CITIZENS PROPERTY INSURANCE CORPORATION

Summary Minutes of the Information Systems Advisory Committee Meeting Tuesday, March 12, 2019

The Information Systems Advisory Committee (ISAC) of Citizens Property Insurance Corporation (Citizens) convened telephonically on Tuesday, March 12, 2019 at 10:00 a.m. (ET).

The following members of the Information Systems Advisory Committee were present telephonically:

James Holton, Chairman Senator McKay John Wortman Brian Foley¹ John Vaughan Kelly Booten, staff

The following Citizens staff members were present telephonically:

Aditya Gavvala Robert Sellers Sarah Harrell Stephen Guth Wendy Perry

Call Meeting to Order

Roll was called. Chairman Jim Holton, Governor John McKay, Governor John Wortman, and Technical Advisors, Brian Foley and John Vaughan, were present. Chairman Holton called the meeting to order.

1. Approval of Prior Meeting's Minutes

Chairman Holton: First order of business is approval of the prior minutes. Kelly, I believe there were some clarifications that were sent around to committee members by you earlier. Could you briefly explain those?

Kelly Booten: Yes, sir. On page 6 of the Minutes there were two additional clarifications that were added to the Minutes, and that was based upon an e-mail I sent after the last committee meeting in November, which clarified some of the dollar amounts that I had quoted during the meeting on the Information Technology Research and Advisory Services. So, I just wanted to point that out, that those clarifications were made in the Minutes.

Chairman Holton: Okay, thank you. Did everyone receive those clarifications? Presumably so. Are there any further questions or clarifications? None being heard, I will accept a motion to approve the minutes from the November 27, 2018 meeting.

¹ Mr. Foley joined the call after roll call was taken.

John Wortman made a motion to approve the November 27, 2018, Information Systems Advisory Committee (ISAC) Minutes. John Vaughan seconded the motion. The minutes were unanimously approved.

Chairman Holton turned the floor over to Kelly Booten to provide the Chief Systems and Operations Update.

2. Chief Systems and Operations Update

Kelly Booten: Good morning. This morning I have a few brief comments before we get into the agenda items.

First, I would like to officially close out the Centerpoint project that Sarah Harrell has been reporting on throughout the last couple of years. As reported in November, the two and-a-half year Centerpoint implementation has concluded. As expected, there has been no additional contingency spend since the program concluded. Of the \$2.1 million approved contingency spend, \$1.6 million was consumed or 74 percent, and \$300,000 remains unused.

There is a separate solicitation underway for the learning management system that was removed from the scope of this project and that will be handled in a separate project.

Also, today we have four topics of discussion. First is the annual Charter review. Then we have an update on two of our IT strategies – Cloud and Security. In addition, because we withdrew the consent item for the document generation software from the last Board of Governors meeting, we are going to cover that one in more detail today with a business case and then re-present the consent item for approval.

And with that, that concludes my update and I can move right into the charter if you would like me to.

Chairman Holton: Any questions for Kelly prior to the charter? Okay, Kelly, that is fine, proceed along with the charter review.

3. ISAC Charter Review

Kelly Booten: Okay. Behind tab three is the current charter and we review this charter every year. It pretty much is consistent with the types of things that this committee covers.

There is one thing, if you would like to make a change - in some of the newer charters we have been changing the number of times a committee is required to meet in a year, making it more flexible.

Right now, this one says the committee shall meet at least four times per year, and we have been changing that to at least two times per year, such that if there are no items, we don't have to meet four times a year, though we intend to always have something that the Board needs to consider. So, based upon that, is there any discussion or would anybody like to make any changes to the charter?

Chairman Holton: Kelly, the staff had a recommendation yea or nay for that?

Kelly Booten: Yes. Staff does recommend that we change the committee meeting to at least two times a year. We will still do the four times, but it gives us the flexibility that if there is nothing for a specific meeting, we have the option to cancel it, of course, at your direction.

Chairman Holton: Correct. That sounds reasonable to me. Any others have any comments or suggestions prior to entertaining a motion? Okay, none being heard, I will entertain a motion on staff's recommendation.

John Wortman made a motion to update the Information Systems Advisory Committee (ISAC) Charter as recommended. John Vaughan seconded the motion. All were in favor. Motion carried.

Chairman Holton: Okay, thank you, Kelly. The Chair next recognizes Robert Sellers on the update of the Security Strategy.

4. Security Strategy Update

Robert Sellers: Good morning Governors, this is Robert Sellers, Chief Technology Officer for Citizens.

As referenced back in the charter under Section 3.D, one of the missions of the Information Systems Advisory Committee is to review and assess IT risk practices, including the IT Security and Disaster Recovery components. I would like to do a high level brief this morning on the IT Security and Risk Strategy updates that we have made going into 2019.

Our strategy updates typically cover a multi-year period, looking at potentially a three-year program or programs and projects that will help us move through and continue to improve our posture around IT risks.

If you look at the second page, the triangle there, the pyramid, you can see the model that we follow. This is a defense in-depth, looking at three major areas of governance and project and operational type activities. The first area down at the bottom - we are really focused on our business units and our IT operations areas, focused on immediate risk, scanning, addressing and evaluating and dealing with those risks.

We move up to the second tier and we start to look at some of the governance activities associated with that internal to Citizens - our risk acceptance and monitoring activities through our Enterprise Risk Management organization under Joe Martins, our Privacy Officers under Dan Sumner, and our IT Security and Risk organization under myself and Kelly Booten.

We work through those areas for acceptable risks for the organization and we document risks and request assurance from the Board, as well as our independent Office of Internal Audit and our executive leadership team. So, a very strong pyramid of governance and focus leading down to the operational functions of the organization.

Coming down on the left-hand side you can see the frameworks and the tolerances, the policies and standards, as well as the divisional risks focused in by the business units themselves. So, a very nice repeating circular type of model here of action, review, new implementation, process and back around and start again.

Over on the right-hand side we have the very specific activities of our external auditors which cover many different organizations that audit us, from the Auditor General to our financial auditors, themselves, as well as regulators from the Department of Financial Services and Office of Insurance Regulation.

As we move to the next page, the strategy update in our Position Statement, the Security and Risk Department really focuses on enabling our business units to manage their internal IT security risks through the process of influencing and supporting them in those activities.

We have very specific operational activities within IT security that we perform every day, also within our overall IT organization that we are performing every day. But without the support and initiation of activities from our business units, we will not be successful. So, it is an entire team effort of the Citizens organization.

Carlos Rodriguez, our Director of Information Security, joined us in July of last year. He performed, in conjunction with a number of prior activities that we had going on, an evaluation of our IT security posture, looking at areas of improvement that we could make in the upcoming period, and has worked with me and others within the organization to revise and update our strategy. That strategy has been brought through our governance processes as I mentioned earlier, including our senior IT leadership and Barry Gilway our CEO. They have been briefed on the 2019 IT Security Strategy, as well as IT security projects and road maps that are underway at this time.

Flipping over to the next page you will see the three-year goals. There are eight primary goals all linked around different levels of improvement that we have identified as necessary to the organization.

The item highlighted in red is what we have deemed the most critical component of the program and is focused around enabling and improving our processes and technology around identity and access management. Every system that we have, every user of one type or fashion, whether it is an agent, an employee, an adjuster, an external vendor, all who have access to our systems, must go through an identity and access management process.

Organically, these have grown over 15 years. Some are in silos. We intend to bring these together in a holistic process that will enable us to manage these at a much deeper and tighter level, and that program is underway at this time.

There are a number of other items listed. These are not in priority order, but they do represent the heart of what we believe are improvements that we can make to our programs across the organization that will continue to improve our risk posture.

On the next page, we will cover Identity and Access Management a little further. What we are looking to accomplish here is a mixture of process and technology. There will be certain acquisitions that we

need to make, but the first thing that we are going through is reviewing all of our existing processes and technologies that we have today. We will look at the ones that we have acquired recently through our Microsoft agreements as part of our Enterprise level Microsoft agreement, both in terms of software as well as processes, our movement to the cloud, etc., and then identify if there is anything new that we need to acquire. There is significant process improvement that we know we will be doing in this area.

The four bullets that are listed here are the outlying goals:

- Secure, easier access to applications within our environment.
- Solutions that require fewer and more secure login credentials. Many of you have your own
 issues around using user IDs and passwords to access systems. The average person has well
 over 150 password and user IDs that they have to remember and manage in their personal and
 professional lives. We need to find ways to continue to integrate those type solutions.
- The ability to collaborate across and beyond Citizens, as I just mentioned.
- And then the improved governance, security and auditing to minimize the exposure of our assets. That handles areas from our privacy, as well as other information risk areas.

So again, we are continuing to reduce the risk by providing the right access to the right people at the right time, quickly. This is a multi-year program we anticipate taking two years to complete.

The next page covers the high-level objectives focused around reducing cyber security risks, the regulatory compliance that we must have as an organization, enhancing our user experience and the productivity of our employees and consultants and agents, and improving our operational efficiencies inside our organization on how to deal with these issues in the area of identity management. Then the last one is to facilitate the digital innovation. As an organization, Citizens is moving rapidly in this area as demonstrated through our Claims and myPolicy implementations that we have done in the past year.

We are continuing to improve in myPolicy. We have the Salesforce Agency Management solution coming online. There are many different areas where we are trying to streamline our approach in interacting with our agents and our policyholders. Those, typically, will fall under the area of digital innovation, and identity and access management is a key component of that.

Governors, this is a very high-level overview of the area around the IT Security & Risk Strategy. I am open to any questions at this point in time, as well as available to you through Kelly for any further or deeper discussions that you might desire.

Chairman Holton: Thank you, Robert. I have one question off the bat and then I will see if others have any. Have you guys explored any of the emerging ID accesses like facial recognition, retinal recognition, fingerprinting, anything like that?

Robert Sellers: We have. As part of the first phase of the Identity and Access Management Program, we will be looking at the gaps and opportunities that we have. In many situations we are seeing a really diverse set of access methods, down to DNA levels depending upon the security that is required. I don't think we have any requirements here to do blood testing, but your point is well taken, and many different methods of access will be reviewed. Again, it has got to be something that is common and easy. And that in itself, while still providing the level of security that is needed, is a balancing act.

Chairman Holton: Right, appreciate that. Other questions for Robert? Okay, thanks for that illuminating report. I appreciate it and I am sure you will keep us very well posted as things move forward on this.

Next is item five, and the Chair recognizes Aditya Gavvala to provide the Cloud Strategy Overview.

5. Cloud Strategy Overview

Aditya Gavvala: Good morning. My name is Aditya Gavvala, I am the VP of IT Services and Delivery. I would like to draw your attention to tab five.

What I want to do today is provide you with a high-level overview of the cloud strategy. Cloud computing is developing. I would like to discuss why it makes sense for us given Citizens' unique business model and position in the insurance market. Some of the key characteristics from the cloud are, number one, elasticity. Cloud gives us the ability to scale resources up and down very quickly on demand. In the cloud, you pay as you go, so any services you use is what you are charged for, so that flexibility is something that cloud uses. It is relatively easy to provision servers and deploy in cloud on demand and very quickly. And, the fact that the hardware is managed by the service provider and it doesn't require any internal resources to manage the hardware or networks.

So those are some of the key characteristics of the cloud. The benefits with the cloud are obviously a variable cost model which aligns nicely with our dynamic policy count, budget and processing needs, and cloud also ensures support for any elastic needs. If there is a catastrophe and we need to stand up servers, it will be relatively easily done in the cloud. It minimizes demand from IT internal resources, also. So, cloud makes a lot of sense for us.

On the next slide we see our cloud future state vision. On the left side you will see the current state of where we are today. On the bottom of that picture you see that we have two data centers. One is at the Colo-CSX and the other one is the disaster recovery center. Today we have some of our applications running in the cloud. We call that software as a service. Our Centerpoint system that we rolled out last year is in the cloud. We also have some of our internal applications running in the cloud. But to the right you see the future state. The vision is that we take our insurance suite applications, which are running on-prem today, and take it to the cloud, also other key business systems running in the cloud, and disaster recovery also running in the cloud. That will shrink our on-prem footprint significantly. So, our cloud strategy has gradually transitioned from migrating our own infrastructure and applications in CSX to the cloud.

On the next slide you see our cloud journey that started last year. We migrated our e-mail from on-prem to the cloud. Our e-mail today is running in Microsoft Office 365 cloud. Microsoft offers two major cloud offerings. One is called the government cloud track, the other is called the commercial cloud track. The software application and data management features are very extensive in the commercial cloud. Also, the commercial cloud is less expensive in comparison to the government cloud. Commercial cloud is obviously identified with FEDRAMP security standard, which meets or exceeds our security standard. Citizens has made a decision to use the Microsoft commercial cloud track.

Moving on to the next slide. We would like to share with you some of the goals for 2019; what we plan to accomplish in 2019, as far as cloud foundations are concerned. We have established a program

management office that will oversee all of our cloud foundation activity. We have established multiple tracks, multiple teams that are looking at various aspects of cloud. A team focused on cloud governance exclusively.

We govern all our decisions about what we will deploy in the cloud, how we will run in the cloud, so the team will come up with the necessary governance controls. Another team will be focused on dashboards. This will bring visibility to systems running in the cloud, how they are performing, how they are accessed. They will have KPIs and critical security factors displayed on the dashboard. Another task focused on security and identity and access management exclusively.

We will also be bringing in an implementation partner that has the experience and expertise that will help us migrate from on-prem to the cloud. As a stretch goal, we are targeting to migrate at least one of our business systems this year to the cloud, and we are looking at our external or internal website and taking it to the cloud.

So that is a quick overview of our cloud strategy. I will pause here for any questions.

Chairman Holton: Any questions for Aditya at this point? Okay, none being heard, you can probably just move on to the next item then.

6. Document Generation Software Business Case

Aditya Gavvala: Okay, on tab six, we have the Document Generation Software Business Case. I want to share some background about document generation consent item that we have.

Starting on slide number two, we have a product called Thunderhead that we use today. This is an embedded technology used behind our insurance suite. It produces output on a nightly basis. It produces thousands of PDF documents that we print and ship to our customers. This is an embedded technology. It doesn't run on its own. It requires hardware. It also requires some additional software in order to run this piece of software.

Slide number three shows the procurement timeline. We procured this product through competitive solicitation back in 2011, for three five-year terms. The initial term at the cost of \$1.2 million, and the two, five-year renewal terms combined at \$1.18 million for a total of \$2.39 million. So, what is changing? We currently run on version 5.1 of the software which runs on-prem on our servers in our data centers. The company that produces this product has stopped supporting the on-prem version of the software. That leaves us with three options.

The first option is to upgrade to the latest version of the product, which is version 6.1, which also runs on-prem, but the support is only through 2022. The other option is to go to the cloud offering. They call it SmartComm, that is the name of the product, for an additional spend of \$917,000. The third option is to replace the vendor and make the necessary changes within our systems to support the new vendor.

Our recommendation is that we upgrade to the cloud version of the software. And I want to discuss how we arrived at this recommendation.

On slide 6, we give you the rationale for the recommendation. Thunderhead is an embedded technology integrated in the insurance suite and we have hundreds of templates that were created using this technology. Replacing all the templates and testing will be a monumental effort. Also, the SmartComm option is economical in the long run. We have a business case that I will walk you through that compares option one, which is staying on-prem with the latest version of the software or going to the cloud. The cloud offering also gives us additional functional capability which I will discuss on the next slide. We have done our due diligence. We have verified that SmartComm is a product that is strategic for the vendor. It is also on Gartner's magic quadrant. And SmartComm is also an official supported vendor for the guidewire technology which we use behind insurance suite.

Our next slide we draw a comparison to the on-prem version of the software with the cloud version of the software. As you can see here, the cloud version of the software is feature rich. It has more features and is a strategic product that would mitigate any future risks with any security vulnerabilities, etc. It also addresses some of the technical deficiencies we have with the on-prem product. There is less operational overhead with the cloud version of the product because it is managed and hosted in the cloud, and it is managed by the vendor. Upgrades, updates and patches are done by the vendor, so we don't have to use our resources to apply any patches or upgrades to the software. There is a little bit of effort in updating the integration and there is some conversion that will occur, but that is moderate effort.

We have done the proof of concept for the SmartComm product and we have noticed that this is definitely a superior product and it has the features which are definitely compelling.

On the next slide we draw a comparison of the two products. For the on-prem version of the product, if we just upgrade to version 6.1 and run it through 2026, the total cost of ownership of the product is \$3.179 million. That is because we need hardware and additional software to run this software. In comparison, if we go to the cloud, the SmartComm version through 2026 will cost us \$2.685 million. So, there is a cost avoidance of \$493,000 by going to the cloud.

On slide 9, we break down the cost further. The spend associated with the vendor is that Board approved \$2.391 million already. We need an additional nine hundred seventeen thousand dollars. The breakdown of the \$917,000 is software for \$180,000 through 2022 and \$415,000 through 2027, technical services for \$200,000, additional services and training for \$122,000, all combined the additional funds that we are requesting is \$917,000. The benefits are to the right side of the slide. The total cost of ownership for on-prem software, if we stayed on-prem, would have been \$3.179 million. In comparison, if we go to the cloud it will cost us only \$2.685 million. There is a cost avoidance of \$493,000. Back in November when we brought this consent item to the Board, at that time the vendor quoted a \$1.5 million. Our vendor management office successfully negotiated it down to \$917,000. So, there is definitely cost savings there.

I will take any questions at this time.

Chairman Holton: Questions for Aditya?

Brian Foley: This is just a comment from Brian Foley. Sorry I joined late. This is an environment where, when vendors with platforms like this are pushing you to the cloud, there are so many benefits in doing that. I am glad you selected the cloud version of this as opposed to implementing a newer version onprem, because the models for a lot of these software products have changed to a full support model in the cloud, but the vendors are not fully supporting on-prem model like they used to. So just a general comment.

Chairman Holton: Thank you for that. Any further questions? None being heard, you can move on to the consent item then.

6. Consent Items

a. Document Generation Software License and Services

Aditya Gavvala: The staff recommends the Information Systems Advisory Committee approve the amendment to contract number 12-11-0043-00, adding \$917,682 to the contract amount for the contract term, and authorize staff to take any appropriate or necessary action consistent with this consent item.

Chairman Holton: Thank you for that. Is there a motion to approve staff's recommendation?

Brian Foley made a motion to approve the Document Generation Software License and Service Consent Item and John Wortman seconded the motion. All were in favor. Motion carried.

7. New Business

Chairman Holton: Thank you for that presentation. We look forward to working with you on that. Our final agenda item is number eight, New Business. Is there any new business to come before the committee?

Okay, before we adjourn, our next teleconference is scheduled for June 4th, 2019, at 10:00 a.m. and I look forward to seeing everyone at the upcoming Board meeting. I will entertain a motion to adjourn.

John Vaughan made the motion to adjourn. Meeting adjourned.