

PUBLIC ACCOUNTS COMMITTEE

INQUIRY INTO INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) PROCUREMENT AND CONTRACT MANAGEMENT

**TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
WEDNESDAY, 18 NOVEMBER 2015**

SESSION ONE

Members

Mr S.K. L'Estrange (Chair)
Mr B.S. Wyatt (Deputy Chair)
Mr W.J. Johnston
Mr M.H. Taylor
Mrs G. Godfrey

Hearing commenced at 9.47 am**Mr GILES NUNIS****Government Chief Information Officer, Office of the Government Chief Information Officer, examined:****Ms MARION BURCHELL****Acting Executive Director, Policy and Governance, Office of the Government Chief Information Officer, examined:**

The CHAIR: On behalf of the Public Accounts Committee, I would like to thank you for your appearance before us today. At this stage, I would like to introduce myself and the other members of the committee present. I am Sean L'Estrange, the member for Churchlands and the committee chairman. To my left is Mr Ben Wyatt, deputy chair and member for Victoria Park, and fellow committee members, Mrs Glenys Godfrey, the member for Belmont, and Mr Matt Taylor, the member for Bateman. We do not have Mr Bill Johnston, the member for Cannington, with us, but he is on his way. Today's hearing is a proceeding of Parliament and warrants the same respect that the proceedings in the house itself demand. Even though you are not required to give evidence on oath, any deliberate misleading of the committee may be regarded as a contempt of Parliament.

Before we commence, there are a number of procedural questions I need you to answer. Have you each completed the "Details of Witness" form?

The Witnesses: Yes.

The CHAIR: Do you understand the notes at the bottom of the form?

The Witnesses: Yes.

The CHAIR: Did you each receive and read an information for witnesses briefing sheet regarding giving evidence before parliamentary committees?

The Witnesses: Yes.

The CHAIR: Do you have any questions relating to your appearance before the committee today?

The Witnesses: No.

The CHAIR: Thank you for your submission. This is the first of the committee's public hearings for its inquiry into ICT procurement and contract management in WA. It may well be the case that we seek to get you in for a second hearing towards the end of our evidence-gathering process. The purpose of today's hearing is to allow the committee to acquire a greater understanding of some of the key terms and concepts that are likely to come up regularly throughout the inquiry. Many of these you have made reference to in your submission. The committee may also look to get an update on some of the key initiatives that have been developed as part of the ICT reform framework that you have been appointed to oversee. Before we commence with our questions, would you like to make a brief opening statement?

[9.50 am]

Mr Nunis: If that is appropriate, yes. Thank you very much for the opportunity to speak today. I want to make a few brief statements to commence. The office was established on 1 July 2015. We are looking at how we can lead ICT investment across the Western Australian public sector, particularly around stabilising some of the costs and having a strategy going forward. We are also

looking towards how we can implement ICT projects in a better way across the sector that drives the value that we expect to get from technology. Some of the areas we have been looking at in terms of the activities in the office are around governance and collaboration. Historically, the agencies have acted and operated individually. I think the time has now come to act a little more cohesively and as a collective. To that extent, the oversight governance around that structure is really important going forward. We have attempted to do that more recently.

We have put in place a Directors General ICT Council. That comprises the directors general from Health, Education, Agriculture and Food, Finance, and the Commissioner of Police and Landgate. I have missed a couple; I will have to check my list. I chair that particular group. We also have a selective group of CIOs who form the advisory committee as well. The CIO group is there to advise the directors general group and for that group to therefore make recommendations to government.

We are also looking at developing the ICT strategy going forward. We are quite a long way down that particular path. We hope to commence a consultation process on that more formally early in the new year, with the intent to put that before government in the first quarter of 2016 to get some agreement on that particular strategy going forward. Some of the key anchor points of that strategy include how we can go about being collaborative across the public sector, the way in which we can use consumption of services, how we can automate agile processes across the sector, looking towards digitally skilled staff, the way in which we deal with the market, the IT market in particular, digital technologies and how we exploit that, having a visible and transparent view of ICT, looking at informed decision-making processes and how we can develop a greater innovative path going forward as well.

Last Thursday we issued an expression of interest into the marketplace. It is called the GovNext-ICT program. It is one that is seeking towards industry providing proposals to government on how we can better utilise our infrastructure, which includes data centres, networks, and cloud and consumption services. We have an industry briefing tomorrow morning. Over 250 people have registered to come to that briefing tomorrow, with the intent for industry to put forward its case in terms of how to give us better solutions ultimately at a lower price. That contract is likely to be a five plus five-year term, so a 10-year term altogether. Nine agencies have committed towards transition into that program. Those agencies include the Departments of Health, Education, Attorney General, Corrective Services, Finance and Transport, along with WA Police, Main Roads and the Public Transport Authority. That makes up approximately 80 per cent of government in terms of their spend in IT. To that extent, we are offering the market a commitment to buy. Therefore, we expect an appropriate price suitable to that type of commitment.

Mr B.S. WYATT: Is that a contract to effectively —

Mr Nunis: It will consolidate data centres and have an interconnected network and also deliver consumption services to the government.

Mr B.S. WYATT: I assume that the agencies that you listed have an understanding of the opportunities that that would provide them.

Mr Nunis: Yes.

Mr B.S. WYATT: Is that being coordinated through you?

Mr Nunis: Yes. The way it arose was all the existing contracts in terms of data centres and networks were coming to an end. I seized the opportunity to aggregate them. Rather than us individually buy, why do we not consolidate our requirements and go to the market as one? By the way, why do we not also offer the capability of moving to a cloud service-type capability? I have a few more things that I wanted to say.

Mr B.S. WYATT: Sorry; I should not interrupt.

Mr Nunis: We are also looking at policy development aspects—key policy areas of digital security, disaster recovery and business continuity, data classification, ICT procurement practices, digital presence and cloud services interoperability. The final area that we are looking at is also ICT skills and capability across the public sector. To that extent, we are looking at ways in which we can improve and upskill our existing workforce. That is what we have been doing since 1 July.

The CHAIR: Excellent. You have already touched on some of this. You listed common-use arrangements as a suboptimal procurement model. Can you elaborate on what you have indicated as the limitations of CUAs with regard to procurement of ICT goods and services?

Mr Nunis: The primary principles of CUAs is a prequalification of vendors onto a panel that allows for government to purchase on a click away. That principle is fantastic; I have no issue with that at all. The CUAs do not offer to the industry any commitment to buy. In essence, we are getting pricing at a rack rate. Whatever price we get is the rate from which we will buy. The opportunity to renegotiate a price is sometimes difficult and constrained. In some instances, the vendors are saying, “Well, I’ve been pre-qualified. That’s my rate. Take it or leave it.” The other aspect of that is that because individual government departments purchase those particular products and services as individuals, we are paying rack rates. In essence, we are not actually buying in a bulk or group buy arrangement. To that extent, the opportunity to negotiate cheaper rates under a group buy does not exist. We think that a group buy, by way of commitment, which is what we are trying to do now, will drive a different price structure.

The other aspect of common-use arrangements is particularly in the commodity environment in terms of networks and servers and those hardware-type environments. Those commodity prices continue to decline, yet our CUAs are price based plus CPI, so it actually increases. We need to have some mechanism—I do not know the answer to this yet—that allows for our contracts to keep driving the price down. To that extent, they are the two or three points that I think we need to fix.

The CHAIR: Which ICT goods and services are currently covered by a CUA that you focus on?

Mr Nunis: Servers, networks, all types of hardware and data centre capability; in some instances services, so there are some basic services under the 14008 CUA that looks at contracting services. With services you expect an increase in cost, because labour costs essentially continue to rise, but certainly in a commodity base is the area that exists at the moment.

The CHAIR: Cloud-based as-a-service solutions are mentioned as examples of alternative procurement models—operating expenditure rather than capital expenditure. What changes are required to the current framework to shift towards these procurement models?

Mr Nunis: Cloud-based services are principally structured to turn on and turn off. So when we go down through the process of structuring contracts and procuring those, those contracts are usually for a reasonable period of time—in some instances three to five years. What we want to try to offer in the cloud-based services is for us to purchase that service on the first of the month and potentially turn it off on the thirtieth of the month. To that extent, with some of this pricing, you could almost buy on a credit card rather than go through an extensive procurement exercise in order to purchase those particular services. So the flexibility around the contractual issues around cloud services does not really exist at the moment. I think it needs to be tweaked to allow for that to occur and to allow for greater competition in that space, which there is, and yet we do not want to be locked into a particular vendor because other vendors can provide a better quality service and a higher scalable service, or what is more suitable, and the contracting prevents us from doing that. So we want to be able to flick from one to another.

Mr M.H. TAYLOR: Can you elaborate? Previously when you mentioned the five-plus-five contract for the data rationalisation, you also mentioned that that would be data rationalisation plus —

Mr Nunis: And services.

Mr M.H. TAYLOR: — services. So why has the decision been made to link those two and then link the consumer base with —

Mr Nunis: My expectation is that we will have a range of consortiums providing the spectrum of services we are seeking, and what we want to do is allow for us to move between consortiums under those contractual arrangements for us to buy those consumption services. Within that group we will move towards another service provider who can provide better quality or better service at a cheaper rate.

[10.00 am]

Mr W.J. JOHNSTON: What do you mean by the term “consumption services”?

Mr Nunis: I always use the analogy of buying electricity. We do not own the network and we do not own the power generator. We have been a consumer as opposed to government. All I do is get a bill at the end of the month for how much electricity I have used and I pay for that particular use of it. If I use my electricity high, as I do during summer at home because of air conditioning, I pay more for my electricity, and when I go down I pay less. The consumption service model within government is not one that we use at the moment in any great way, but we want to move more dramatically across to that space. Why that is a benefit to government is that if you pay for what you use, most of government is nine to five, Monday to Friday, and you pay for that period. Overnight your consumption goes down dramatically and on the weekend it is down to almost negligible. I exclude from that Health, police and the like—emergency services—but even they themselves have peaks and troughs in their usage. The evidence from around the world is that the way in which we use services, we barely use 40 per cent of the infrastructure that we buy; that is the average amount. In essence, we are paying for 100 per cent infrastructure, but using only 40 per cent of it. So we want to actually pay only 40 per cent and push the risk of infrastructure to industry and get them to supply those services to us and we pay for that particular service. That is the way the consumption service model works.

Mr M.H. TAYLOR: Just to follow up on that previous question, are we not then restricting our agility and flexibility if we are going to one consortium in that five-plus-five contract?

Mr Nunis: Sorry, that is multiple consortiums.

Mr M.H. TAYLOR: But is it still a general market that we can select from?

Mr Nunis: Yes.

Mr M.H. TAYLOR: So who are we contracting, then, in that five plus five?

Mr Nunis: We could be contracting a consortium who will have within their basket of goods a data centre, a network and consumption of service capability, but we could have four of those consortiums that go the full vertical stack, if I could call it that. We do have potentially the ability to have a horizontal stack—a consortium that provides only data centres and then one that provides only consumption services or one that provides only network services, so we can go across the horizontal or vertical.

Mr M.H. TAYLOR: But the five-plus-five contract is not to select one; it is just to create that environment to then choose from over time?

Mr Nunis: Correct. So we would hope, for example, to move from 50 or 60 data centres down to four. I would hope to have four vendors sitting in our space that allows for them to have good competitive tension at the time. The only reason for the longer period is because the expectation is that we are pushing all our infrastructure spend to the industry, and the industry therefore needs to have some way of commercially getting a return on that.

Mr W.J. JOHNSTON: I just want to follow up on this issue because if the private sector invests, they need to get a return. I can understand about ideas—I will leave that aside—but in respect of the

infrastructure, taking electricity as an example, in the electricity system you are paying for the fact that the infrastructure is available to you even if you do not use it. That will be the same here, will it not it? There will have to be a charge because the infrastructure is sitting there ready for use even if it is not being used.

Mr Nunis: Not exactly that. The way in which I will get the build is only on my usage, but the way in which the vendor would price that structure I do not see, other than what components make up that structure; they will show to me my 40 per cent of my usage equates to this value.

Mr W.J. JOHNSTON: But will they not then say, “If you use our infrastructure 20 per cent of the time, you pay this amount, and if you use it 10 per cent, you pay 90 per cent of the 20 per cent”, because it is actually in their interest to push your usage up rather than allow you to come down?

Mr Nunis: That is what we are waiting to see. They could put a floor and say, “Yes, there is a floor price that has to be maintained.” However, looking at the number of transactions and the usage, the floor would be pretty low, I would think, based on those agencies that are coming forth, but there is that potential and that is what we are waiting on.

The CHAIR: Moving to government ICT solutions for WA, many of the initiatives you have listed on page 3 of your submission cover letter as possible government ICT solutions for WA are unfamiliar to the committee. Although we have questions relating to these initiatives, I would first like to ask if you could just take a few minutes and describe each of these products or concepts to the committee. The first one is the one-stop shop. What is the likelihood of the one-stop shop concept succeeding in WA and how long would it take to implement?

Mr Nunis: The one-stop shop is really based on the types of activities that have occurred in other government agencies around the world. The UK government, the Estonian government and the New Zealand government have all gone down the path of consolidating websites and creating a government portal to introduce more transparent ability to transact with government. In Western Australia at the moment the high transaction agencies online are Transport, Synergy and the Water Corporation. All have individual ways in which they undertake to do that and they are all very good. I have no issue with the way they have gone about doing it, but they have multiple payment gateways and they have multiple infrastructure sitting behind it. The UK government had more than 2 500 government websites. It introduced the one portal, which is GOV.UK. In essence, progressively over the past four years that has consumed all the other government websites because people are coming to this one government website to transact with government and get the government information. I think now they are down to about 250 websites in the UK government. I am not suggesting that this is a method to consume government websites; I am suggesting that what we need to do is change the way in which we deliver services to the public online because the expectation that most people go through—I am sure a lot of you do today—is that all you do is search for the information using Google. I want a google capability just for WA government. Rather than say, “I need to go to the Department of Transport to do my vehicle licence, but I am not quite sure where I should go for my firearms licence—I do not know which government department to go to—so I want to search across the government database and come up with that transaction and undertake that function.”

In addition to that, we want to have one payment gateway, because having multiple payment gateways is quite a significant cost. Also, eventually, we will move down the path, as the federal government of Australia has, around identity management with myGov. So people voluntarily come on, they register themselves and they use the ATO number and the Medicare number to validate who they are, and then the government serves different information specific to that particular individual that they are concerned with. I think the opportunity for us in Western Australia is to not only deliver a better outcome for the way in which we deliver better government services, but to also have a more scalable solution that can grow with our business, and at the same time that will reduce our costs as well.

The CHAIR: The next one is data centre rationalisation. The submission makes reference to a US federal government's data centre consolidation initiative that is expected to save \$3.3 billion by the end of 2015. Are you able to provide an update on this initiative for the committee?

Mr Nunis: This initiative was undertaken over the past four years. These are their published papers that they put out in, I think, August this year. They have achieved quite a significant reduction in multiple data centres. This is actually what we have put to the marketplace—that is, to consolidate our data centres. We have taken the learnings from this and looked at ways in which we can undertake this particular work at the moment, so we are doing that right now.

The CHAIR: Would you like to elaborate any further on how you are doing that relating to the agencies that you are focusing on in WA?

[10.10 am]

Mr Nunis: Sure. Each of those nine agencies identified were all due to refresh their data centre contracts, which is why we have them altogether. They are in a variety of different data centres, within hospitals, buildings and commercial data centres. There are many, many servers that we have across all of those government agencies, some of which have been underutilised, so we want to clean that up and we want to move all those agencies over the next one to three years, because it will take some time—Health and Education, the largest, will take a reasonable period of time to get there—and that basically will look towards consolidating all their server infrastructure and their networks, and also to reducing their footprint in that particular space as well, so that will then reduce their cost. It will also achieve concurrently a more scalable solution. The reason we have added cloud services into that is so they can scale their storage capability over time and pay for that usage rather than continue to spend significant infrastructure dollars every year.

The CHAIR: You mention cloud-based services. What is your view of a shift to it as a service in WA?

Mr Nunis: There are multiple versions of cloud-based services, some of which are called infrastructure as a service, software as a service, platform as a service and desktop as a service. All of those are the technology stacks. Desktop as a service is basically that your PCs and phones will be undertaken by someone else; so we are not at that space at the moment. However, the federal government—the Department of Finance and I think the department of communications—have just undertaken a desktop as a service for their 2 500 employees and have introduced a 30 per cent cost saving in taking on that work. But that is a little further down the track for us. We are starting down at the bottom of the stack in terms of infrastructure, because essentially there are more low-hanging fruit for us. As you go up as a service stack, it ends up being more cultural changes within government to change the way in which we implement those types of outcomes. We will be looking towards those consumption services as time goes on.

The CHAIR: What about your role as the Government Chief Information Officer in overseeing that?

Mr Nunis: We are trying to lead the road mapping of the transition from where they are now to the new world under this new contract. I will be taking a role in negotiating the contract on behalf of the government. That contract will be overarching—not unlike a CUA but it will be a high-level contract—and each of those agencies will have their subcontracts stemming from that. They will have direct control over what money they spend, how they spend it, and what their service levels are and the like, because they are all in different forms, so they will have direct control over that. The other aspect is then also to give them advice in terms of how they move and transition to the cloud services and look towards how we can give them some good governance and good internal consulting advice in order to undertake that work.

The CHAIR: Network consolidation: are you aware of any jurisdictions that have done this well?

Mr Nunis: We have done it pretty well here in Perth. It is called the government campus network. It has only 6 000 public servants on it but the model is a very effective one. Those agencies that are essentially on that network—I have referred to the buildings, so Dumas House, 140 William Street and Optima, and there might be others, are essentially on that network—can all talk to each other for free. It is videoconferencing at no cost. It is using VOIP, voice over internet protocol. The cost reduction has gone down in terms of its operational costs. What is costly is the infrastructure component of that, and we want to strip out that infrastructure cost and get all the networks to connect across government. The telcos are not promoting this idea, because ultimately they will lose significant funds out of their normal review return, but the technology has been there for more than 10 years. The Queensland government has gone down this path—it is not as extensive as what we are looking at. We probably have the most extensive approach and there is quite a lot of interest in making this particular component work. Why it is important to go forward with it is that we hope to expand the capability of networks into regional Western Australia. Schools and hospitals have quite poor network capabilities, so we want to increase that. Not only does it turn our desk phones into internet phones, but our mobile phones connected to the network also become a free cost within the network, so we want to have that capability as well.

The CHAIR: Electronic identity management: can you please provide more details regarding what would be required to implement electronic identity management across the public sector in WA?

Mr Nunis: This is a pretty difficult exercise. It is part of the one portal arrangement, if we want to go down that path. If the Australian or state governments ever wanted to go down the path of having some online voting capability, they need to identify their people in some form. It is an eventual outcome, I think, in the way in which society is going. The Australian government has gone down this path by way of myGov. They are offering their back-end validation to all the state governments around the country to say, “Why don’t you use our myGov back-end?” If the federal government had their way, they would prefer all governments to be using myGov, but I do not think that is a palatable position going forward, so from a state government point of view, I think it is quite interesting to look towards how we can use that back-end infrastructure. It is a very costly exercise for the federal government and they are offering it at a very low price—I think it is almost free—and saying, “Use it.” That is essentially plugging in your tax file number and your Medicare number. We have an ability to add more identity capability. Drivers’ licences and vehicle licences are one form; that seems to be our main one. The driver’s licence, I think, is quite a good one because we have an image of the person as well as a particular number attached so we can use that as a way of identity management. Everything about identity management in the tech sector is moving at a rapid pace, so for us to move down that path would be a good one, but it is a slow process.

The CHAIR: Interoperability and common platforms: you indicated in your submission that over £500 million was saved through the adoption of open sourcing and common standards. How are the savings in these instances generated?

Mr Nunis: The older technologies in terms of the paradigm that we are in and the likes of Oracle and Microsoft, for example, started off as proprietary systems. That basically locked down all aspects of the type of software you would use and you were compelled to continue to use that particular type of technology. As that technology continued to get a much larger footprint in our business world, the cost of those kept going up and they took advantage of all their clients in that regard. Open source technology allows for various pieces of software to communicate with each other. So whether you have a content management system, a financial system or an email system—a whole range of things—the ability for us to connect all of them is, I think, the key for us going forward, and open systems offers that capability, as opposed to proprietary. What is shifting is that the likes of Microsoft and Oracle are moving into an open environment, and they have to in order to sustain their business going forward. To that extent, that allows for us to use more common platforms because some of the proprietary systems dictate a particular technology or infrastructure

that must be in place. That is the reason the £500m pounds was saved—going down the more open source technology. It is a big leap of faith, but there are various forms of open source technology which are of some value and worth pursuing in a variety of areas. For us to continue with Outlook, for example, we have been using it for a long time, but Google provides free same services. It is an open source technology. We could move to that and have almost the same functions and save \$20 million, \$30 million or \$40 million a year, but we will need to change the way in which we structure our other systems in order to accommodate that if that were to happen, and that is quite a big step.

Mr W.J. JOHNSTON: Can I ask a question based on that? I just use Google as an example, and I will disclose that I have a son-in-law working for Google. Google makes money out of the overall data that they are extracting from people's email activity. I am not picking on Google, but if you went to Google as an open source email service, you could do that only if you agreed to their terms of use. One of their terms of use is that they get to see, not the detail, not the individual emails, but the content of your emails will still be harvested for their own benefits. That is why they do not charge, because they are making money on the other end. Is that a challenge for government?

[10.20 am]

Mr Nunis: Yes.

Mr W.J. JOHNSTON: So how would you deal with that challenge?

Mr Nunis: Google also offers the software that you can actually purchase without that. You can have both options. The free service is also undertaken, all their back-end infrastructure and storage capacity as well, hence that is the reason they offer it. You can actually buy the open source software from Google itself and constrain it within your own infrastructure and therefore have that set up. That is what they are offering at the moment. But we would not go down the path that you are suggesting.

Mr W.J. JOHNSTON: It would not make any sense because you would lose control, yes.

The CHAIR: In terms of the reform framework, can you please define, explain the purpose or objectives of, and/or provide an update on a number of things? The first is the directors general ICT board. In your opening statement you started talking about that. Is there anything more you would like to add on the objectives of that?

Mr Nunis: Yes. If you do not mind, I will just refer to my notes on their terms of reference. The directors general ICT board is established for a few reasons. One, I think it is important to have the buy-in from the top tier of government in terms of the decision-making. I am pretty keen on using that opportunity to actually provide a greater level of insight at that particular level about technology. I do not think there is enough understanding of technology at that particular tier of government, so I want to try to bring a little bit more in terms of what it means and give more transparency. I also was keen on that group being as close as we can to a decision-making authority that kind of sets a particular standard across government. That can relate to policies and it can relate to the way in which we spend money. It relates to our recent EOI in that they said, "Yes, this makes logical sense and, by the way, we all want to be part of that program." It allows for them to be more collaborative as well within government. I also was pretty keen on getting that group to understand that the technology is actually contributing to the way in which they deliver their services in their business. The technology question should be a more silent issue for them. It should be: what is it that is going to help me deliver better services from government and what is it that I need to do in order to be more innovative in government to deliver the types of services as well? So that is their primary function. It is a sounding board for reform. Our ICT strategy will come through that group and say, "This is what we've planned. Let's test it. How does it work? There are some parts in here that are not right." And that will be the last step before I go into the government process to seek government agreement to endorse the strategy.

The CHAIR: And the CIO council?

Mr Nunis: The CIO council is more of a technical function. They are meant to lead an innovative path in terms of service delivery in the technology. The CIOs are there to provide that technical advice and we use that particular group in order to test the technology aspects. So the whole consumption environment: What does it mean? What is our road mapping? How do we go about technically achieving this outcome, and for them to test that particular group, and also, at the end of the day, to champion the reform agenda across government as well, because there is quite a diverse group of CIOs on that particular committee.

The CHAIR: And the open data policy, including Landgate's role?

Mr Nunis: I might ask Marion to talk about open data because she has been so in-depth with open data!

Ms Burchell: Thanks, Giles. Landgate and the Office of the Government Chief Information Officer work collaboratively to implement the open data policy. Landgate has been responsible for developing the online government data portal, which is data.wa.gov.au. It is currently in beta testing phase and has about 300 data sets currently available on it. It is likely that that portal will be online for public consumption in the first quarter of 2016. We are also working with them to target a number of government agencies around particular data sets that we think should be available on that particular portal. Unlike other jurisdictions that decided to apply a lot of quantity data sets on their portals, we have learnt from that process and we are looking more at quality and value data sets to be placed on the data portal, and there will also be an online form that will allow people—the public, businesses, government—to be able to request certain data sets as well.

The CHAIR: And the ICT strategy?

Mr Nunis: The ICT strategy is quite extensive. In my opening statement I mentioned the breadth from which we are trying to address that. To that extent we are looking at the consumption of services, the way in which we implement technology, the disciplines around that, the methodologies and also the capability of our sector and how we actually measure maturity across the sector. We want the agencies to move up the maturity scale, relevant to their agency. You would expect the larger agencies to be at the highest maturity and some of the smaller ones to be relatively high, but not as high as the larger ones. So, to that extent this strategy is pretty important. It is more of a framework. It is not meant to be a dictatorship around what you must do; it is more around what standard you should try to achieve. I am also required every six months, once the ICT strategy has been endorsed by government, to report on the way in which government has migrated across into using those aspects of that framework going forward.

The CHAIR: And the ICT project dashboard?

Mr Nunis: That would be a fantastic outcome. The dashboard is actually meant to give some transparency of where we are spending the money, particularly in projects. The last thing that a government of any colour would like would be surprises of the cost of projects exceeding what they expect it to be, so we want to have some ability to try to give that information well ahead of time, so we can do the right corrective measures in order to make those things work. I can only reflect on when I was down at Fiona Stanley Hospital undertaking that work and I created a dashboard that gave a view across the variety of areas and basically said, "This is kind of where we're sitting and to what extent and what percentage we have completed. Are they meeting the milestones? Where is the sum of the major risk areas we need to address?" It would be good for us to have something of that at a higher level across government, on probably the more higher profile-type projects in particular. There is one that we are doing right now, the GovNext program. That would be one of the dashboard sort of categories—what is the migration across; what is the timing; what are the cost aspects of this; what savings are we deriving; and what benefits are we getting from that?

The CHAIR: That concludes my questions, but I will open it up to the floor to dig a bit deeper on some of the things that we have heard today.

Mr M.H. TAYLOR: Thanks, Mr Nunis. How does the ICT strategy relate to the submission that you provided? I guess the context is that we are at a phase in the committee where we are considering what the options are that we could investigate, where we can add most value to the overall system in WA and looking at other examples. You have gone through your strategy and you have had some time now in your role to, I guess, get a better idea about the low-hanging fruit, as you referred to it, and what you are going to tackle in this first phase. I am keen to get from you a better understanding of what you have under control, so to speak, and what you think is the next horizon that might be better for a committee like ours to actually put our resources into investigating those options and creating some value there for future consideration.

[10.30 am]

Mr Nunis: That is a big question. The low hanging fruit for us is dealing with those commodities, which are essentially the infrastructure. I would rather get the ICT strategy done and then commence the program but I have really seized the opportunity because of timing to undertake the infrastructure component early. But the strategy will basically say, “In terms of the infrastructure, we need to make some savings in that regard.”

The next largest chunk of budget is really in the software and application space. That is the area that has the highest risk of spend—the highest amount of money you will spend every year. We have a lot of people involved in supporting systems, creating and building systems and deploying them. That is the area I want to tackle in a much stronger way because I think we are lacking in the disciplines and methodologies to deliver on those areas. I think there are opportunities for us to improve the way in which we undertake that particular work. If we go down the path of fixing infrastructure and software and having the right corporate positioning in that space, really it leads to how we provide an environment that drives a stronger innovative path in government. The portal, for example, is one of those innovations. It is basically seeking the ability for us to consolidate our data, deliver data differently and to make that more available to the private sector to come up with different applications and the like that actually conserve more information and data into government, and also for government to transact in a better way.

I get a little frustrated when people throw comments around that we must have big data, not knowing really what big data is about. In fact, most data in the big data environment is totally useless. What we need to have is the algorithms and analytical tools that help us use the data that is made available to us and help us make better decisions. There was an example of one more recently of a professor who used to be here at the UWA and is now at the University of Melbourne. The best example of that is the CCTV data. We have people sitting in front of screens, looking at multiple screens. The ability for an individual to identify something in any of those screens is next to zero; you are never going to prevent anything. You can only see after the event when that happens and you go back in history and look at that. She looked at a way of turning off all the screens and having an algorithm that looked at measuring what is normal as opposed to what is abnormal. The only screen that came up was an abnormal image and therefore that individual could go, “Ah, that is the issue.” To that extent, we need to come up with the tools that help us use the data in a better way. At the moment, we have a fragmented environment that does not consolidate our data. We need to have the ability to consolidate our data and that is one of the first things we are trying to do now — bring it all together, have it at the lowest cost, have the access to that data, get our systems and applications in the right mode and start to deliver those types of innovative analytical tools that can give us that information.

Mr M.H. TAYLOR: From the headings under “Government ICT solutions for WA” and listening to what you have been saying today, I take it that some of the priority areas where the next Horizons is relevant is the one-stop shop crowd-based services, particularly as you go up the stack, as you

referred to it, looking at some of those secondary ones, electronic identity management for me would probably be the three key ones out of that list and the interactability and common platforms as well. Is that a fair assumption that they are probably the three key areas from your perspective in which we can make some significant improvements?

Mr Nunis: I believe so. I am looking over a three-year term for that. It is probably beyond that period but we can only bite off a certain amount. They would be the priorities that we would be looking at.

Mr M.H. TAYLOR: Just as a follow up question, one part that we are interested in is to look at some examples of where those three elements would be done well and compare and contrast those. Again from your submission, I think the UK and Korea were good examples of one-stop shops. I think you said the UN recognises South Korea as a world leader in e-government.

Mr Nunis: I think we gave you a supplementary table, which lists New Zealand, the United Kingdom, Estonia, California in the US and the federal government of the USA and, yes, South Korea and Israel.

Mr M.H. TAYLOR: Perhaps going through the three headings one by one, from your experience in the WA environment and what is happening globally, with some examples there, where do you think in your opinion the committee would spend its time most valuably studying other jurisdictions in the one-stop shop or common portal examples?

Mr Nunis: The United Kingdom is definitely on a far stronger platform than the rest of the world. Estonia is more of an extreme view so everything is online government in that regard. In fact, it has identified digital citizens, I think they call it now. We can become a digital citizen of Estonia. They are the two areas. In terms of identity management, Norway has also gone down the path—it is not on this list but more recently—of allocating their citizens with digital identity. They are now going down the path of electronic voting and a whole range of things quite extensively.

Mr M.H. TAYLOR: I notice that in your submission there were two different types of identity management. There was almost a logging. I think New Zealand was another example of a logging. Estonia, from memory, was a card that is readable by machines and more applications. Can you explain a little the difference between those two models and whether you see merit in one over the other?

Mr Nunis: The opt-in model, which is what we have here in Australia, really bypasses privacy issues more than anything else. Whereas Estonia has issued, if you call it an Australia card, similar: “Here is your card, here is your number”, and everyone now has a digital number. We do not have that. They are the two differences. One is voluntary and the other is not involuntary but you are allocated a particular number.

The CHAIR: Is that why you are saying the UK is a better model, because it is voluntary?

Mr Nunis: Yes, the UK is voluntary. It has not gone down the identity path just yet but I know they are. They will be going down a similar path to what we have in Australia—going down the voluntary opt-in model.

Mr W.J. JOHNSTON: Can I just clarify something. Estonia, the UK and Norway are all unitary countries. The UK is moving to become a federation. They are unitary countries whereas we are a federation.

Mr Nunis: Correct.

Mr W.J. JOHNSTON: That is going to have a big impact, is it not?

Mr Nunis: Correct. That is the difference.

Mr W.J. JOHNSTON: Unless Western Australia adopts the myGov approach, you would end up with two digital identities, would you not? You would end up with a Western Australian and a national.

Mr Nunis: It is interesting that the other states have not really taken on the myGov thing. I think we should, from my point of view. There may be a range of things outside my control around the politics of it but certainly in the technical context, it is the best model to use to go down that path.

Mr B.S. WYATT: They are no technical issues. That is called a software map.

Mr Nunis: We all have a Medicare number. We all predominantly have a tax file number if we are over 18 or sometimes if we are over 16.

The CHAIR: You mentioned in your brief the procurement model site. Have you conducted any economic or financial modelling to compare the cost of the current purchasing inputs approach with what you are suggesting—the proposed purchasing outputs approach?

Mr Nunis: The short answer to that is no primarily because some of the other offices similar to this one have gone down the path of benchmarking everything. They took three years to benchmark everything and still did not come out with a number that anyone was satisfied with. I am of the view that I think it is better to act knowing, on evidence around the world, to say we can make some savings. Part of the process of transitioning across to that model is that you are required to benchmark and then look at the cost savings as part of that process. In essence, that is what all the agencies are now looking at—looking at their cost structure and moving across in a transition and then to the new model. Rather than go down the other way, I think we would be wasting a lot of time and money and effort from my point of view.

[10.40 am]

Mr W.J. JOHNSTON: Can I seek a follow up question on that? Tell me if I am wrong; is it not really the cost saving that you are only paying for what you need as opposed to paying for what you are buying?

Mr Nunis: Correct.

Mr W.J. JOHNSTON: That is really the gap and that is how the vendor can make money, because they can charge more per unit —

Mr Nunis: Utilise that elsewhere.

Mr W.J. JOHNSTON: — but less overall because they are only —

Mr Nunis: Correct.

Mr W.J. JOHNSTON: So that is really the trick, is it not?

Mr Nunis: There are two components of the cost saving. There is that one; the other one is cost avoidance of infrastructure expenditure.

Mr W.J. JOHNSTON: Sure, yes. But that will be limited because the—let me use the electricity as the example. There is a flaw under the cost because there is a minimum of infrastructure otherwise you do not get the peak capacity.

Mr Nunis: I have, for example, had some informal discussions with some of the resource companies around town, and said, “Well, you need the same stuff that we do, we should all just move and that will lower the cost for us as for them as well.”

Mr W.J. JOHNSTON: But you take the resource companies as an example, and then the two big houses in Perth, their volume of data has gone up exponentially because they have moved to more remote monitoring et cetera. They get other efficiencies but actually their data spend has gone up, not down, and their cost structure has gone down because they have saved money elsewhere.

Mr Nunis: Absolutely. That is the model.

Mr W.J. JOHNSTON: That is the trick though, because you actually have to get savings elsewhere otherwise —

The CHAIR: Just following up on that and my previous question: is it just too hard to quantify what the actual cost is?

Mr Nunis: I think it is because the costs are actually—if you look at the IT definition of total cost of ownership, you are taking to account floor space, power, air conditioning, people and/or software and infrastructure and so forth. We have buildings that house data centres that we do not necessarily pay rental for. We would not know what the cost of that is because we own the building. No-one really measures it. We buy capital at the moment, and we bought it three years ago. That probably is now down to zero cost; zero value. It is a zero value today, but it would have been—it is really quite difficult in order to know exactly a snapshot in time in terms of what those cost structures are. We have tried doing that across a range of government agencies, which is why we have got some of these numbers, but we have had to extrapolate that. We know we spend about \$350 million a year in infrastructure. That could go down to 300 or could go up to 400, but it is around that number.

Mr W.J. JOHNSTON: Just on that, it is partly an accounting issue, is it not, because your capital does not come into your current expenditure. Everybody concentrates on their recurrent, but of course you then have to pay for the depreciation. I do not know what the depreciation cycles are but they are often mismatched between the finance–treasury demand for the depreciation, but because the actual life cycle of the IT is getting shorter and shorter, there actually can be a mismatch in what you are doing because of accounting treatments that are not related to outcomes. That is part of the problem of alignment.

Mr Nunis: It is, and this is a paradigm that Treasury needs to get over; that is, we are moving out of the capital space into the recurrent space and it is a different baseline. I have been trying to convince Treasury that you should not read the baseline because all that is going to happen is we are going to see an increase in operational cost, but there would be a lot less of an increase in operational cost if we did nothing. We will actually reduce our operational cost, but it will continue to rise over time.

Mr W.J. JOHNSTON: And that is the same about the volume of data, because if you do nothing then the system will collapse, so you have to continue to do something. The question is exactly what that something is, and you are describing a new paradigm for that and now we have to convince people that there is actual savings in it?

Mr Nunis: Yes.

The CHAIR: And that links back to your objective of changing cultural views and norms, I suspect.

Mr Nunis: Yes—not to say that a lot of people agree, but there are some people that do not. That is a normal way of life.

Mr W.J. JOHNSTON: Can I just ask a question there? I have friends in the IT consulting game who say that when they are consulting the government—not necessarily the Western Australian government, but governments around the country—people only want to replace; they just want to do what it is they are doing today, rather than look at what are the capabilities they are creating. My friends would argue—whether they are right or not is a judgement—that the advantage is what you can do, not what you are doing.

Mr Nunis: Yes; absolutely.

Mr W.J. JOHNSTON: That then becomes an issue as well.

Mr Nunis: Absolutely right.

Mr M.H. TAYLOR: Can you talk a little bit about the cloud-based service?

The CHAIR: We are going to need to wrap this up quickly.

Mr M.H. TAYLOR: Yes. You mentioned that there are the four levels; the infrastructure, platform, software and desktop. What are you currently looking at for WA out of those four?

Mr Nunis: We are starting slightly below the infrastructure as-a-service. We are going to co-location. The first step is co-location. The next step is infrastructure as-a-service. Then we go into platform, software and then desktop at the very end.

Mr M.H. TAYLOR: Okay. Currently you are looking at co-location, but not yet infrastructure —

Mr Nunis: Infrastructure is in that mix.

Mr M.H. TAYLOR: It is part of that mix?

Mr Nunis: Yes.

Mr M.H. TAYLOR: And then platform is beyond where you are currently looking?

Mr Nunis: Yes.

Mr M.H. TAYLOR: In the platform space, are there good examples?

Mr Nunis: The best one might be the websites. We have a common platform, open systems. We want people to use those systems, and we want to move towards that environment.

Mr M.H. TAYLOR: And jurisdictions that do that well?

Mr Nunis: Definitely the UK on that one. The federal government is well ahead of us in Australia. They are a long way in front of us, so there is lots to see in Canberra, not that I have gone travelling anywhere yet.

The CHAIR: If the committee members have any further questions, we may be able to write to you with those further questions down the track. As I said at the start, there is going to be an opportunity I hope for all of us to be able to get you back to try and ask some further questions, from the information that we have been able to gather during the conduct of our inquiry. To yourself, Mr Nunis, and Ms Burchell, thank you for your evidence before the committee. A transcript of this hearing will be forwarded to you for correction of minor errors. Please make these corrections and return the transcript within 10 working days of the date of the covering letter. If the 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. Thank you again.

Mr Nunis: Thank you, Mr Chairman. Thank you, everyone.

Hearing concluded at 10.48 am
