PUBLIC ACCOUNTS COMMITTEE

GOVERNMENT ICT FOLLOW-UP



TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 9 AUGUST 2017

SESSION ONE

Members

Dr A.D. Buti (Chair)
Mr D.C. Nalder (Deputy Chair)
Mr V.A. Catania
Mr S.A. Millman
Mr B. Urban

Hearing commenced at 10.00 am

Mr GILES NUNIS

Chief Executive and Government Chief Information Officer, Office of the Government Chief Information Officer, examined:

Ms MARION BURCHELL

Executive Director, Policy and Governance, Office of the Government Chief Information Officer, examined:

The CHAIR: Good morning. On behalf of the Public Accounts Committee, I would like to thank you for agreeing to appear today to provide evidence related to your agency's response to the recommendations made in the 2016 committee report "Doing ICT Better". My name is Tony Buti, I am the member for Armadale and the chair of the committee. With me today are, of course you would know, Hon Dean Nalder, the committee's deputy chair. To his left is Vince Catania, member for North West Central. Simon Millman, member for Mount Lawley, will be here very shortly, and then there is Barry Urban, member for Darling Range. It is important that you understand that any deliberate misleading of this committee may be regarded as contempt of Parliament. Your evidence is protected by parliamentary privilege. However, this privilege does not provide to anything that you might say outside of today's proceedings. Do you have any questions in regards to your attendance here today?

Mr NUNIS: No, I am fine thank you.

The CHAIR: Would you like to commence with a brief opening statement before we ask some questions?

Mr NUNIS: Yes, I have a few statements. Thank you very much for the opportunity this morning, Chair. Since the report came out in September last year, we have made quite a significant amount of progress. I thought it worthwhile, given it is a new committee, to give you a brief background in terms of where we are at.

Our office is looking towards how we can try to stabilise ICT costs across the public sector, because it has been in somewhat different forms over a period of time, how we can increase value for money, how we can minimise risk in terms of delivery of ICT projects, and how we can build capacity back in the public sector because over many years we have outsourced that capability. In doing this, we do not have any particular authority, so we are there to try and lead and influence in terms of getting the right outcomes, to set up a government ICT strategy, which we have published in order to provide some guidance, look at how we can introduce ICT innovations and how we can do things better, and also introduce standardised approaches across the public sector whilst improving public sector capability. In a broad context that is what we have been trying to achieve.

We are funded for a period of three years. We are in the third year, so that ends on 30 June next year. That funding included a \$25 million allocation from which almost \$10 million of that relates to the operational running and \$15 million is related to the ability for projects to come on board and those to be funded if they were to be suitable for government. We have a base of 17 staff at the moment. With additional projects that have come on board, we have a total of 36 staff at the moment with those projects across government that have arisen. During that time we have released a number of policies—an open data policy, a business continuing disaster recovery policy, digital

security policies, digital services policies, interoperability policy and a cloud policy—along with working on data classifications across the public sector. We do not classify data like that of the commonwealth or other states. We have introduced three whole-of-governance groups; that being the directors general council, the Business Impact Group, which is a second tier across government and how the business could be impacted if there were technological changes, and CIO advisory council. Those three governance groups are in operation now. In addition to that, with more than 100 CIOs, 80 of them are on a CIO portal. We share information electronically across the CIOs.

There are a few initiatives that I will quickly talk about, which I am sure we will get to in more detail going forward. The GovNext-ICT program is up and running. We have had some success and we will describe that as we go forward. The MyWA program, which is an all-of-government portal and how we can start to do digital transactions through that government portal, is another initiative that we are also working through as well. Other than that, I thought I would just leave that open statement at that.

The CHAIR: Thanks very much. Before I ask questions about the recommendations of the report, have you received any confirmation from the minister or reassurance about the status of your office going forward and continued funding after 2017–18?

Mr NUNIS: My minister, Hon Dave Kelly, who has innovation and ICT amongst others portfolios, has given a strong indication that he is very keen on supporting the ongoing funding arrangements for our office. However, we obviously need to justify that as part of the budgetary process. The expectation for us is to make that business case to government in the midyear review and for government to consider that for the 2018–19 financial years going forward. The answer is yes, other than that he cannot obviously make a commitment.

The CHAIR: Before some of my colleagues ask specific questions about certain recommendations, and some of the stuff you mentioned does go to responding to those recommendations in the report, can you just give us an overview of which recommendations have actually been implemented and the process for that, and the ones that have not been implemented and if there are particular reasons why?

Mr NUNIS: I do not have a table list of how many have been implemented—I did not think about that—but I can quickly go through those that have been done.

Recommendation 1 relates to our ongoing nature, which we have just addressed. We are waiting for that to occur. The second one relates to having a similar structure to that of New Zealand and having the right stakeholder management teams in place. We do have a range of stakeholder management teams available at the moment. I can only stress that the New Zealand scope of activities is much broader than us. They have a larger number of people involved in that particular organisation. To some extent, we do have that; we have met that particular requirement in terms of ensuring we have good stakeholder committee engagement, as I already highlighted, with the director general councils and CIO councils. Measurement of recommendation 3 relates to the way in which we can measure performance across the public sector. There was benchmarking undertaken in 2015 and 2016 across 10 government agencies, and somewhat extrapolated that gave us a number around the kind of money that we have been spending across the public sector. In the last three months we have been doing surveys across the public sector, which has just closed. That looks at our key performance indicators that we have highlighted in our ICT strategy to look towards how we can publish that. We will soon be publishing that once we get those consolidated, but I have some early insights if you choose to understand what those are.

Similarly, with recommendation 4 there are some measurements that we have undertaken. We know, for example, that approximately 80 online digital transactions occur in the Western Australian

government. How does that compare with other jurisdictions? New South Wales has 800, the UK government has more than 1 000. If we were to suggest that we keep up with the trends, we are a long way behind. We are very much a manual environment. Recommendation 5 around the establishment of a cabinet subcommittee for ICT is not one that I believe should be supported in the context of now that there is an ICT minister, the ICT minister is the accountable minister and therefore will report to cabinet. That is what we always believed to be suitable and we would suggest that would be the best way to go forward. Now that the new government has appointed an ICT minister, I think that accountability is quite clear in terms of advising cabinet. Recommendation 6 refers to the DG ICT council. We have put that in place so that is definitely underway. We meet four times a year, every three months, and the council is quite active and proactive in its decision-making based on those policies that have been published, new procurement methods being the GovNext contracting arrangement, and also the MyWA program that we have been working through as a single government portal. They have been quite positive in their response going forward.

Recommendation 7 refers to the Department of Finance and looking at further benchmarking. I think I have highlighted that. We have already started that program and are working with finance quite closely on that and across the public sector. I should say that what we are trying to do on benchmarking is to look towards how we can benchmark government agencies amongst themselves and within best practice. I think the best way to describe it is that it is a bit like the NAPLAN view with the parameters of lowest and highest and where this agency sits without identifying all other agencies so that you know where you are performing. We are also looking at what are best practice parameters and look towards where that agency sits in terms of best practice as well, so we can look towards how we can drive improvement based on some indication going forward.

[10.10 am]

Recommendation 9 refers to the Department of Finance undertaking Gateway policy review. That has happened and I am sure the director general will advise you in terms of the current status, but that has certainly been operable and we are a member. Recommendation 10 is about how we can stabilise costs. This is a bit of a "how long is a piece of string" scenario. There are a number of things that we have undertaken going forward in that context. Where we can intervene, we do so in order to provide the best advice. An example is the Western Australia Police that had a computer-based dispatch system recently installed—new technology. Once they finished that, the fire and emergency services also wanted one. Typically, they have individual ones, and we encouraged them to use the same platform because they both turn up at emergency events so why not use the same system? That has actually happened. That has resulted in millions of dollars of savings by using the same platform going forward. Similarly, we have looked at other areas where we can improve the cost structures going forward. We are more than happy to tell you what those things are, but in some regard, given our level of resourcing, we can only go so far across the public sector given the size and scale of the West Australian public sector.

Recommendation 11 relates to Treasury. I will let them respond if you are seeing them. I could say that Treasury do send significant proposals for ICT to us in terms of giving advice, and we also encourage government agencies to consult with us before they make any type of submission going forward. I will leave recommendation 12 with finance. Recommendation 13 is the establishment of a GovNext service broker. We have established that. We have 10 people working in that office at the moment, which is brokering commercial arrangements under the GovNext model. If you are interested in the outcomes of that I can talk about some of those benefits that have occurred so far on that particular recommendation. Recommendation 14 relates to cloud policy in which there is to be a cloud-first approach. I have some difficulties with the cloud-first approach. The main reason is that if you move directly into cloud without actually reforming what you are going to do, it will cost

you more. An example of that is we have a range of environments on premise in government departments, so they have a development site, a testing site, and an archive site, so all these different servers. If you were to pick that up and put them all into the cloud, they would be far more expensive than what we are currently doing. So we need to change our discipline and look at how we establish these environments and turn them on and turn them off, because cloud is a pay-per-use arrangement. Typically, we put these systems on these servers and let them run, and they just keep running. So we are trying to say do not do exactly what you are doing now. Change the way you do it and if you change the way you do it, cloud will be cheaper, and it is basically a different discipline. There have been circumstances in other jurisdictions around the country where agencies have moved to cloud without doing that and it has cost a lot more money and they ask the questions why. At the end of the day, we basically say it is more cloud appropriate or cloud relevant to your particular circumstances.

Mr B. URBAN: Can I ask a question? What is the relevance of government agencies jumping across to cloud? I do not get why our agencies should move across to cloud when we do backups, which is—I honestly do not get the point of cloud unless it jumps —

Mr NUNIS: Is that in terms of why is cloud attractive?

Mr B. URBAN: Yes. Just because it is attractive around the world for other things, with security for government I think hard storage is better. Is it just to go with the trend of the world or is it —

Mr NUNIS: No. Cloud is not a new concept. It has actually been around since the day of central IBM mainframes, which in essence is the original cloud—how you can share and use those resources. Why cloud is attractive now both commercially and in terms of capability is for a couple of reasons. Some large cloud providers are called Amazon Web Services—AWS—or Azure. They have set up big data centres with 50 000 servers and they basically say if you want to use our servers, you click and import it over, you turn it on, you pay for the time it is on and then you take it away when you have finished using it. That means you only pay for what you use. What we do in terms of putting that same application is that we buy lots of servers. We have hundreds and thousands of servers. Those servers cost funds upfront. They are quite expensive. They have software sitting on them, they have operating systems and they have people sitting around and maintaining those. When you add up the cost of all those servers and people, it is a significant cost across the public sector. What government typically does is because we own and operate those environments, we have the luxury of just putting things on there and they keep running. What we are basically saying about why cloud is attractive is that if we change the discipline of the operation, we do not need to have a development site, a test site, continually running when you are not using it. So to that extent, you are paying for 100 per cent of your infrastructure, but over the period of time that you are using it, it is down to about 40 per cent. So you are paying for 60 per cent more than what you typically do. Under those circumstances AWS and Azure are not only offering storage capacities, a use it when you want to use it option and to take all the risks associated with the infrastructure and its costs, but they are actually paying for all licensing structures, the whole support around it, and we actually have no support people or infrastructure or licensing costs attached to us at all for that use. The attractive component of this is basically that we are just renting the use of it for the period that you want to use it for.

Mr B. URBAN: What is the security of it?

Mr NUNIS: There are two major types of cloud: one they call a public cloud and the other one is called a private cloud. The public cloud that AWS uses today has been certified at what is the IRAP standard, which is a security standard. None of our government systems are at that standard of security.

Mr B. URBAN: We have not got encryption yet have we?

Mr NUNIS: No, so we are working in a lower security environment than what these guys actually offer. They also offer, and so do some other vendors, a private cloud, which locks down to only government using it, for example. So it will not allow, in this one piece of kit, different layers of other users on there. So they can limit the usage to certain clients and say that is now your private cloud. You pay more for it compared to a public cloud, but it is dedicated towards your usage. The level of security is, in essence, apart from providing those services, their business. If they had any breach or loss of data or any penetration by foreign entities, their business goes down, basically. They have never had —

Mr B. URBAN: Do they convert the data which we put into the cloud, with encryption so they are putting the extra security on that and then that is part of the service?

Mr NUNIS: Yes, so all we have is a pane, a window, and we basically click and send stuff over to it. Once it goes inside their environment, the security layers are sitting around it. They allow only us to get access to that. They do not actually sit in the middle of it. It is an automated environment, so you do not actually have a human being deciding your access levels.

The CHAIR: But did you say that you did not think that we should be using cloud?

Mr NUNIS: No, I think we should be using cloud. We just should not be using it in the way we are currently practicing our current usage of systems sitting on our infrastructure. We need to change our methods.

The CHAIR: Do you want to just continue with —

[10.20 am]

Mr NUNIS: Sorry. Recommendation 15 is investigating a one-stop shop approach to service delivery and that is our MyWA program. We have started that program and we have in fact launched a prototype, which is online today, and getting quite good feedback from the community in that regard. Recommendation 16 looks at mandating a digital services portal. We have more than 450 government websites. There are not 450 government departments. There are way more websites than we would like to have. We have put in place since June of this year, as a result of endorsement by the directors general council, for any kind of website development that goes above \$100 000 to refer to us. We do not want to create more websites, so we have wanted to find some way in which we can restrict that going forward. Eventually, over time, we expect that 450 to go down quite significantly, but it will just take time.

Mr B. URBAN: Are your thoughts to have an essential website and then people come off that into the back screens? So you go onto an essential government website and that then throws you into the back screens so that you are in a central spot rather than —

Mr NUNIS: Yes. The best way that I can explain that is when people want to find that information, the first place they typically go to is just Google, because they are just searching for data: "I want to know how can I apply for a probate." They do not know to go to the Supreme Court, they just want to know how to apply for a probate in Western Australia. So we have put one government website, which will be the new wa.gov.au website, and it has its search bar and that search bar lets you search across the 450 government websites. If I were to search "probate" in Google, it would come up with probate in the US and probate in England and probate in WA. If we put probate in this search engine, it only searches Western Australian websites and comes up with that particular result. We are trying to allow for the community to find information across the public sector without necessarily knowing what agency runs it.

Mr B. URBAN: Across all government agencies, what is the cost of each of the 450 websites?

Mr NUNIS: At the moment we understand it to be around \$25 million a year to maintain and support those websites. Last year, over 12 months ago, one particular agency wanted to create a website using quite an old-school approach—getting the servers, not using cloud, building everything around it—at a cost of \$3.2 million. I argued with them that it was better to go down using an out-of-the-box website called WordPress, use a cloud service and then basically we do not have to customise anything. They built that now for \$500 000, the savings are that significant, and the cost of running it I think it was around \$80 000 a year compared with \$900 000 a year. So there are significant cost reductions in a cloud environment for the use of that type of server as opposed to building our own.

Recommendation 17, communications with the commonwealth digital transformation office. We have quite frequent conversations with them and we are trying to align as much as we can with that particular agency going forward as well as the newly created cybersecurity unit in the Prime Minister's home land agency—I am not quite sure of the name of it.

The CHAIR: Homeland security?

Mr V.A. CATANIA: Home office.

The CHAIR: It is very *Yes Minister*.

Mr NUNIS: The last one I think is recommendation 18 about the whole-of-government open data policy. Yes, we have put that in place. That has been in place since July 2015. When we last appeared before this committee, we had about 300 data sets from 24 different agencies on there. Now we have more than 900 data sets from 63 different agencies, so it has grown by 300 per cent of open free data to the public.

The CHAIR: Thanks for that. Is it possible—I know that you are not overly staffed, you are understaffed if anything, but could you supply maybe a table at some stage with the recommendations, which has been done based on maybe a little bit more detail as to what you have verbally said today? That will be more than likely posted on —

Mr NUNIS: Public. Yes, we have actually done one of those already so we can do that very quickly.

The CHAIR: I am sure it will be on the cloud somewhere. I would like to pass over to the deputy chair and my colleagues.

Mr D.C. NALDER: Thanks. When we set about trying to set up the DCO originally, there was an audit that was undertaken by PWC that showed that no-one really understood what was being spent in ICT right across the government. They estimated that it would be somewhere between \$1.6 and \$2.4 billion a year. As I stated many times, what frightened me was not the absolute number but it was more the variation of the number that we were spending.

Mr NUNIS: Yes.

Mr D.C. NALDER: Do we have a better handle in our financial reporting today of what the government is spending on ICT?

Mr NUNIS: There is a yes and no response to that. In the first response, the answer is no because we allocate costs in ICT differently across the sector. In some regards, we cannot see the costs of ICT because it is blended into what could be perceived to be a business transaction as opposed to a technological one. So that makes it quite difficult to make it transparent in terms of our financial systems. The second response in terms of do we have other transparencies, is yes. We have just recently undertaken that survey. We have set a standard and said, look, this is how we want to count IT costs and transactions. So now everyone has to measure their cost expenditure in

accordance with the standard that we have set rather than rely on our financial systems, and allocate according to that standard. That has now come back—it came back only last Friday actually—and it is looking like that cost is \$1.02 billion per annum in terms of that spend for 2016—17 financial year, from which \$200 million is allocated to ICT projects.

Mr D.C. NALDER: Does that include people resources, because sometimes the definitions of what are looked at change?

Mr NUNIS: We said people, contracts, software, project management, and contracting ICT services. It did not go to the extent of what is true total cost ownership. They could not really work out space in terms of rental, if they had a data centre what it costs to run that data centre and the electricity costs. It did not go to that extreme.

Mr D.C. NALDER: PUEs.

Mr NUNIS: Yes, but it did come with the most obvious ones and it has come to that amount of money. You would think that from year on year, why there is a variation is really being reflective of more recent government projects where we have big spends. We have had a large health spend over the last five or six year with significant ICT components in that, so it peaked in previous years. With Fiona Stanley Hospital and the children's hospital you are looking at \$200 or \$300 million just in ICT for those each. Now that those do not exist, you would expect it to drop down in terms of that project cost.

Mr D.C. NALDER: Just while I am on that line, do you think that it would be helpful, and it may be outside your jurisdiction, that the state standardises the financial reporting of ICT?

Mr NUNIS: Yes, absolutely. Now that we have done this one survey from which we have had quite a good response, we want to set a standard: this is how we want to capture it and we want to therefore try and enforce or influence the financial systems to be reflective of that, to go "please now record it according to this".

Mr D.C. NALDER: Consistency across state makes it easier for all of us to understand what is going on.

The CHAIR: Just further on from what has been asked of you and your response, does that include the \$3 billion GovNext program?

[10.30 am]

Mr NUNIS: Yes, so the \$3 billion GovNext program was a 10-year program, from which we estimated it to be anything up to \$300 million a year. On that scope of technology, it was what would be typically spent in government. So that \$300 million out of the almost \$1.1 billion is what we are talking about.

Mr D.C. NALDER: Just taking that to the next step, in looking at, obviously, GovNext and how we do things, and chunking down, because what worries me is implementation; it is five per cent inspiration, 95 per cent perspiration. When you look at things such as data centres, are you moving on data centres and the inefficiencies that exist there, particularly around PUEs because of locations and the cost of energy and so forth?

Mr NUNIS: Yes. Now that the GovNext contract has been signed, and we signed those in late January this year, between now and June they were essentially required to stand up their services, so their data centres, their networks, their data storage and the cloud services. It has taken them that long to get that established. Typically, government buys it the other way; we kind of agree to buy something then the industry builds it. What we have said is that we do not want to take that risk of

us building it anymore: "You build it and then we will certify that it suits our requirements and then we will start buying it."

Mr D.C. NALDER: So if Amazon can deliver a PUE of 1.25 for starters or even lower at 1.15 or 1.2, whereas ours are probably sitting between 2.0 and 3.0 —

Mr NUNIS: It is way higher, so we have set a particular standard on the data centres. They must be tier 3. Tier 4 is the highest. I do not believe there is actually a tier 4 that is commercially available in Australia. Defence use their own data centre; it is a tier 4 data centre. Tier 3 is very high in terms of security and very low in terms of energy usage, so those three have been selected. Now we are just about to encourage government agencies to look towards getting the right pricing and look towards moving in.

Mr D.C. NALDER: Just staying on that PUE stuff, my understanding is that agencies or departments do not reflect the cost of power in own properties in their P&L.

Mr NUNIS: They do not.

Mr D.C. NALDER: Therefore, they do not have a vested interest in looking at efficiency in data centres and things like that because they can just blow it away. Do you see that as a hindrance in being able to try and get agencies to get on board, because it is better for WA but not necessarily their P&L?

Mr NUNIS: Yes, so we have more than 60 data centres in government. Some of those are commercial; most are government owned. When they are sitting inside a government building, the power costs associated with government buildings relates to the entire building; it does not relate to that portion of the data centre. When a pricing comes from the government vendors they are giving a total cost. When they get a total cost and the public sector people go, "I do not pay that much", well, they actually do, but they do not know. They do not count it in the same way.

Mr D.C. NALDER: It comes back to that standardised financial reporting.

Mr NUNIS: Yes. We want to try to move the public sector into total cost ownership costing arrangements, which is why we are trying to do this standardisation.

Mr D.C. NALDER: Which includes property costs too, because there is no charge in P&Ls for owned properties, but if you lease a property it is in your P&L.

Mr NUNIS: Correct.

Mr D.C. NALDER: So there is a vested interest in departments to own their properties, and yet corporations out in the private sector a long time ago went and put a charge against owned properties down on the P&L so that you actually took away that vested interest to try and manipulate an outcome.

Mr NUNIS: Exactly right. In addition to that, where we own capital, in some regards some of the servers they would have to recognise a depreciation cost on their books. When you have got those costs, which are excluded from their current thinking and almost seen as an invoice price that comes in from a range of areas, comparing that to the new world they sometimes see it as being more expensive. We are just working through with them now and it has now been found out by a few agencies who have gone into—I will quickly give you a couple of examples of that. The Water Corporation is moving into the new data centres and they have actually just signed up an arrangement and had a 15 per cent reduction in their total costs. Their current expenditure just on data centres is close to \$1 million a year. It is quite early days and that price will keep going down over time as they get more efficiency and get better economies of scale.

Mr D.C. NALDER: Do you look to group smaller agencies so that you can get the economies?

Mr NUNIS: We try. It is a bit like herding cats. They are all in different time scales as well. Some are ready to move now and some may not because the existing equipment has not come to end of life, they also have different contractual arrangements supporting them so they are all on different time scales, but the pricing structure within the GovNext arrangement is an economy of scale pricing already. We have basically said that government can only buy through this, so you are basically getting all of government coming through this particular contract and then that comes up with a pretty good price and then the three vendors have to compete with each other to offer the best price going forward. We are always going to the three vendors, "Give me a price on colocation."

Mr D.C. NALDER: Do you think you have enough teeth to ensure that we are getting the best outcome for Western Australia in the sense of you are a group function, if you like, and you are dealing with individual agencies that believe that they know what is in the best interest of WA for their patch, and you end up with these conflicts? Are you getting the right level of support from, for example, Treasury or Finance, or are there things that the government could be doing better or smarter to ensure that we get greater compliance around delivery in this space?

Mr NUNIS: I always say that you can only go so far with influence and charm and at some point you have to mandate. We are at that point now. Now we have a new government in place and whilst we work out all the different machinations of that and a lot of other things that we have to think about, there is a point from which we have to set a sunset clause associated with rolling into GovNext. I would argue that we should be moving everyone to GovNext in terms of our infrastructure capability within the next 18 months and it will derive significant savings to the sector.

Mr D.C. NALDER: I have a couple of more questions on this. Having been involved personally with functions like group procurements and group securities and such things in my previous private sector, and globalising and standardising financial reporting et cetera, one of the challenges around the implementation is that when you set standards, you may be restricted to using multinationals because they are the only ones that can provide the service standard or do certain functions, and there is a fear and risk that you end up putting costs right up. For example, in the bank, when I wanted to buy a printer I would pay \$1 200 for it, but I could go down to Dick Smith and buy it for \$400 myself, yet I could never do that because I had to go through group procurement. There is some noise out in industry that it is starting to cost more for certain things. Do you have a sense of that and what is happening around the implementation and the cost of certain services? That noise could be vested interests that are local businesses that are now missing out, but I am trying to actually sift through some of that to get a sense of where you are going on the implementation and what the impact is on costs.

Mr NUNIS: Thank you for that question. There is a bit of confusion in industry on a range of factors actually and every time I meet with those people who do have a vested interest, they actually go away and better understand that the scope is somewhat limited to what they think it is. GovNext is not a contract that is buying all ICT services. It actually deals with about 15 per cent of our total costs. Most of our money in terms of the way government spends its money is in consulting services, project management services and software development. That is not part of GovNext. We spend the most amount of money in that particular space. What we are talking about in GovNext is only networks, data centres, data storage and cloud services. The first three all have to be local. You cannot provide a network on the ground here in Perth from Shanghai. We made it a requirement to have data centres in Perth. We have got three data centres in Perth, so we are not going to have a data centre also sitting in Shanghai. It is locally driven in that regard. The other component of this is in terms of pricing, and I might just pinpoint network pricing. Telstra, Vocus and Optus are the major telecommunication companies—TPG—and 140-odd government departments have individual contracts with those telcos. Each of them negotiate individually the purchase of that

telecommunication cap. Since we have been putting this in place and saying, "No, we are now going to have three multinationals that will negotiate on our behalf with the telcos to give us a better price", the pricing has come down on telecommunications that we have never experienced in our history with between a 15 to 30 per cent reduction in costs in telecommunications, and that is still including the multinationals sitting in the middle. Telstra usually gives the state a six per cent loyalty bonus for staying with them on renewing existing contracts. Now it is offering pricing to large government agencies and small ones that are, on average, around 30 per cent because of fear of losing market share. All we have done is create a competitive and dynamic marketplace essentially and now it is open slather towards particularly telecommunications being very much a commoditised environment. You kind of flick the switch and turn it on and turn it off, just like power and water, and that has been quite alarming to the larger companies because what we are now saying is that we do not necessarily have to have a direct contractual relationship with you, Telstra, anymore.

[10.40 am]

We now want to buy that commodity and we want to buy that commodity on a competitive basis. In that regard, it has worked out to be a lot cheaper. In data centres, comparing it to that of running 60 data centres moving to three, the economies of scale kind of highlight the fact that we will be reducing those costs and that is looking at between 15 to 30 per cent cost reduction as well. When it comes to the use of cloud services compared to on-premise costings, that is around a 40 per cent reduction. Even if we have the multinationals sitting in the middle there—yes, they must make margin and must make a profit—the competitive environment that has been established is actually driving price down. Part of this model was based on what happened in New Zealand. In New Zealand, in the last four years they have had price reductions in their contracts. We have never had price reductions in our contracts in IT; they have always been price increases. When I talked to the AWS in terms of providing cloud services over the last—I cannot remember the exact period of time but it would be four-plus years, they have had more than 160 price reductions. They have never had one price increase. What we want to have in government is to use the declining costs of technology and pass that on to government. At the moment, industry is actually retaining that cost saving and continuously charging us either the same or more for the same type of service.

Mr D.C. NALDER: Is it true that at a local level, the smaller service providers are missing out because of the multinationals?

Mr NUNIS: I think the only business, with exception of telecommunications, which is not going to have a direct contractual relationship with government is when we buy servers and storage capacity —

Mr D.C. NALDER: But that is hardware stuff.

Mr NUNIS: Just hardware, so the hardware companies, we will not be buying those anymore because we want to move to cloud. The vendors in data centres and the three multinationals will buy hardware because they have to supply that to us. To that extent, that has been the only impact that I have seen of not a direct relationship. We are still buying them, but indirectly.

Mr D.C. NALDER: Are there things that we can do as a government or as a committee that reports back to Parliament, things that could support you in being better? Are there things that you believe that we should be taking into consideration?

Mr NUNIS: I actually thought the last report was quite good. There were a lot of things in there. In terms of our office, obviously dealing with our ongoing funding arrangements, and that is obviously one issue for government, but we do not have any particular authority in cross-government. If we

had the ability or authority to intervene and make decisions to not buy something as opposed to buying something, that would be good.

Mr V.A. CATANIA: Sorry, Giles, with that, have you worked out what the potential savings would be?

Mr NUNIS: Just in the GovNext arrangement, which is the only area we have looked at, where we spend around \$300 million a year, we expect to save approximately \$65 million, and that, we believe, is the minimum number. If we do the right transformation, I think we will go up above \$100 million in savings a year.

Mr V.A. CATANIA: Is that straight off the bat, like, to have control over agencies that you expect to save that \$65 million in the first year and then more after that?

Mr NUNIS: Essentially, GovNext, in terms of rolling agencies in, has only been happening the last four to six weeks. So far, based on the agencies that are rolling in—there are about a dozen of them so far—they are looking towards a cost saving collectively in the first month of \$7.6 million in the first year, \$14 million in the second year, and \$15 million in the third year, totalling over five years to \$63 million; that is just for those 12 agencies.

Mr V.A. CATANIA: How much does it cost for your agency to run each year?

Mr NUNIS: It is \$2.7 million a year. It is not a bad investment.

Mr V.A. CATANIA: I would have thought that one way is for the committee to highlight the fact that after 2018 you want this to continue.

Mr NUNIS: It terms of what I see in the public sector, there is a need to have technological leadership, and that is a void that we have been filling. It is a big job corralling the people to go down the same path, and any change program is always difficult, but what we have relied on is "let the economics speak for themselves". Where these pricings are now coming through, you kind of say, "Well, why are you staying the way you are? You need to move".

The CHAIR: Obviously with the economics, money always talks very powerfully, but is there any recommendation in a political or administrative sense that would make your job easier?

Mr NUNIS: I would like to have some form of positioning within government that this is the strong policy position to move into this arena. I am saying that we should be moving to GovNext and we should drive that agenda. Politically, that would be good for that to happen and for that to happen relatively soon. That is actually just the first tier of reform. We have not moved into our applications layer in terms of HR systems, finance systems and records management systems. There is a phenomenal —

Mr D.C. NALDER: There is a massive savings there.

Mr NUNIS: We have not moved into that space yet.

The CHAIR: Politically though, we will be speaking to the Department of Finance shortly. You sit within the Department of Finance, right, but you are answerable to the minister for innovation or science or whatever. Do you see that as clumsy at all or difficult?

Mr NUNIS: No, I think it works quite well. I deal directly with the minister and the minister represents us well in cabinet. It is important to have that accountability at a ministerial level.

The CHAIR: Although you do sit in the Department of Finance, are you at all answerable to the Minister for Finance?

Mr NUNIS: No, not at the moment, unless things change under the service priority review. At the moment we are not. I only report straight to the Minister for Innovation and ICT.

Mr V.A. CATANIA: Giles, with that, so you have the Minister for Innovation. Anything that is brought to cabinet in relation to IT, does it need his signature or do you need to be able to vet any other minister bringing those cabinet documents to cabinet based on new IT or upgrades? Does it need the signature of the innovation minister?

Mr D.C. NALDER: It would have to. The agency that is involved would have a signature on that every time.

Mr NUNIS: I can only rely on the cabinet cover sheet that typically says, "Tick the box of those that are going to be impacted by this cabinet decision" before it goes to cabinet. We have our little box with ICT on it and it comes to us then.

Mr V.A. CATANIA: I suppose what I am getting at is that one way of having that ability to have some leverage over other government departments is by ensuring that the Minister for Innovation has the final sign off to ensure that it has the best IT and saving measures for the state.

Mr NUNIS: I think we have got to try and balance it so that we just do not become another bottleneck process as well. It probably involves things of a more strategic nature as opposed to things that are incidental, because not everything goes to cabinet. Those that are strategic in nature that go to cabinet, we are certainly involved in that regard. The other aspect, and I am always quite mindful that people throw these catchlines all over the place, is that we are trying to create some kind of shared service and therefore we are a deciding authority that is going to limit people's capability. We do not want that to happen. We want agencies to be accountable for what they are accountable for. All we are asking is that if you are going to make decisions in the ICT area, that this is the framework you should adopt and move down that path. If you step outside of it, we can have a discussion about it with you. We want you to stay within that framework because we think that direction is the right direction.

The CHAIR: I am mindful of the time. Simon or Barry, do you have any questions?

Mr B. URBAN: I am not sceptical but I am concerned about the cloud, in particular. I do love clouds but I am really sceptical with government, security and encryption. I would like some further info on that if I can.

The CHAIR: Are you able to provide —

Mr NUNIS: I am more than happy to provide that. There is a lot of material around the level of security on cloud. The other aspect, if you do not mind me mentioning it, is that we do not have a written policy on it but we have what is essentially called a data sovereignty policy so that if we are going to use cloud, we do not want the use of that cloud outside the shores of Australia. Just because it is a cheap data centre cloud sitting in Syria, do not think that it is a good idea. We think it is best that we keep it within the shores of Australia because we want to ensure that if we need to get access to that data, we have some element of control with the jurisdiction—number one. Preferably it would be good for it to be in Perth, but as you go into a smaller cloud environment, the more expensive it is, so the Perth one would be more expensive, but out of AWS sitting in Sydney or Melbourne, at least it is in Australia. Azure has the cloud in Singapore. It is highly unlikely we will be using Azure in Singapore. They are the kinds of guidelines that we provide to agencies and then we let them decide on where is the best cloud approach, whether it be here in Perth, in Melbourne or anywhere else. We are more than happy to give you information around the cloud security and encryption.

The CHAIR: Thank you very much for coming in today. Thank you for the evidence that you presented before the committee. A transcript of this hearing will be forwarded to you for corrections of minor errors. Please note these corrections and return the transcript within

10 working days of receipt. If this transcript is not returned within this period, it will be deemed to be correct. New material cannot be introduced via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence, and also you will provide us with the recommendations table and the cloud security information. Thank you very much.

Hearing concluded at 10.53 am