October 26, 2011 06:03 PM
To: Thomson, Kathy; Ian Bailey <Ian.Bailey@gov.bc.ca>
Subject: SecureKey-ICBC Chip Card Agreement (v3)

Hi Kathy and Ian

I am pleased to report that we have a first draft of contract 1 for your review. We have left some blank schedules in the agreements that we will have to complete together, and some that you will have content for already. We can talk about them after your first review.

Please take a look and once you have comments we have can a discussion.

Thanks so much
Andre

This email and any attachments are intended only for the named recipient and may contain confidential and/or privileged material. Any unauthorized copying, dissemination or other use by a person other than the named recipient of this communication is prohibited. If you received this in error or are not named as a recipient, please notify the sender and destroy all copies of this email immediately.

Pages 273 through 274 redacted for the following reasons:

s14

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, March 19, 2012 5:34 PM
To: Bailey, Ian D LCTZ:EX; Greg Wolfond
Cc: Bamford, Kevena LCTZ:EX
Subject: RE: set passcode?

Hi Ian

S13

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, March 19, 2012 8:06 PM
To: Andre Boysen; Greg Wolfond
Cc: Bamford, Kevena LCTZ:EX
Subject: set passcode?
Importance: High

Andre, Greg,

S13

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Page 276 redacted for the following reason:

S14

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Saturday, April 7, 2012 9:35 AM
To: Bailey, Ian D LCTZ:EX
Subject: RE: Telus agreement

Thx - will review

-----Original Message-----

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Saturday, April 07, 2012 12:34 PM
To: Andre Boysen
Subject: Telus agreement

http://www.cio.gov.bc.ca/cio/strategic_partnerships/contract_admin/tsma_index.page?

Andre, here is the master agreement with telus where you can our standard terms.

Page 278 redacted for the following reason:

S14

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Sunday, April 1, 2012 2:42 PM
To: Bailey, Ian D LCTZ:EX
Subject: Re: time is of the essence

Thanks Ian - good session

Will get the provisions

Got the date

A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-04-01, at 17:10, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre, can you see if we can get the confidentiality/security rules re the PANS tomorrow...we need to understand these. Also, I guess I don't need to say we need to get this all done by the 14th. That is the drop dead date.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, February 24, 2012 11:40 AM
To: Bailey, Ian D LCTZ:EX
Cc: Greg Wolfond; Bamford, Kevena LCTZ:EX; Jaime Shapiro
Subject: Re: Tuesday conference call.

Hi Ian

I will be on a flight 1:30 - 4:30 PST

Can we go earlier or later? If not I will move my flight.

S14

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

On 2012-02-24, at 13:07, "Bailey, Ian D LCTZ:EX" <Ian.Bailey@gov.bc.ca> wrote:

Andre, Greg,

S14

Please advise if this time can work for you.

Thanks, Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Tuesday, February 14, 2012 9:06 AM
To: 'Andre Boysen'
Cc: 'Greg Wolfond'
Subject: RE: Update

Ok thanks Andre.

-----Original Message-----

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Tuesday, February 14, 2012 7:05 AM
To: Bailey, Ian D CITZ:EX
Cc: Greg Wolfond
Subject: Update

Hi Ian

Greg and Dave had a good meeting yesterday. They reached agreement on what would work well for BC. I would like to get time with you later this week to go through it. Thursday 12:00 PST to 5 pm works. I am pretty good Friday too

I have drafts of the schedules and will get them out today. Our lawyer is buried and promises we will get something soon - sorry for the delay.

Dmitry, our CSO, is presenting w Sierra at Reboot this week. Say hi if you are there

Talk soon
A

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Thursday, February 16, 2012 2:16 PM
To: Bailey, Ian D CITZ:EX
Cc: Brodie, Diane LCTZ:EX; Bamford, Kevena LCTZ:EX; Wiebe, Patricia CITZ:EX
Subject: RE: Urgency on contract

Hi Ian

We do have a draft back from our lawyer. Jaime, our internal contracts person is away this week. I am trying to expedite in his absence.

Update to follow
Andre

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Thursday, February 16, 2012 5:11 PM
To: Andre Boysen
Cc: Brodie, Diane LCTZ:EX; Bamford, Kevena LCTZ:EX; Wiebe, Patricia CITZ:EX
Subject: Urgency on contract
Importance: High

Andre,

Kevena just met with ICBC and we are reminded that we need to get the contract in place asap so that they can get their IBM contract amended in time. We need to have a really good draft version done and reviewable by ICBC for February 24th. By March 2nd we then have a draft that works for ICBC as our agent. Contract is with LCTZ as we discussed but we have to make sure that ICBC can properly amend their contract with IBM and that MUST be done by March 15th.

We are going to work on the 2 schedules and get these back to you. We have security and privacy schedules however since you will not be receiving any personal information the privacy schedule just says doesn't apply (or words to that effect).

We need your lawyer to get us the contract draft very very soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S14

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, May 30, 2012 12:39 PM
To: Bailey, Ian D LCTZ:EX
Subject: RE: visa approval of polycarbonate cards?

Can I call you at 1:30 PST?

From: Bailey, Ian D LCTZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Wednesday, May 30, 2012 2:52 PM
To: Andre Boysen
Subject: visa approval of polycarbonate cards?

Andre,

I understand that were expecting VISA approval of our polycarbonate cards by May 25th. Can you call me on my cell phone.

Ian Bailey
Executive Director & Chief Information Security Officer
Office of Chief Information Officer
Ministry of Labour, Citizens' Services and Open Government
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, December 15, 2011 9:41 AM
To: 'Andre Boysen'
Subject: RE: We have received the sample 3/4size antennea

Thanks.

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, December 15, 2011 8:37 AM
To: Bailey, Ian D CITZ:EX
Subject: Fwd: We have received the sample 3/4size antennea

FYI.

Will keep you posted

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey - Online Security Made Easy

+16472872544

Begin forwarded message:

From: Pierre Roberge <pierre.roberge@securekey.com>
Date: 15 December, 2011 11:35:11 EST
To: Andre Boysen <andre.boysen@securekey.com>, Greg Wolfond <greg@securekey.com>
Subject: We have received the sample 3/4size antennea

Testing will be performed this afternoon

Pierre A. Roberge, CTO and EVP Financial Solutions
Online Security Made Easy - SecureKey Technologies Inc.
pierre.roberge@SecureKey.com

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message vous a été transmis par erreur, veuillez en informer l'expéditeur et supprimer toutes copies immédiatement.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, October 3, 2011 4:01 PM
To: 'Andre Boysen'
Cc: 'greg.wolfond@securekey.com'; Watkins, Peter CITZ:EX
Subject: RE: where we are at.

Importance: High

Andre,

We got the ok to proceed with NOI, etc from our Project board this afternoon so all good there. With the NOI I would like to discuss the items in contract 1 with you.

Contract 1 Acquire Card Licensing Rights (ICBC)

- SecureKey to provide credential service provider bureau service - isn't this in contract 3?
- SecureKey to license card application for authentication services in networks is this Paywave?
- SecureKey to provide access rights to partner networks for authentication services what does this mean?
- SecureKey to provide the card management system - I think this is contract 2?
- SecureKey to define and maintain the network configuration profile what is this?

Did you want to talk now or tomorrow am?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Monday, October 3, 2011 12:46 PM
To: Bailey, Ian D CITZ:EX; 'greg.wolfond@securekey.com'
Subject: Re: where we are at.

Thanks for the update

A
Andre Boysen

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, October 03, 2011 03:35 PM
To: Andre Boysen; greg wolfond
Cc: Poutney, Richard G LCTZ:EX <Richard.Poutney@gov.bc.ca>; Watkins, Peter CITZ:EX <Peter.Watkins@gov.bc.ca>; Kishimoto, Mike J LCTZ:EX <Mike.Kishimoto@gov.bc.ca>
Subject: where we are at.

Andre, Greg,

We are still putting reviewing the doc Andre provided and considering other sources of information that would help. Back to you soon.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
Subject: RE:
Date: Monday, May 28, 2012 2:46:00 PM

Patricia,

I wanted to chat about timing for the various docs this week. Here is what I have on the list. The intent is that when you get these docs they will be signed off by SK pending BC concurrence. It does not leave much time to circulate internally and so wanted to talk through what is reasonable to complete the sign off process. I am avail this aft/evening for a call if needed.

Thx. Chris

	Doc	Review Status	Target Date
1	CMS-IAS interface, security design	Final review session BC/SK May 29, 2PM EST Ready for LCTZ signoff May 30	May 31
2	CMS-IRIS interface, security design	Final review session IRIS/BC/IBM May 29, 8:30PM EST Ready for LCTZ review May 30	May 31
3	CMS Program Security Design	Available for LCTZ review May 30 Will include IAS, IRIS docs as appendices	May 31 – should follow closure of 1, 2
4	IAS-SKAP functional, security design	My estimate is we will have a final draft by May 31 and will need a few extra days to finish up.	May 31

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Monday, May 28, 2012 2:16 PM
To: Chris Chapman
Subject: RE:

OK.

Btw – Ian asked again about the dual reader proposal.

I have time in an hour, but after that my afternoon is mostly booked up.

So email might be better than phone. Of course call me on my cell if its urgent.

Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Monday, May 28, 2012 11:13 AM
To: Wiebe, Patricia LCTZ:EX
Subject:

Sorry Patricia,

S22 .i will be unable to call until later today. Nothing urgent and can likely send an email a bit later too.

Thx. Chris

Chris Chapman,
SecureKey Technologies Inc - Online Security Made Easy.
chris.chapman@SecureKey.com

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From: [Bamford, Kevena LCTZ:EX](#)
To: ["Robert Blumenthal";](#)
cc: ["Heather Neale"; "Joanne Gore"; "andre.boysen@securekey.com";](#)
[Moss, Jeremy LCTZ:EX; Wiebe, Patricia LCTZ:EX;](#)
Subject: RE:
Date: Monday, August 13, 2012 2:40:03 PM

Hi Robert

I have just been in contact with GCPE of both Health and LCTZ - neither side is comfortable with SK providing a press release at this time.

I will explain further in tomorrow's JOC meeting.

Kevena.

-----Original Message-----

From: Robert Blumenthal [<mailto:robert.blumenthal@securekey.com>]

Sent: Monday, August 13, 2012 2:10 PM

To: Bamford, Kevena LCTZ:EX

Cc: Heather Neale; Joanne Gore

Subject: Re:

Hi Kevana,

Just wanted to touch base regarding the SecureKey / BC press announcement.

I understand there are some new PR people. Any news you can relate ?

Thanks

Robert

On 12-06-27 4:32 PM, "Bamford, Kevena LCTZ:EX" <Kevena.Bamford@gov.bc.ca>

wrote:

>Hi Robert

>I am the person that Andre has been working on re: the press release.

>This is still on hold. However, I will follow up again.

>

>A related activity is the publication of the MSA and SOW between the
>province and SK. Attached is the redacted version of both documents
>for SK's review.

>

>I sent this to Andre/Jaime - if you can review/stick handle - that is
>great. We were hoping for SK feedback by next week sometime. Please

>see note below re: future FOI request.
>
>Thanks
>Kevena.
>
>
>-----Original Message-----
>From: Bamford, Kevena LCTZ:EX
>Sent: Tuesday, June 26, 2012 11:31 AM
>To: 'Andre Boysen'; 'Jaime Shapiro'
>Cc: Bailey, Ian D LCTZ:EX; Bamford, Kevena LCTZ:EX
>Subject:
>
>Andre and Jaime
>
>Please find the attached SOW and MSA agreements redacted in preparation
>for publication (posting to the OCIO website).
>
>
>We wanted to send this to you as courtesy it terms of what we intend to
>post. Please advise of any high value concerns.
>
>That said, it is unlikely that all the redactions would survive a
>future FOIPPA challenge if one arises - In this light, it is prudent to
>alert you both to the risk that additional disclosure could be ordered
>in the event of a FOIPPA request.
>
>Lastly, this will also need to go through our public relations group
>before we disclose.
>
>Thanks
>Kevena.

From: [Moss, Jeremy LCTZ:EX](#)
To: [Wiebe, Patricia LCTZ:EX](#);
[Chris Chapman](#);
cc: [Adlhoch, Grietje A LCTZ:EX](#);
Subject: RE: 2012-08 14 JOC Agenda
Date: Friday, August 10, 2012 7:47:41 AM

Good catch – sorry we missed this, Patricia. Chris, suggest we re-publish a slightly amended version of the Authentication Dashboard. Something like “Sandbox available, but not usable by LCTZ until SecureKey delivers usable test cards and tokens.”

From: Wiebe, Patricia LCTZ:EX
Sent: Thursday, August 9, 2012 11:37 PM
To: Chris Chapman; Moss, Jeremy LCTZ:EX
Cc: Adlhoch, Grietje A LCTZ:EX
Subject: Re: 2012-08 14 JOC Agenda

Hi there

I just had a quick look through the agenda, dashboards and minutes that Grietje sent out (not this email thread).

I noticed in the dashboard that it said the test harness is still incomplete, but the sandbox is available. I think this is misleading. The sandbox is not sufficiently available to us until SK sends BC usable cards and tokens. We have had to stop work on our SK integration because of this. This has been outstanding since I was in Toronto, so 4 weeks now? I do not understand why it has taken so long. Please let me know if I've missed an email or if there's a package waiting for me at my desk ...

p.s. when you are ready to provide cards and tokens, I want one set to be provided to Jackie, our main developer on this component, who resides and works out of Toronto. He can come to the SK office to pick it up, just say when.

--Patricia

On 2012-08-09, at 11:28 AM, "Chris Chapman" <Chris.Chapman@securekey.com> wrote:

[Revised with comments.](#)

From: Moss, Jeremy LCTZ:EX [mailto:Jeremy.Moss@gov.bc.ca]
Sent: Thursday, August 09, 2012 12:18 PM
To: Chris Chapman
Cc: Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: FW: 2012-08 14 JOC Agenda

Hi Chris,

Here is a draft agenda for the next JOC. We can discuss during our phone call later today.

Jeremy

From: Adlhoch, Grietje A LCTZ:EX
Sent: Thursday, August 9, 2012 9:10 AM
To: Moss, Jeremy LCTZ:EX
Subject: 2012-08 14 JOC Agenda

Hi,

Did you want to send Chris the JOC proposed agenda for the 11 o'clock call?

G

<JOC Status Report - Auth 08142012 DRAFT.docx>

<JOC Status Report - Card Mgmt-Prod 08142012 DRAFT.docx>

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: RE: BC/Skey weekly team update
Date: Thursday, April 5, 2012 1:27:00 PM

Hi Chris

S22

S22 I should be able dial in.

Let's keep the Monday concall to have a quick touch base.

By the way, I had a good working session with Maggie and Ayinde this morning on the design document. Progress. 😊

I endeavour to create an interface spec for us incorporating our various work, and send to them by Monday.

We should schedule a concall on design for either Monday morning (between 9-noon Pacific) or Tuesday (preferably after 11am Pacific, but this is priority so I can skip my other meeting)

We could perhaps keep the pressure on ourselves by having short daily meetings.

Patricia

-----Original Appointment-----

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]

Sent: Monday, February 13, 2012 9:24 AM

To: Chris Chapman; Wiebe, Patricia CITZ:EX

Subject: BC/Skey weekly team update

When: Monday, April 9, 2012 11:00 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).

Where: Athena,

S15, S17

From: [Chris Chapman](#)
To: [Moss, Jeremy LCTZ:EX;](#)
cc: [Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX;](#)
Subject: RE: Draft JOC Meeting Minutes
Date: Thursday, August 9, 2012 8:45:38 AM
Attachments: [JOC Status Report - Auth 08142012 DRAFT.docx](#)
[JOC Status Report - Card Mgmt-Prod 08142012 DRAFT.docx](#)

Draft JOC updates for this aft's call.
Thx. Chris

From: Moss, Jeremy LCTZ:EX [mailto:Jeremy.Moss@gov.bc.ca]
Sent: Tuesday, August 07, 2012 8:37 PM
To: Chris Chapman
Cc: Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX
Subject: Draft JOC Meeting Minutes

Hi Chris,

Please see the attached draft JOC meeting minutes from July 27th. We can discuss on our phone call this Thurs.

Jeremy Moss
Program Development Director
Provincial IDIM Program | Office of the CIO
Ministry of Labour, Citizens' Services and Open Government

jeremy.moss@gov.bc.ca
desk phone: 250-387-1581
cell phone: S22

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
cc: [Moss, Jeremy LCTZ:EX;](#)
Subject: RE: IAS-CMS interface doc
Date: Wednesday, May 30, 2012 9:00:05 PM

Great news. Thank you.

-----Original Message-----

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Wednesday, May 30, 2012 11:57 PM
To: Chris Chapman
Cc: Moss, Jeremy LCTZ:EX
Subject: IAS-CMS interface doc

Just a quick note to say that today Ian reviewed the v1.2 of the IAS-CMS spec and is acceting of the security revisions. I also have acceptance from Henry (one of our security guys who thoroughly understands cryptography). So, you can feel more comfortable that this one will be signed off this week's package.

Now, off to review the next doc ...

Patricia

From: [Wiebe, Patricia CITZ:EX](#)
To: ["Andre Boysen";](#)
Subject: RE: IBMs card supplier
Date: Thursday, July 28, 2011 3:24:00 PM

Hi Andre

We do not feel comfortable with this approach. IBM has existing suppliers and manufacturers, however they may choose to use other ones for this project. I'd like to re-iterate that we need you to provide the chip specifications and capabilities required so that IBM can then find an appropriate supplier.

Thanks,
Patricia

Patricia Wiebe, A/Director, Identity and Information Architecture & Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

From: Andre Boysen [<mailto:andre.boysen@securekey.com>]
Sent: Thursday, July 28, 2011 10:43 AM
To: Wiebe, Patricia CITZ:EX
Subject: IBMs card supplier

Hi Patricia

Can you please get the name of the IBM card media supplier? IRIS (sp)

We are working on getting the details right for card issuance. We want to understand what capabilities they have.

Thanks
Andre

Andre Boysen
EVP - Digital Identity and Authentication Services
Online Security Made Easy - SecureKey

From: [Wiebe, Patricia LCTZ:EX](#)
To: [Moss, Jeremy LCTZ:EX](#);
cc: [Chris Chapman](#);
Subject: RE: JOC dashboards for July 13
Date: Thursday, July 12, 2012 6:45:00 AM
Attachments: [JOC Status Report - Card Mgmt-Prod 007132012 DRAFT.docx](#)
[JOC Status Report - Auth 07132012 DRAFT.docx](#)

Hi Jeremy – here are our revised dashboard files for Friday.

p.s. JOC is at 2pm (Eastern) and my flight is at 3pm. I should be able to dial in and listen for the first half or so until I have to board the plane.

Patricia

From: Chris Chapman [mailto:Chris.Chapman@securekey.com]
Sent: Thursday, July 12, 2012 9:20 AM
To: Wiebe, Patricia LCTZ:EX
Subject:

For our quick review.

I did make some changes to the CMS update I want to talk through.

Thx.

Chris Chapman,
SecureKey Technologies Inc - Online Security Made Easy.
chris.chapman@SecureKey.com

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From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: RE: Monday meetings
Date: Thursday, May 24, 2012 1:49:00 PM

Yes I'm fine with your proposal.

You can have any of my time from 9am-1pm Pacific, split it up as you will for the 3 meeting areas.

Patricia

From: Chris Chapman [mailto:Chris.Chapman@securekey.com]
Sent: Thursday, May 24, 2012 1:18 PM
To: Wiebe, Patricia LCTZ:EX
Subject: Monday meetings

Patricia,

On Monday we have a working session set up 9:30-10am PST (functional design) and a weekly update 11-12PST.

Kevena, Ian is looking for a meeting with us (you are invited too) to follow up on some contract escrow details 11:30-12PST.

Would you mind if I expanded the working session to an hour and shortened the weekly update to accommodate the escrow meeting?

Hope that 's not too confusing.

Thx. Chris

Chris Chapman,
SecureKey Technologies Inc - Online Security Made Easy.
chris.chapman@SecureKey.com

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From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: RE: next week
Date: Thursday, March 1, 2012 1:02:00 PM

Thanks. Appreciate the quick back-and-forth co-ordination.

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Thursday, March 1, 2012 12:46 PM
To: Wiebe, Patricia LCTZ:EX
Subject: RE: next week

Thank you for the options.

Just fired out the meeting changes and chose March 14 for the review given availability.

Chris

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Thursday, March 01, 2012 3:32 PM
To: Chris Chapman
Cc: Maggie Au
Subject: RE: next week

OK, we will defer to the following week.

Could we delay the Monday March 12 meeting from 11am PST by a bit? Like 1-2pm?

I'm scheduled to lead an important workshop with ICBC from 9-noon to wrap up design with them.

I'm also open Tues March 13 9-11 or Wed March 14 9-11.

Thanks,
Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Thursday, March 1, 2012 11:51 AM
To: Wiebe, Patricia LCTZ:EX
Cc: Maggie Au
Subject: RE: next week

I don't think its holding anything up on our end. Just wanted to finish the review

and make sure there weren't any significant changes.
We have time on Mon March 12 at 11PST for an hour. How about we aim for the 12th to finish that review?

Thx. Chris

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Thursday, March 01, 2012 2:34 PM
To: Chris Chapman
Cc: Maggie Au
Subject: RE: next week

I can do Tuesday 9am PST or Friday 9am PST for one hour.
My week is pretty full because of ICBC and Telus meetings.
I'm ok to defer another week, but not sure how much this delay is affecting your team.
Too much going on these days for me.

Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Thursday, March 1, 2012 11:15 AM
To: Wiebe, Patricia LCTZ:EX
Cc: Maggie Au
Subject: next week

Patricia,
You had asked who from SecureKey was going to visit next week. At the moment it looks like Andre, Hugh and June will be coming to see you and Telus.
So if we are to review the integration document next week we'll have to set up a conf call to review it as the technical folks will be in Toronto.
Please let us know if a review next week is feasible.
Thx. Chris

Chris Chapman,
Online Security Made Easy - SecureKey Technologies Inc.
chris.chapman@SecureKey.com

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From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: RE: overview diagram from Apr 3 workshop
Date: Thursday, April 5, 2012 9:54:00 AM

Keith's address is below in the forwarded email.

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Thursday, April 5, 2012 9:54 AM
To: Wiebe, Patricia LCTZ:EX
Subject: RE: overview diagram from Apr 3 workshop

Patricia,

Thx. Ayinde sent the docs....i have not shared with Keith....need to find his address.

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]
Sent: Thursday, April 05, 2012 10:30 AM
To: Chris Chapman
Subject: FW: overview diagram from Apr 3 workshop

Good morning Chris

I'm thinking we should share the interface doc that we are drafting now, in a few days when we're more ready.

But if you wish, you can send me (or Keith directly) the slides you wish to share from Apr 3. We can also discuss on our concall in a few hours.

Patricia

From: Rodrigue, Keith [<mailto:Keith.Rodrigue@icbc.com>]
Sent: Thursday, April 5, 2012 7:09 AM
To: Wiebe, Patricia LCTZ:EX
Cc: Van der Merwe, Sam ICBC:EX
Subject: RE: overview diagram from Apr 3 workshop

Thank you Patricia.

If there is a possibility of getting a copy of the SecureKey presentation it would be appreciated. This would assist with the language employed in our documents and give an understanding of Card Life Cycle, States and Use Cases.

Keith.

Keith Rodrigue

Driver Licensing Assessment and Analysis Services

ICBC building trust. driving confidence.

910 Government St 2nd Floor

Victoria | British Columbia | V8W 3Y8

direct: 250 414 7776

remote: S17

email: keith.rodrigue@icbc.com

From: Wiebe, Patricia LCTZ:EX [<mailto:Patricia.Wiebe@gov.bc.ca>]

Sent: Wednesday, April 04, 2012 10:53 PM

To: Rodrigue, Keith; Carey, David

Cc: Van Der Merwe, Sam; Turner, Greg CITZ:EX

Subject: overview diagram from Apr 3 workshop

Hi there

Keith – you requested to have a copy of the diagram I used in the Apr 3 partner planning & design workshop. See attached in VISIO format.

Dave – you were on the concall/webex, so I thought you might want a copy so you can see it clearer. I had handed out a paper copy in the meeting room.

Patricia

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From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
cc: [Moss, Jeremy LCTZ:EX;](#)
Subject: RE: planning to connect test environments
Date: Tuesday, June 12, 2012 5:47:58 AM

I'll set up a call later in the week and we'll go from there.
Thx. Chris

From: Wiebe, Patricia LCTZ:EX [mailto:Patricia.Wiebe@gov.bc.ca]
Sent: Monday, June 11, 2012 11:23 PM
To: Chris Chapman
Cc: Moss, Jeremy LCTZ:EX
Subject: planning to connect test environments

Hi Chris

As per our discussion today, yes, I think we should get our two tech/security teams together planning the connecting and testing work for June. Our test lead Jason (who should also take responsibility for integrating our test environments) is not available Tues or Wed, so perhaps Thursday or Friday? Unfortunately I still don't have my status update yet on where we are with our firewall rules and DMZ set up, but I don't think that should stop the planning and discussing.

Can you (or your Jason) propose a meeting time to our Jason; he can invite the team on our side. I don't think Jeremy or I need to be on the call, and I'd like to give them their space to work out the details.

Thanks,
Patricia

From: [Chris Chapman](#)
To: [Adlhoch, Grietje A LCTZ:EX](#); [Wiebe, Patricia LCTZ:EX](#);
Subject: RE: pre-JOC meeting disc - Patricia/Chris/Grietje
Date: Wednesday, August 22, 2012 11:52:12 AM
Attachments: [JOC Status Report - Auth 08292012 DRAFT.docx](#)
[JOC Status Report - Card Mgmt-Prod 08292012 DRAFT.docx](#)

Latest as of this aft.

-----Original Appointment-----

From: Adlhoch, Grietje A LCTZ:EX [<mailto:Grietje.Adlhoch@gov.bc.ca>]
Sent: Friday, August 17, 2012 5:54 PM
To: Adlhoch, Grietje A LCTZ:EX; Wiebe, Patricia LCTZ:EX; Chris Chapman
Subject: pre-JOC meeting disc - Patricia/Chris/Grietje
When: Wednesday, August 22, 2012 11:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Victoria - S15 / Toronto - teleconference

When: Wednesday, August 22, 2012 11:00 AM 12:00 PM (GMT 08:00) Pacific Time (US & Canada).

Where: Victoria S15 / Toronto teleconference

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

As discussed during August 17th conference call.

Phone Number S15, S17

Participant Access code: S15, S17

Regards,
Grietje

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
cc: [Moss, Jeremy LCTZ:EX;](#)
Subject: RE: quick update
Date: Wednesday, June 27, 2012 7:24:08 AM

Thanks Patricia,

Good news re: transition file.

I think the only other item is the Dual Card reader and that is with Dmitry and me.

We need to confirm the design requirements with you to get this moving again.

Heather is likely going to back me up while I am away, although Ayinde will be on point for co-ordination etc. I will confirm.

Thx. Chris

From: Wiebe, Patricia LCTZ:EX [mailto:Patricia.Wiebe@gov.bc.ca]
Sent: Wednesday, June 27, 2012 1:14 AM
To: Chris Chapman
Cc: Moss, Jeremy LCTZ:EX
Subject: quick update

Hi Chris

A quick update before JOC tomorrow:

S14

2. Program wide security design doc – it's on Ian's desk for his assessment on whether it's in the right direction. I asked him for his response to me today, maybe I'll get it in the morning, but he'll probably give it during JOC tomorrow then. I did review the doc with Henry (our security guy) and we have some feedback on the details, but I think the more important thing right now is about the scope and approach to the doc.

3. Re-plan – Ian is ok with a re-plan of contract authn deliverables. Kevena is still uncertain on what work the team can handle and what dates we even want to aim for. I am going to push Kevena and Ian yet this week to make some scope and feature decisions, but sounds like these decisions

need to be made by Dave, so will take some time.

4. Another trip – Ian is good with me traveling to accomplish design and planning. Kevena is aware that I am considering taking that trip. However there is still concern about scope and timing (see item 3). I’m thinking of being there during July 9-12. I will try to get that figured out in the coming days S22 Please let me know who will be covering for you during S22 so that I can co-ordinate meetings with him/her if the trip is going to happen.

5. Authn development work in progress – my developers gave me a demo today of how they successfully incorporated the SecureKey test widget and also a (non SecureKey) JSON service into our technical environment. So, they are in a good position to start integrating with the test harness that you will deliver in a few days.

6. Authn reporting design – sorry, this hasn’t gotten any more of my attention yet.

I’m just going from memory here. Is there anything else I need to update you on before JOC? If so, drop me a line and I’ll respond in the morning.

Patricia

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Maggie Au";](#)
cc: ["Chris Chapman";](#)
Subject: RE: Roles for the parties
Date: Saturday, April 14, 2012 7:31:00 PM

Hi Maggie

Changes below.

Thanks,

Patricia

From: Maggie Au [mailto:maggie.au@securekey.com]
Sent: Friday, April 13, 2012 1:33 PM
To: Wiebe, Patricia LCTZ:EX
Subject: Roles for the parties

Hi Patricia,

What do you think of the descriptions in the following table?

Thanks,

Maggie

The table below describes the role for the parties:

Ministry of Health	<ul style="list-style-type: none">• Sponsor of the BC Services card issuance project
Ministry of Labour, Citizens' Services and Open Government (LCTZ)	<ul style="list-style-type: none">• Owner of the SecureKey BC Service Cards.• Owner of the Identity Assurance Services (IAS), which will be the central and authoritative source of identity information for BC.• LCTZ is the Data custodian of the identity information collected related to issuing services cards. <p><i>ICBC, Health and other government parties may contribute identity information to LCTZ IAS.</i></p>
Insurance Corporation of BC (ICBC)	<ul style="list-style-type: none">• The main registration point for BC Services Cards• and they Facilitates the card production and delivery of the card to citizens• Crown corporation associated with BC government, with agreements to deliver these services to LCTZ and Health

SecureKey	<ul style="list-style-type: none"> • Bin owner of chips embedded in the BC Services cards. • Provides chip application specification to IRIS • Provides reader technology to read the BC Service cards for second factor authentication • Provides Chip Management System (CMS) services to IRIS and IAS (on behalf of IAS, ICBC and IBM).
IBM	<ul style="list-style-type: none"> • Provides card engraving service (or plastic personalization) for the BC Service cards. • Subcontractor to ICBC
IRIS	<ul style="list-style-type: none"> • Service cards manufacturer. • Provides chip personalization for the Service cards • Subcontractor to IBM

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: RE: update from ICBC
Date: Wednesday, April 18, 2012 8:24:00 PM

I sent a draft doc on security reqts to Ian. And he hasn't responded to me yet. He must be busy with something else, but I thought this was pretty high on his list. I'll remind him again tomorrow.

In the mean time, I'm making good progress with getting the data I need from ICBC, finishing up that spec.

Patricia

From: Chris Chapman [mailto:Chris.Chapman@securekey.com]
Sent: Wednesday, April 18, 2012 8:23 PM
To: Wiebe, Patricia LCTZ:EX
Subject: Re: update from ICBC

Excellent news.
Now this PCI stuff.... :)

From: Wiebe, Patricia LCTZ:EX [mailto:Patricia.Wiebe@gov.bc.ca]
Sent: Wednesday, April 18, 2012 05:21 PM
To: Chris Chapman
Subject: update from ICBC

An email from Sam today says "**We will provide the spoiled card information daily.**" And I hardly pushed for this. Glad they're making progress quickly. Good – one less thing to worry about.

Patricia

From: [Chris Chapman](#)
To: [Wiebe, Patricia LCTZ:EX;](#)
Subject: RE: Updated Security Requirements for BC Services Program
Date: Thursday, August 16, 2012 5:39:33 AM

Yes. Talked to Andre yesterday. Working on getting the requirement removed.

From: Wiebe, Patricia LCTZ:EX [mailto:Patricia.Wiebe@gov.bc.ca]
Sent: Thursday, August 16, 2012 1:18 AM
To: Chris Chapman
Subject: RE: Updated Security Requirements for BC Services Program

As you probably figured out... I talked to Ian today, who talked to Andre, who talked to you. Sounded like Andre wanted to get the VISA TPA requirement removed. So I will wait a few more days to hear from you on this, and continue to hold back the security requirements document from Sam / ICBC/IBM.

Patricia

From: Chris Chapman [mailto:Chris.Chapman@securekey.com]
Sent: Wednesday, August 15, 2012 10:14 AM
To: Wiebe, Patricia LCTZ:EX
Subject: FW: Updated Security Requirements for BC Services Program

Patricia, would you like me to set up a 30 min call with you, Ian, Dmitry to review this together?

From: Moss, Jeremy LCTZ:EX [mailto:Jeremy.Moss@gov.bc.ca]
Sent: Tuesday, August 07, 2012 12:01 AM
To: Chris Chapman
Cc: Wiebe, Patricia LCTZ:EX
Subject: FW: Updated Security Requirements for BC Services Program

Hi Chris,

I was surprised at the revised language in Section 1.4. The fact that it still says IBM will register as a Visa TPA "if required", will not, I think, provide ICBC or IBM with much reassurance. I thought SecureKey was just going to remove this language. Perhaps we can discuss sometime this week?

Jeremy

From: Wiebe, Patricia LCTZ:EX
Sent: Friday, August 3, 2012 10:22 AM
To: Moss, Jeremy LCTZ:EX
Subject: FW: Updated Security Requirements for BC Services Program

Haven't looked at this yet myself, but forwarding to you.

Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Friday, August 3, 2012 9:27 AM
To: Wiebe, Patricia LCTZ:EX
Cc: Eli Erlichman; Dmitry Barinov
Subject: FW: Updated Security Requirements for BC Services Program

Patricia,

Here are the updated Visa requirements with the changes to Third Party Agents as per earlier discussions.

Section 1.4 contains the changes.

I will not send to ICBC until you and Ian have had a chance to review.

Thx. Chris

From: [Chris Chapman](#)
To: [Moss, Jeremy LCTZ:EX;](#)
cc: [Wiebe, Patricia LCTZ:EX;](#)
Subject: RE: Updated Security Requirements for BC Services Program
Date: Tuesday, August 7, 2012 6:01:17 AM

Jeremy,

I can explain why this is in there. I should have explained last week but did not obviously.

Please let me know when you have a few mins for a call.

Thx. Chris

From: Moss, Jeremy LCTZ:EX [mailto:Jeremy.Moss@gov.bc.ca]
Sent: Tuesday, August 07, 2012 12:01 AM
To: Chris Chapman
Cc: Wiebe, Patricia LCTZ:EX
Subject: FW: Updated Security Requirements for BC Services Program

Hi Chris,

I was surprised at the revised language in Section 1.4. The fact that it still says IBM will register as a Visa TPA "if required", will not, I think, provide ICBC or IBM with much reassurance. I thought SecureKey was just going to remove this language. Perhaps we can discuss sometime this week?

Jeremy

From: Wiebe, Patricia LCTZ:EX
Sent: Friday, August 3, 2012 10:22 AM
To: Moss, Jeremy LCTZ:EX
Subject: FW: Updated Security Requirements for BC Services Program

Haven't looked at this yet myself, but forwarding to you.

Patricia

From: Chris Chapman [<mailto:Chris.Chapman@securekey.com>]
Sent: Friday, August 3, 2012 9:27 AM
To: Wiebe, Patricia LCTZ:EX
Cc: Eli Erlikhman; Dmitry Barinov
Subject: FW: Updated Security Requirements for BC Services Program

Patricia,

Here are the updated Visa requirements with the changes to Third Party Agents as per earlier discussions.

Section 1.4 contains the changes.

I will not send to ICBC until you and Ian have had a chance to review.

Thx. Chris

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Friday, June 1, 2012 1:57 PM
To: Bailey, Ian D LCTZ:EX; Bamford, Kevena LCTZ:EX
Subject: Request for press release
Attachments: 2012-06-XX BC Contract v3 draft.docx

Hi Ian, Kevena

Ian, as discussed, here is the press release we have drafted to support the project we are doing together. The purpose of this release is to help us build momentum with the other government projects we have on the go, and to build credibility with our partner network.

We want to highlight the leadership the province has with this project and talk about the consumer/citizen benefits. We can tailor it to meet the timing and communication priorities the Province has.

We can talk after you have had a chance to review it.
Have a great weekend
Andre



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DRAFT FOR APPROVAL

British Columbia selects SecureKey to provide Secure Credential and Authentication Services for its new BC Services Card

New BC Services Card will provide chip-based drivers licenses and health ~~service~~ cards to access to government services

Toronto, Canada, June XX, 2012 – SecureKey Technologies Inc. today announced that it has been awarded a contract by the Government of British Columbia to provide secure credential and authentication services that will enhance security and privacy, and decrease identity fraud, when citizens of BC access government services online and in-person.

Under the terms of the \$205M contract, SecureKey will help the Province issue smart-chip-enabled ~~drivers licenses and health cards~~ service cards beginning in ~~December~~ November 2012, and provide the corresponding authentication services and terminals. The enhanced EMVⁱ-based, contactless BC Service Cards will include the same bank-grade security features as chip credit cards have today, and will replace existing BC cards over a period of 5 years.

"The new BC Services Card is an important part of our strategy to deliver greater security for online and in-person transactions for the citizens of British Columbia," said David Nikolejsin, Associate Deputy Minister and Government Chief Information Officer for the Province of British Columbia. "SecureKey was uniquely positioned to help us deliver on our vision of enhanced security without sacrificing convenience and ease-of-use."

~~BC citizens will be able to easily and securely access an increasing number of government services online including personal healthcare information, tax transactions, social services, and education records, as well as other in-person services wherever proof of identity is required (e.g. medical tests, hospitals, doctor's office).~~

This technology will enable BC citizens to easily and securely access government services online which could include: personal healthcare information, tax transactions, social services, and education records, as well as other in-person services wherever proof of identity is required (e.g. medical tests, hospitals, doctor's office).

"SecureKey allows consumers and business to use real-world payment and identity credentials with their computers and mobile phones, to enhance online security and payments in a simple and convenient manner," said Greg Wolfond, CEO of SecureKey Technologies Inc. "For the first time, financial industry-based credentials and government identity credentials will benefit from the same technology."

By embedding its technology in a variety of device platforms, including laptops, tablets, and mobile phones, SecureKey enables a wide range of scalable, enhanced security solutions which deliver choice, control and convenience, together with industry-leading best practices for privacy protection—SecureKey recently launched a new authentication service for the Government of Canada that allows Canadians to use their bank authentication credentials to obtain access to online government services.



DRAFT FOR APPROVAL

¹ EMV is a technical specification developed jointly by Europay International, MasterCard, and Visa that ensures the security and interoperability of contactless chip-based cards and terminals.

About SecureKey Technologies Inc.

SecureKey provides an innovative platform-as-a-service for authentication, payment and identity. By embedding its security client in laptops, tablets, and mobile devices, SecureKey enables partners to deliver scalable, easy-to-use solutions with the security of chip-based identity and payment credentials. Financial institutions, healthcare providers, telecoms, and government organizations are using SecureKey today to provide two-factor and federated authentication and identity solutions. SecureKey is a privately-held company based in Toronto, Canada, with backing from leading technology, payments and mobile industry network providers. For more information, please visit www.securekey.com

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john.clute@highroad.com

Cameron, Dianna LCTZ:EX

Subject: Reserve for BC call on visa
Location: S15, S17
Start: Fri 2012-03-02 1:00 PM
End: Fri 2012-03-02 2:00 PM
Show Time As: Tentative
Recurrence: (none)
Meeting Status: Not yet responded
Organizer: Andre Boysen

Here below is the concall info for tomorrow:

IRIS/IBM say they found out Wednesday they need a Technical Review Agreement with Visa. We want to know what this is, how long it will take, and if there are any other key implementation dates that SK knows of. IRIS won't be starting the Technical Review Agreement with Visa until ICBC amends the contract with IBM on March 15th.

Thanks, Ian.

CONFERENCE CALL DETAILS: -

Participant Conference ID S15, S17
Dial In Toll Free S15, S17
Dial In Vancouver S15, S17

Pages 320 through 322 redacted for the following reasons:

S13

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 28, 2012 10:25 AM
To: Bailey, Ian D LCTZ:EX
Subject: Sched C Pricing -v2
Attachments: Sched C Pricing -v2.docx

Hi Ian

Here is a first draft for Sched C

Some items we need to talk through

- 1) Option to switch have we understood your properly
- 2) Option to switch mechanics of switching for users who are in mid-paid-authentication window.

A

Schedule A

SecureKey Card Management and Authentication Services

The scope of the services to of the agreement includes the following:

1.0 Credential Broker Services (Province and SecureKey agreement)

a. SecureKey to provide credential broker service. This service includes:

- Allowing the Province to enrol as a „relying party“ to the credential brokering services; and
- Enrolling the Province as a credential service provider to the credential brokering services.

b. SecureKey to provide credential provider services to the Province. This service includes:

- Updating the card authentication services using the daily card activation/deactivation file; and
- Card authentication services for the Province where an active card has been tapped on a qualified terminal.

c. SecureKey to provide access to network terminals which;

- Enables the Province to use deployed SecureKey terminals for authentication services. The credential service broker service has a broad range of consumer terminals as well as access to commercial partner networks; and
- Supports the Province in providing a custom terminal compliant with credential broker service network specifications and support for legacy applications, existing magstripe cards, and the new contactless Service Card.

2.0 Card Licensing Rights, Card Technologies and Card Personalization Services (ICBC and SecureKey license).

a. SecureKey to license card application for authentication services in payment networks.

- This license provides ICBC and its qualified suppliers the required rights and authorizations to use a major network certified EMV contactless compatible payment applet for contactless EMV compatible smart-chips. The license also includes a unique primary account number (“PAN”) for each issued card.

b. SecureKey to define and maintain a network configuration profile. SecureKey will:

- Define and maintain a standard configuration for the contactless EMV application in compliance with the payment network and ICBC issuance program. SecureKey will also provide the configuration to ICBC's qualified card supplier for personalization;
- Provide ICBC's qualified smart-chip personalization facility all key-material required to support the card personalization process;
- Provide ICBC with smart-chip personalization files on a quarterly basis;
- Provide PAN to persistent anonymous identifier ("PAI") mapping files to ICBC's distribution facility on a quarterly basis;
- Provide the EMV compatible smart-chips configuration profile to ICBC's qualified smart-chip personalization facility;
- Update the card authentication service using batch card personalization files generated by ICBC's smart-chip personalization; and
- Perform regular audit to ensure compliance of the smart-chip personalization bureau, card personalization facility and the distribution facility, to ensure the smart-chip issuance program objectives are being met or exceeded.

EMV refers to technical specifications developed jointly by Europay International, MasterCard International and Visa International outlining the interaction between chip cards and terminals/CADs to ensure global interoperability

Schedule B

Implementation Plan and Services

Introduction

The BC Government provides its citizens with access to services in person, through over-the-counter interaction, by phone or through online web-based access. While in-person interaction and phone contact to provide access to services utilizes in-person security online access is typically based on a single level (user name and password or card number) or sometime dual level access (e.g. security questions or requirement to enter a code shown on the page or on a card). As citizen demand for online access to personal and confidential information held by financial institutions and government increases, advanced identity identification (e.g. chip enabled contactless cards) and secure data transmission technology is critical to ensure privacy of the individual accessing their information or transacting government provided services. In addition, crucial components for successful deployment of a secured card system are familiarity, ease of use and low costs for the card holder.

Currently eligible B.C. citizens are issued a Ministry of Health Care Card that identifies the individual and is used to access medical services in the province. These cards have the individual's personal health number on the front and a magnetic stripe on the back with the personal health number and identify information encoded. As with other similar chip-less cards the current Care Card is susceptible to fraud and theft and does not provide proof of identity of the individual possessing the card without additional picture ID.

The Care Card is issued with no expiry or re-enrolment. Up to 8.6 million cards could potentially be in circulation, compared with a population of 4.5 million current beneficiaries. Over the last two decades the card and the policies related to how it is issued have changed minimally.

In 2009 the BC Government and SecureKey started discussions about the SecureKey authentication solution using existing chip card and contactless technologies. In 2010 the Government of BC and SecureKey partnered to build a proof-of-concept (POC) to demonstrate SecureKey's authentication technology with Health Services.

In May of 2011, the Province of BC announced a project to replace existing BC Health Care Cards with a new identify proof Services Card that contains a security smart-chip and related contactless authentication technology to protect the identity and information of the BC citizen card holder accessing medical services. This will allow BC citizens to easily and securely access their personal health information online, from their home computer.

On January 19 2012, the Province of British Columbia, as represented by the Minister of Labour, Citizens' Services and Open Government and the Insurance Corporation of British Columbia gave notice of their intent to direct award contracts for related credential and authentication services to SecureKey Technologies Inc. These contracts include SecureKey Card Management and Authentication Services as described in Schedule A.

The BC Government has four high level business drivers for this project:

1. BC Government enabling secure, in-person and online methods for access to services and information

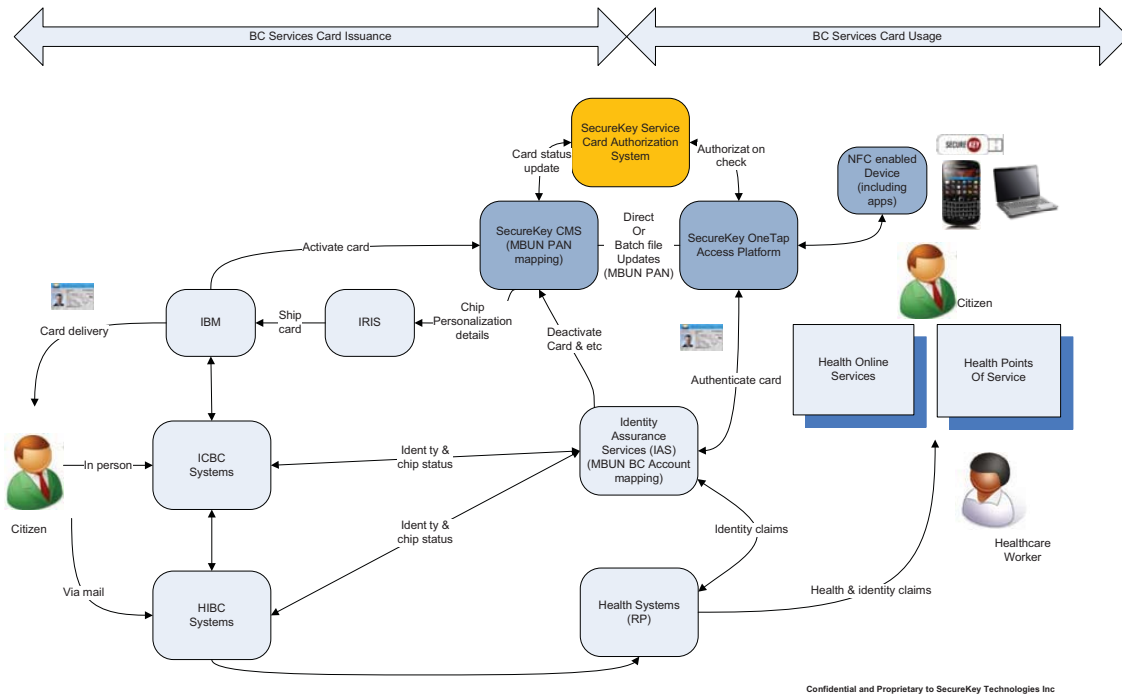
2. Alignment and interoperability with the Federal Government’s acquisition of SecureKey’s Credential Broker Services.
3. Responding to BC legislative/regulatory changes impacting card expiry
4. Reduce consumer card fraud and identity card theft

Project Approach

There are a number of parties that interact in the management of the BC Government Service Cards and Credentials. The table below describes the high level role of the parties:

Insurance Corporation of BC (ICBC)	Owner of the BC Service Cards.
BC Ministry of Labour and Citizens’ Services (BCeID/IAS)	Sponsor of the project Provides secure access to online British Columbia government services.
BC Health Service (HIBC)	Current issuer of BC Care Cards and Medical Service Plan enrolment and management.
SecureKey	BIN owner Provides chip application specification to IRIS Provides reader technology to read the service card for second factor authentication Provides Chip Management System (CMS) services to ICBC, IAS, IRIS and IBM.
IBM	Provides personalization for the Service Cards.
IRIS	Service Cards manufacturer.

This diagram identifies the high level interaction model.



The overall objective is to improve access in person and online - to high-value Government services with chip enabled contactless Government issued BC Services Cards for citizens that can be used for multiple programs and services. This will be done through the provision of Authentication and Card Management services.

Project Scope

There are two projects reflecting the scope SecureKey is being requested to deliver: a) Chip Authentication Services and b) Card Management Services.

a) Chip Authentication Services

The BC Government will use the SecureKey OneTap Access Platform to provide Authentication services to the BCeID/Identity Assurance System (IAS). SecureKey's OneTap® Access Platform provides strong authentication using card and phone credentials and at a high level reads the information from the card, validates the card cryptogram and validates the state of the card. The platform also additionally (and optionally) offers two-factor authentication in the form of a federated 3rd party CSP (such as a password login provider).

BCeID/IAS is the new system that the BC Government is creating to contain and handle identity information for all BC citizens. IAS provides the mechanism to support the BC relying party to verify the credential online (eGovernment).

Enabling Components of BCeID/IAS:

- New provincial identity and card/chip registries, to be integrated with card issuance / registration / renewal / lifecycle processes
- Chip/Passcode card authentication services to support online and in person identification
- Chip/Passcode Credential Management Service,
- RP Integration Service, BCeID enables individuals to represent themselves online at many government relying parties
- BCeID to be integrated with Identity Assurance Services, allowing immediate card usage at existing government relying parties

b) Card Management Services

Currently ICBC is the card issuer of the BC driver license and BC identification cards. ICBC uses IBM for card production services, which includes card personalization for all types of cards and IRIS is the card manufacturer and chip personalization bureau for chip enabled contactless cards.

For the BC Services Card, ICBC will be the card issuer, on behalf of the Province of BC; and will continue to use IBM and IRIS for card production services.

SecureKey will provide ICBC with the products, services and licenses required to manufacture, personalize, use chip enabled contactless Service Cards.

Enabling Components of SecureKey CMS:

- Card Manager - Lifecycle Management Solution
- Key Manager

- Import/Export Module
- SecureKey Chip data preparation module

High Level Solution Design

Not Responsive

SecureKey Deliverables:

SecureKey to provide Authentication (credential provider) services to the Province. This service includes:

1. A hosted SecureKey OneTap Access SAML 2.0 Server.
2. Updating the card authentication services using the daily card activation/deactivation file; and
3. Card authentication services for the Province for both card and proxy devices
4. Provide SecureKey Card cryptogram verification
5. Provide MBUN-PAN mapping
6. Provide device plug-in detection services.

SecureKey to provide Card Management (CMS) services to the Province. This service includes:

1. A hosted SecureKey Chip Management System (CMS) to assist in the card production and personalization process.
2. Chip application specification. Provide smart-chips configuration profile to ICBC's qualified smart-chip personalization facility
3. Chip specification. Provide profile to ICBC's qualified smart-chip personalization facility a standard configuration for the contactless application in compliance with the payment network and ICBC issuance program. SecureKey will also provide the configuration to ICBC's qualified card supplier for personalization
4. File format for the personalization file, PAN-MBUN mapping file, End-Of-Life files (PAN and MBUN), and personalized confirmation file.
5. Provide ICBC's qualified smart-chip personalization facility all key-material required to support the card personalization process;
6. Assistance to ICBC's qualified smart-chip personalization facility for the SecureKey Card Acceptance test
7. License, hardware and software requirements for CMS.
8. Technical second line support for CMS system for life of the project.
9. Provide ICBC's qualified smart-chip personalization facility with smart-chip personalization files on a quarterly basis;
10. Provide PAN to persistent anonymous identifier ("MBUN-BC") mapping files to ICBC's distribution facility on a quarterly basis;
11. Update the card authentication service using batch card personalization files generated by ICBC's smart-chip personalization; and
12. Perform regular audit to ensure compliance of the smart-chip personalization bureau, card personalization facility and the distribution facility, to ensure the smart-chip issuance program objectives are being met or exceeded.

DRAFT BC Deliverables

BC Citizens' Services will provide:

1. New provincial identity and card/chip registries, to be integrated with card issuance / registration / renewal / lifecycle processes
2. New card authentication services to support online and in person identification
3. Confirm acceptability of CBS credential specifications
4. BC Citizens' Service Card first line Help Desk/Customer Support for life of the project

BCeID/IAS will provide:

1. End-of-Life file (MBUN) with the specified format to SecureKey.
2. Old MBUN to new MBUN mapping file with the correct format to SecureKey so that SecureKey can transfer the information from the old card to the new card for the card replacement use case.
3. Mutually agreed mechanism to accept Card Mapping File MBUN-BC ACC from ICBC.
4. Mutually agreed mechanism to attach MBUN to an account and activate account for online services.
5. Mutually agreed mechanism to deactivate account for online services.

Card Production Planning (ICBC):

1. Mechanism to accept MBUN values from SecureKey and be able to store MBUN values in the system.
2. "Card Mapping File" MBUN-BC ACC to IAS.

Chip Personalization, Card Inventory (IRIS):

1. Test cards to SecureKey for SecureKey Acceptance test for the new inlay.
2. Upon receiving the streamlined dual interface applet personalization, qualified chip personalization facility will produce sample service cards based on applet personalization and send to SecureKey for the general Card Acceptance test.
3. Mechanism to accept and process the personalization files sent by SecureKey Chip Management System (including key management).
4. Personalized confirmations file and send to SecureKey after the personalization is completed.
5. End-Of-Life file (PAN) for any damaged or lost personalized cards to SecureKey.
6. 1,000 test cards (with no chip).
7. 15,000 service cards (full PC with Chip).
8. Fulfillment of the requirements to produce the first service card on Nov 12, 2011.

Card Personalization, Production (IBM):

1. "Card Mapping File" MBUN-BC ACCOUNT mapping to ICBC.
2. PAN-MBUN mapping file to SecureKey.
3. End-Of-Life File (PAN) for any damaged or lost personalized cards to SecureKey.
4. Mechanism to accept new card request from ICBC (with MBUN value).
5. The Standard test specification for new card verification.
6. Mechanism to retrieve PAN from card and create PAN-MBUN record for each card, and add record to the PAN-MBUN mapping file.
7. Personalization for the 1,000 test cards (with no chip).
8. Personalization for the 15,000 service cards (full PC with Chip).
9. Fulfillment of the requirements to produce the first Service Card on Nov 12, 2012.

Dependencies, Assumptions

TBD

High Level Milestones and Timing

The Government of BC will be issuing the first chip enabled contactless Service Cards in November 2012.

1. Completed contracts between required parties before XX XX 2012.
2. SecureKey Card acceptance test for the new inlay.
3. Ordering of raw material for the card production.
4. Streamlined dual interface applet personalization for BC service card completed.
5. SecureKey acceptance test on the dual interface applet personalization for BC service card.
6. SecureKey Chip Management System Infrastructure completion (including design, development, configuration).
7. SecureKey OneTap Access Platform integrated with BCeID/IAS system.
8. Chip, Applet personalization setup completion (End to End integration test completion).
9. SecureKey CMS system integration with qualified chip and card production facilities.
10. 1K Test card (no chip) from Card Production facility (IBM).

11. 15K Test cards (with chip) from Card Production facility (IBM)..
12. Iterative tested code releases for Integration (end to end testing)
13. Performance testing with SecureKey
14. Call centre, Operational Support readiness for BC and SecureKey
15. BC Government UAT
16. First Card issued in field on XX XX 2012

From: [Wiebe, Patricia CITZ:EX](#)
To: ["Andre Boysen";](#)
Subject: secure facilities
Date: Friday, July 29, 2011 12:18:00 PM

Hi Andre

I'm still trying to sort out our conversation yesterday about secure facilities. What I thought I heard you say is that in our meeting last week that Chet said that they (IBM) do not have secure facilities, but the chip manufacturer does for their Enhanced DL cards.

But what I heard and continue to hear from ICBC/IBM is that IBM's card production facilities are secure, that is where card personalization for EDL is done. But IBM's facilities are not EMVco certified, they meet some other standard.

So, what information can you provide on secure facility requirements? Can you refer me to a specification on this?

Thanks,
Patricia

Patricia Wiebe, A/Director, Identity and Information Architecture & Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, October 26, 2011 6:04 PM
To: XT:Thomson, Kathy CITZ:EX; Bailey, Ian D CITZ:EX
Subject: SecureKey-ICBC Chip Card Agreement (v3)
Attachments: SecureKey-ICBC Chip Card Agreement (v3).doc

Hi Kathy and Ian

I am pleased to report that we have a first draft of contract 1 for your review. We have left some blank schedules in the agreements that we will have to complete together, and some that you will have content for already. We can talk about them after your first review.

Please take a look and once you have comments we have can a discussion.

Thanks so much
Andre

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, November 7, 2011 3:02 AM
To: Nikolejsin, Dave CITZ:EX; Watkins, Peter CITZ:EX; Bailey, Ian D CITZ:EX; Wiebe, Patricia CITZ:EX
Subject: SecureKey Technologies Inc. to power the Government of Canada's new online
Attachments: SecureKey CBS Press Release (Nov 4 2011) ENG.PDF

Hi David and Team

Here is a copy of the press release that is going out this morning for your records.

Andre

Andre Boysen
EVP Digital Identity and Authentication Services
SecureKey Technologies Inc
+1 647 287 2544



SecureKey Technologies Inc. to power the Government of Canada's new online authentication service

Use of bank-issued credentials from TD Bank Group, Scotiabank and BMO Financial Group will enable secure, convenient access to online government services

Toronto, Canada, November 7, 2011 - Toronto based SecureKey Technologies Inc. today announced that it has been awarded a contract by the Government of Canada to provide an innovative Credential Broker Service (CBS) that will allow Canadians to use their bank authentication credentials to obtain access to online government services. To ensure privacy protection, users of the CBS will authenticate through their bank but neither their login credentials nor the identity of their bank will be shared with the Government of Canada. Similarly, no information about the government service being accessed by the user will be shared with the user's bank.

The new service is part of the Government of Canada's Cyber Authentication Renewal initiative and leverages SecureKey's authentication solutions, which enable banks, credit card issuers, governments and healthcare providers to extend the security capabilities of chip-based payment and identity cards to their mobile and online offerings.

"We are thrilled to have been selected, through a competitive process, by the Government of Canada to provide this unique service", said SecureKey Technologies Inc, CEO Greg Wolfond, "This partnership between government and industry lays the foundation for an ecosystem that will offer increased choice and ease of use for consumers and businesses accessing secure online services."

Management of security credentials is a constant challenge for online government services which are used periodically, as website-specific user ID's and passwords are often forgotten. SecureKey's new authentication service will allow consumers to access government services using their online banking login credentials or, if offered by their bank, by tapping their bank-issued chip card on one of SecureKey's easy-to-use USB card readers or, in future, on a SecureKey-enabled laptop or mobile device.

To provide consumer choice and broad national coverage for the launch of the service, three of Canada's largest banks, BMO Financial Group, TD Bank Group and Scotiabank have been selected as the inaugural credential providers. These banks offer unparalleled authentication capabilities that will make customer access to online government services much easier.

"We are pleased to be able to offer our customers safe, secure and convenient online access to government programs and services," said Mike Henry, Scotiabank's Senior Vice-President and Head of Canadian Retail Payments, Deposits and Lending. "So many websites require login information, making it easy to forget a few every now and then. With this service, our customers won't have to worry about remembering another user ID and password because they will be able to easily access government services online using what they already use with us. This will give them the peace of mind that their personal information is securely protected."

"BMO sees this as a natural extension of services we offer to our customers. Our participation gives customers a secure, simple, and trusted verification process for accessing government sites and also



leverages the investments we have already made in chip and contactless technology to create a safe & sound environment for banking and payments," said Mike Kitchen, SVP, P&C Products, BMO Bank of Montreal.

"SecureKey's credential service will offer our customers a powerful combination of security and convenience when accessing their government accounts online," said Paal Kaperdal, SVP, Online Banking, TD Bank Group. "This is an innovative approach by both government and industry to improve an essential service for Canadians, and another way that TD can fulfill our promise of delivering a more comfortable banking experience to our customers."

The CBS will go live in 2012 and will be made available to all Government of Canada Departments and Agencies.

About SecureKey Technologies Inc.

SecureKey develops innovative hardware and software solutions that extend the power of chip-based identity and payment credentials to online and mobile transactions. With SecureKey, financial institutions, health care providers and government organizations can offer their online customers the convenience and security of 'tap to authenticate' and 'tap to pay' services. SecureKey is a privately held company with offices in Toronto, Ontario.

About BMO Financial Group

Established in 1817 as Bank of Montreal, BMO Financial Group (TSX, NYSE: BMO) is a highly diversified financial services organization. With total assets of CDN\$477 billion as at July 31, 2011, and more than 47,000 employees, BMO provides a broad range of retail banking, wealth management and investment banking products and solutions.

About Scotiabank

Scotiabank is one of North America's premier financial institutions and Canada's most international bank. With more than 70,000 employees, Scotiabank Group and its affiliates serve some 18.6 million customers in more than 50 countries around the world. Scotiabank offers a broad range of products and services including personal, commercial, corporate and investment banking. With assets above \$567 billion (as at July 31, 2011), Scotiabank trades on the Toronto (BNS) and New York Exchanges (BNS). For more information please visit www.scotiabank.com.

About TD Bank Group

The Toronto-Dominion Bank and its subsidiaries are collectively known as TD Bank Group (TD). TD is the sixth largest bank in North America by branches and serves more than 20 million customers in four key businesses operating in a number of locations in key financial centres around the globe: Canadian Personal and Commercial Banking, including TD Canada Trust, TD Insurance and TD Auto Finance Canada; Wealth Management, including TD Waterhouse and an investment in TD Ameritrade; U.S. Personal and Commercial Banking, including TD Bank, America's Most Convenient Bank and TD Auto Finance U.S.; and Wholesale Banking, including TD Securities. TD also ranks among the world's leading online financial services firms, with more than 7 million online customers. TD had CDN\$665 billion in



assets on July 31, 2011. The Toronto-Dominion Bank trades under the symbol "TD" on the Toronto and New York Stock Exchanges.

For further information:

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SecureKey Technologies Inc.
647-287-2544
andre.boysen@securekey.com

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Media Relations
Treasury Board of Canada Secretariat
613-957-2640
media@tbs-sct.gc.ca

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, September 26, 2011 1:00 PM
To: andre.boysen@securekey.com
Subject: Securekey Contract Analysis.xlsx
Attachments: Securekey Contract Analysis.xlsx

Andre,

To help with discussion at 1pm.

Interactions between us and our suppliers and SecureKey:

- Initial setup of BIN, paywave, key management at Iris card production facilities and ongoing key management
- Nightly chip activation between IBM and Securekey as cards assigned to people
- Setup of authentication services, interfaces, key management between IAS and SecureKey
- Authentication at time of card tap at home, point of service
- Purchase of USB tokens and point of service readers from Securekey
- Ongoing product development for authentication services, federal scene, etc.
- Pilots such as WorksafeBC, Oceanside VIHA

Interaction	Service or Function	Project Release	Party to Secure Key	Frequency	Frequency Count
BIN and Key Setup	card production	release 1	IRIS	low	one time project plus updates
chip activation	card production	release 1	IBM	high	nightly batch
Authentication Setup	authentication	release 2	CITZ	low	one time project plus updates
Card Tap Authentication	authentication	release 2	CITZ	very high	10 per second
USB Tokens & Readers	authentication	release 2	CITZ	low	monthly
Product Development	authentication	ongoing	CITZ	medium	weekly to monthly
Pilots	authentication	ongoing	CITZ	medium	projects

gement

Complexity	Service Mgt	Recommended Contract Owner
high	low	ICBC
medium	high	IBM
high	low	CITZ
high	very high	CITZ
low	low	CITZ
high	low	CITZ
high	high	CITZ

Pages 343 through 355 redacted for the following reasons:

S13

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Tuesday, February 21, 2012 5:10 PM
To: Wiebe, Patricia LCTZ:EX; Bailey, Ian D LCTZ:EX
Cc: Chris Chapman; Andre Boysen
Subject: SecureKey-Citizens' Services MSA V2 - BC to SK comments
Attachments: SecureKey-Citizens' Services MSA V2 - BC to SK comments.doc

Hi Patricia

Here is the updated draft and renamed version of the doc based on our conf call.

Talk to you tomorrow at 10 AM EST on the Sched A changes that we made.

Andre

SecureKey Smart-Chip Authentication Contract Fees

Project Year 0	FY 11/12				
Base Licence		\$	500,000		
Project Year 1	FY 12/13				<i>1st cards issued Nov 2012</i>
Base Licence		\$	1,000,000		
Project Year 2	FY 13/14				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	480,000	240000	10%
Total cost before CAP		\$	2,480,000		Cards In Ciculation
Maximum required payment (CAP)		\$	2,000,000		2400000
Project Year 3	FY 14/15				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	2,040,000	1020000	30%
Total cost before CAP		\$	4,040,000		Cards In Ciculation
Maximum required payment (CAP)		\$	3,000,000		3400000
Project Year 4	FY 15/16				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	3,520,000	1760000	40%
Total cost before CAP		\$	5,520,000		Cards In Ciculation
Maximum required payment (CAP)		\$	4,000,000		4400000
Project Year 5	FY 16/17				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	4,400,000	2200000	50%
Total cost before CAP		\$	6,400,000		Cards In Ciculation
Maximum required payment (CAP)		\$	4,500,000		4400000
Project Year 6	FY 17/18				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	5,720,000	2860000	65%
Total cost before CAP		\$	7,720,000		Cards In Ciculation
Maximum required payment (CAP)		\$	5,000,000		4400000
Total contract payments over 6 years		\$	20,000,000		

SecureKey Smart-Chip Authentication Contract Fees

Project Year 0	FY 11/12				
Base Licence		\$	500,000		
Project Year 1	FY 12/13				<i>1st cards issued Nov 2012</i>
Base Licence		\$	1,000,000		
Project Year 2	FY 13/14				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	480,000	240000	10%
Total cost before CAP		\$	2,480,000		Cards In Ciculation
Maximum required payment (CAP)		\$	2,000,000		2400000
Project Year 3	FY 14/15				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	2,040,000	1020000	30%
Total cost before CAP		\$	4,040,000		Cards In Ciculation
Maximum required payment (CAP)		\$	3,000,000		3400000
Project Year 4	FY 15/16				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	3,520,000	1760000	40%
Total cost before CAP		\$	5,520,000		Cards In Ciculation
Maximum required payment (CAP)		\$	4,000,000		4400000
Project Year 5	FY 16/17				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	4,400,000	2200000	50%
Total cost before CAP		\$	6,400,000		Cards In Ciculation
Maximum required payment (CAP)		\$	4,500,000		4400000
Project Year 6	FY 17/18				
Base Licence		\$	2,000,000	Active Cards	% Active
Chip Authentication Services		\$	5,720,000	2860000	65%
Total cost before CAP		\$	7,720,000		Cards In Ciculation
Maximum required payment (CAP)		\$	5,000,000		4400000
Total contract payments over 6 years		\$	20,000,000		

Province to pay SK for all active users at a rate of \$2 per user per year up to the Cap. Once the CAP is reached, then additional charges apply (at the \$2 rate) for those active users that are over the cap and are using their card exclusively outside of healthcare.

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, January 9, 2012 8:03 PM
To: Andre Boysen
Cc: greg.wolfond@securekey.com; Bamford, Kevena CITZ:EX (Kevena.Bamford@gov.bc.ca); Watkins, Peter CITZ:EX
Subject: RE: NOI and pricing?
Attachments: SecureKeyContractCosts.Summary.Updated(1).xlsx

Andre,

Here is a spreadsheet that outlines our understanding of pricing as per our last call.

Ian.

From: Andre Boysen [andre.boysen@securekey.com]
Sent: January 9, 2012 6:03 PM
To: Bailey, Ian D CITZ:EX
Subject: RE: NOI and pricing?

Hi Ian

That is great news

I talked to Peter before the holidays. He said that the changes we asked for have been incorporated (we max out at \$2,00 but Health does not have to pay full freight on their own)

We should try to do a call this week. When do you have time?

A

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Monday, January 09, 2012 5:10 PM
To: Andre Boysen
Subject: NOI and pricing?
Importance: High

Andre,

We are getting close to issuing NOI...likely this week. I was checking my sent items/inbox to see if we exchanged the latest pricing model as agreed at our last conference call on that topic. Do you have such an email?

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Thursday, October 27, 2011 8:59 AM
To: andre.boysen@securekey.com; 'greg.wolfond@securekey.com'
(greg.wolfond@securekey.com)
Cc: Bamford, Kevena LCTZ:EX
Subject: SecureKeyContractCosts.xlsx
Attachments: SecureKeyContractCosts.xlsx

Andre, Greg,

We have shown this spreadsheet to our senior management and they are fine with the pricing have a look and confirm this is our mutual understanding. Peter put this together from our previous conversation.

Let me know if any issues asap.

Thanks, Ian.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Wednesday, February 8, 2012 1:26 PM
To: Bailey, Ian D CITZ:EX
Cc: Chris Chapman
Subject: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012
Attachments: SecureKey-ICBC Chip Card Agreement (v3) 8Feb2012.docx

Hi Ian

Here a draft close to what you we sent during the last iteration.
It is focused on getting the ICBC part right. We are working on the Citizen Services agreement as well.

Chris Chapman and I are working on getting the schedule populated. Our lawyer is amending the agreement to reflect our updated design decisions. This should surface in the next day or so; I was hoping to have it already.

Once this draft is completed we will get the updated CS agreement to you.

I hope this works
Andre

Pages 362 through 387 redacted for the following reasons:

S13

Cameron, Dianna LCTZ:EX

From: Adlhoch, Grietje A LCTZ:EX
Sent: Tuesday, August 7, 2012 10:33 AM
To: 'chris.chapman@securekey.com'; Wiebe, Patricia LCTZ:EX; Moss, Jeremy LCTZ:EX
Cc: Adlhoch, Grietje A LCTZ:EX
Subject: SK/LCTZ PM Group - Draft record of August 3rd call
Attachments: SK-LCTZ PM group - Aug 3 concall record - draft.docx

Hi,

Attached for your information are draft minutes from Friday's call. Please note that going forward we will not have an agenda for these meetings but that a review of the previous minutes will serve that purpose.

The next meeting is scheduled for August 17 at 10 am PDT and S22

Thank you,
Grietje

**SecureKey/LCTZ Project Management Group
Teleconference Meeting**
Friday, August 3, 2012, 10 a.m.

Attendees: LCTZ Wiebe, Patricia Moss, Jeremy
SecureKey Chapman, Chris
Recorder Adlhoch, Grietje (LCTZ)

Item	Discussion	Actions
1.	<p>Agenda Review</p> <ul style="list-style-type: none"> No agenda was prepared and going forward the review of action items from the previous meeting will serve as the agenda. 	
2.	<p>Approve Minutes and Review Action Items</p> <ul style="list-style-type: none"> Minutes were approved Action items were updated 	<ul style="list-style-type: none"> ☑ ☑
3.	<p>CMS Integration Testing</p> <ul style="list-style-type: none"> Chris advised that the tunnel was set up and that there is work in progress between LCTZ and SK to solve the file encryption issue. It is planned to do some testing with unencrypted files. 	<ul style="list-style-type: none"> Chris to follow up on the connectivity testing.
4.	<p>USB keys</p> <ul style="list-style-type: none"> Chris advised that SecureKey needs to establish a plan/forecast which is dependent on the model Andre and he are doing. <p>SecureKey visit to Victoria - August 13/14</p> <ul style="list-style-type: none"> Peter Watkins has set up a 2-day meeting to discuss Release 3 architecture which Andre and Hugh are attending with Ian, Kevena and Patricia. It was agreed that it would be helpful to have the visit extended by one day to allow for meetings and discussions between LCTZ and SecureKey on other topics; plus, it would be beneficial if Chris also came to Victoria. 	<ul style="list-style-type: none"> Chris to follow up on expanding the length of the visit and about him also coming to Victoria; and to advise Patricia/Jeremy
5.	<p>JSON document</p> <ul style="list-style-type: none"> Patricia discussed with Mike which resulted in a list of action items. Chris advised that Mike will edit the document based on that discussion. 	<ul style="list-style-type: none"> Meeting set for August 13 to be put on hold pending completion of the revisions.

Item	Discussion	Actions
6.	Security Design Sign-Off <ul style="list-style-type: none"> • LCTZ (Patricia) received this document today. • Chris advised that the document is a thorough draft of the requirements as Eli took a detailed approach in preparing the document. IBM's assessment is still pending. • Pending a satisfactory outcome of a review by LCTZ (Henry) next week it was agreed that the status of this item will be reported as green at the next JOC meeting. 	<ul style="list-style-type: none"> • Patricia to request Henry to review the revised Security Design document (as she will S22) and to advise Jeremy of the outcome. • Unless LCTZ advises otherwise, Chris to make the status green.
7.	ICBC Security Checklist / Site Visit <ul style="list-style-type: none"> • Chris sent the checklist to Patricia today who sent it to Jeremy who will forward it to Sam. • Jeremy agreed that Chris could send a note directly to Sam (copying Jeremy) requesting potential dates for the site visit in September. 	<ul style="list-style-type: none"> • Chris to send Sam a request for potential site visit dates, copying Jeremy.
8.	Implementation Strategy <ul style="list-style-type: none"> • Linked to item #7, Jeremy advised he talked to Sam yesterday and that Sam is in favour and thought mid-September would probably be a good time. • Chris would also like to confirm the integration testing strategy. • Jeremy advised that ICBC and HIBC will be expanding their joint integration testing strategy to include LCTZ. 	<ul style="list-style-type: none"> • Jeremy will add onto Chris's email to Sam (item #7 above) a request for an update regarding the testing.
9.	JOC Meeting <ul style="list-style-type: none"> • Patricia and Chris will lead the August 14th discussions as S22 • Kevena will speak to the Relying Party agenda item. • Agreed to remove "Security Design Sign-off", "Dual Reader Update", and "Transition File Update" from the agenda as these are all covered during the CMS/Authentication Updates. • It was agreed that a process for seeking a decision/approval from JOC needs to be discussed, documented and adopted. The SOW/MSA will be checked for the correct terminology for change request. 	<ul style="list-style-type: none"> • Jeremy to book pre-JOC meeting next week on Thursday. • Grietje to add to the agenda under "Release 2 Re-Planning" (a) non NFC devices / pass code solution, and (b) new card reader terminals/devices ☺ • Grietje to add to the agenda the item regarding decision/ approval requests to JOC ☺
9(A)	<u>CMS Update / Project Dashboard</u>	<ul style="list-style-type: none"> • Chris to send both dashboard reports to Jeremy next week
9(B)	<u>Authentication Update / Project Dashboard / Re-Plan</u> <ul style="list-style-type: none"> • Chris advised that he needs to publish another version that threads re-planning of Release 2 into it and will send a draft of the re-plan in the workbook as a starting point. 	<ul style="list-style-type: none"> • Chris to send updated workbooks to Patricia and Jeremy • Chris to prepare draft outline/ approach for the re-planning and send to Jeremy next week

Item	Discussion	Actions
10.	<p>Dual Reader Update</p> <ul style="list-style-type: none"> • Patricia advised that her meeting with Health identified different understandings: <ul style="list-style-type: none"> ○ LCTZ proposed that the card reader would have the capability of tapping and translating into PHN and a keyboard emulation technique to inject into Health's application. ○ Health still prefers the mag stripe solution and thought that SecureKey was doing both a mag stripe and chip solution in the same device but no emulation. Health hasn't found a reader for these two functions and their present solution does not involve SecureKey. <p style="text-align: center;">S13</p>	<ul style="list-style-type: none"> • Patricia to have a discussion with [an regarding next steps.
11.	<p>Transition File</p> <ul style="list-style-type: none"> • This is complete. LCTZ signed the file and it was returned to SecureKey who submitted their invoice the same day. • Jeremy advised that LCTZ has put a placeholder into its work plan for testing the transition file and recommended that Chris do the same in his plan. • October 30 is the deadline for transition file testing to be completed. 	<ul style="list-style-type: none"> • Chris to confirm test plan for the transition file.
12.	<p>Actions / Next Steps / Other Updates</p> <p>---</p>	

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Andre Boysen"; "Chris Chapman"; "Ayinde Yakubu \(Ayinde. Yakubu@securekey.com\)";](#)
Subject: soft launch of BC Services Card public website
Date: Monday, July 23, 2012 4:09:00 PM

I just thought I'd pass on to you the new public website that launched today to describe the BC Services Card and how to get it.

<http://www2.gov.bc.ca/gov/theme.page?id=C20086F4FDF627499800D60391C384E3>

Patricia Wiebe, Director, Identity and Information Architecture and Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, February 20, 2012 2:23 PM
To: 'Greg Wolfond'
Subject: talked to Dave

Importance: High

Greg,

S13

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Monday, February 20, 2012 9:38 AM
To: andre.boysen@securekey.com
Cc: Greg Wolfond; Wiebe, Patricia CITZ:EX
Subject: The Province's relying parties and credentials

Andre,

Just an fyi,

Patricia and I will be tweaking the language in 1.a of the authentication services to better define "The Province will provide identity and authentication results to its relying parties as required". We need to be able to leverage your service in providing identity services and recognize that your CBS needs some protection.

Also, in 1.b, we think we need to say that the use of our credentials in the CBS and our use of the CBS will be determined in the future. We as it is we are just saying the our cred's need to be usable with the CBS in the future.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

Cameron, Dianna LCTZ:EX

From: Bailey, Ian D CITZ:EX
Sent: Sunday, February 12, 2012 7:42 AM
To: 'Greg Wolfond'
Subject: this fiscal

Greg,

Wondering if we could get some movement on the CAP if we were to pay SK \$1.5M prior to March 31st...assuming we complete contract in time....which we surely hope to do.

S22

S22

Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
Office of Chief Information Officer
Phone (250) 387-8053
Cell S17

From: [Wiebe, Patricia LCTZ:EX](#)
To: ["Chris Chapman";](#)
Subject: this next week
Date: Saturday, April 14, 2012 7:17:00 PM

Hi Chris

This next week will probably be just as busy as last? Perhaps it will be just a tad lighter because the contract is done. ☺

Thinking about finalizing the design. By Tuesday, if I understand correctly, we need to sign off the following documents:

- IAS-CMS interface design spec
- CMS-IRIS interface design spec
- BCSC Issuance Process Flows

Will your team be ready?

Meanwhile we need to work on the security requirements and checklists.

And there is a meeting on Wednesday about the TRAN smartcard pilot.

I don't think I (or others on my team) have the capacity to get back to work on the authentication spec this week.

Anything else?

Patricia Wiebe, Director, Identity and Information Architecture and Standards
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Cameron, Dianna LCTZ:EX

Subject: Touch base on contract terms
Location: conference call

Start: Tue 2011-11-15 11:00 AM
End: Tue 2011-11-15 11:30 AM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bailey, Ian D CITZ:EX
Required Attendees: Bamford, Kevena CITZ:EX (Kevena.Bamford@gov.bc.ca); andre.boysen@securekey.com

Touch base on contract terms for SecureKey services.

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, July 11, 2011 7:21 AM
To: Wiebe, Patricia CITZ:EX; Stephenson, Mike
Subject: Tuesday July 19th - Perso options for BC

Hi Patricia

Mike Stephenson from TD Merchant Services will be attending with me Tuesday afternoon.

I propose we book from 2pm-5pm.

Agenda

1. Review BC current and proposed card issuance processes
2. Talk about Perso options
3. Select best option

Let me know if you have any questions or would like to add other items.

Look forward to seeing you.

Andre

Andre Boysen
EVP - Digital Identity and Authentication Services
Online Security Made Easy - SecureKey

Cameron, Dianna LCTZ:EX

From: Andre Boysen [andre.boysen@securekey.com]
Sent: Monday, August 8, 2011 9:05 AM
To: Wiebe, Patricia CITZ:EX
Cc: Stephenson, Mike; Greg Wolfond
Subject: Update

Hi Patricia

I spoke with Mike Stephenson of TD today. He will assist BC with acquiring the TD BIN range for use in BC cards. Mike will contact you shortly to begin these discussions.

As to card vendors, TD is willing to work with BC/IBM to enable the vendor they choose for acquiring chipcards.

We are still awaiting an answer from VISA as to whether the IBM production facility qualifies for card activation. We are expecting a positive response, but we need to wait for the answer.

Let me know if you have any other questions.

Thanks

Andre

Andre Boysen
EVP - Digital Identity and Authentication Services
Online Security Made Easy - SecureKey

Page 400 redacted for the following reason:

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Watkins, Peter CITZ:EX

From: Wiebe, Patricia CITZ:EX
Sent: July-27-11 8:30 PM
To: 'Andre Boysen'
Cc: Bailey, Ian D CITZ:EX; Watkins, Peter CITZ:EX
Subject: Followup on Chip Personalization

Importance: High

Hi Andre

It's been a week since your visit here, and several days since I posted the meeting minutes with specific questions. I'm under pressure to have this figured out and shared with ICBC/IBM and Health within a few weeks. How are you going to help me get answers?

- What information can you provide me with now?
- Who can you provide to me as technical contacts?

Also, you referred to compliance with the VISA EMV specifications (Visa Contactless Spec V2, EMV Level 1 or Level 2 (VIS 4.2)) – these are not available on the internet without our organization seeking a licence from VISA, which I don't think we have time for and who knows if it costs money. Can you share a copy with me?

I need a good start on information from you by end of this week.

Thanks,
Patricia

Patricia Wiebe, A/Director, Identity and Information Architecture & Standards
Office of the Chief Information Officer, Province of British Columbia
Phone: 250.387.6818 Mobile: S17 Email: Patricia.Wiebe@gov.bc.ca

Watkins, Peter CITZ:EX

From: Greg Wolfond <greg@securekey.com>
Sent: September-27-11 5:32 PM
To: Bailey, Ian D CITZ:EX; Andre Boysen; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: Soo, Jaslyn
Subject: RE: Securekey conference call

Thanks Ian,

This is good. We are on the right track. Lets have a conversation early next week once you've seen the draft.

g

Greg Wolfond
CEO SecureKey Technologies Inc.
416 214 6451

From: Bailey, Ian D CITZ:EX [<mailto:Ian.Bailey@gov.bc.ca>]
Sent: Tue 9/27/2011 5:41 PM
To: Andre Boysen; Greg Wolfond; XT:Thomson, Kathy CITZ:EX; Wiebe, Patricia CITZ:EX; Watkins, Peter CITZ:EX; Poutney, Richard G LCTZ:EX
Cc: 'Soo, Jaslyn'
Subject: RE: Securekey conference call

Minutes of meeting today:

- Objective is to get crunchy descriptions of what we need to buy to start procurement process
- General agreement on the 3 contract structure
 1. BIN + EMV rights (ICBC)
 2. Services to support Card Personalization and activation (IBM)
 3. Authentication and Broker Services (Citizen Services)
- Detailed descriptions of the 3 procurements is needed and Andre to develop 1st drafts for end of day Friday
- Andre to contact Ian/Patricia for any feedback, clarification, etc if needed to accomplish 1st draft

S13

Let me know if I've got this wrong and I'll update.

Also, is it time to bring IBM to the table? Kathy, Greg?

Ian.

Ian Bailey
Executive Director
Architecture & Standards Branch
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