

REPORT OF PROCEEDINGS BEFORE

PUBLIC ACCOUNTS COMMITTEE

**INQUIRY INTO PROCUREMENT AND MANAGEMENT OF
INFORMATION AND COMMUNICATIONS TECHNOLOGY
SERVICES IN THE NSW PUBLIC SECTOR**

At Sydney on Wednesday 28 November 2012

The Committee met at 9.00 a.m.

PRESENT

Mr J. R. O'Dea (Chair)

Mr B. E. Bassett

Mr M. J. Daley

Dr G. Lee

The Hon. G. R. Torbay

CHAIR: I open proceedings by thanking our witnesses and others for attending this hearing of the Public Accounts Committee. The Committee is holding hearings in relation to its inquiry into the procurement and management of information and communications technology in the New South Wales public sector. The purpose of the inquiry is for the Committee to hear from a number of stakeholders from New South Wales Government agencies, suppliers and industry associations. Before the proceedings commence, I remind everyone to switch off completely their mobile phones as they can interfere with the Hansard recording equipment.

For the benefit of the gallery, and we have a few members there, I note that the Committee has resolved to authorise the media to broadcast sound and video excerpts of its public proceedings. Copies of the guidelines governing coverage of proceedings are available. I now declare open the hearing in relation to procurement and management of information and communications technology [ICT] in the New South Wales public sector. I welcome our first witnesses, Mr Mark Paterson and Mr David Kennedy, from Trade and Investment. As part of the formalities, it is a requirement that each witness be examined under oath or affirmation. Again I thank our witnesses for appearing today before the Committee to give evidence in the inquiry.

MARK IAN PATERSON, Director General, New South Wales Department of Trade and Investment Regional Infrastructure and Services, affirmed and examined:

DAVID KENNEDY, Chief Information Officer, New South Wales Department of Trade and Investment Regional Infrastructure and Services, sworn and examined:

CHAIR: I draw your attention to the fact that your evidence is given under parliamentary privilege and you are protected from legal or administrative that might otherwise result in action in relation to the information you provide. I also note that any deliberate misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901. Before we commence with questions, would you like to make a brief opening statement?

I should make a preliminary point of appreciation: I know your project is not yet live and I know you are also in many ways leading the way. We are meeting with a number of agencies today that have a track record perhaps of not delivering on time and on budget. You are not in that category; rather, you are symbolic, hopefully, of the bright new sky in many ways. I know it is not easy, particularly when your project has not gone live, but we are hoping that you might be an example of how things might be done rather than how they have not been done in the past. In that context, I invite you to make a brief opening statement, and then we will move to more specific questions.

Mr PATERSON: Thank you, Chair. I do not intend to spend a long time. I know that the Committee asked for David Kennedy to appear before the Committee today and I am happy for David to appear. I do not come to these proceedings to supplant the questions that were going to naturally be put to David, but what we are doing here is much more than an ICT project. I felt that there may be some questions that the Committee wanted to ask where I might be better placed than David to respond to some of those questions.

We are 11 days from go live, so it is very much at the pointy end of the transition from our existing arrangements to the new software as a service provision. It may be easier that we just respond to the questions that the Committee members have, Chair, but it is a comprehensive whole-of-cluster activity that we are embarking on. As you have observed, it is something that is new and different in terms of approach, but I think that the nature of the questions that members of the Committee might want to ask will bring those issues out. As I said, I am happy for David to respond, and I can seek to embellish or respond to the questions that might best be placed to me rather than to him.

CHAIR: Thank you, Mr Paterson. Mr Kennedy, did you want to add anything?

Mr KENNEDY: No.

CHAIR: I will refer to information and communications technology throughout the proceedings as ICT and others could do likewise: I am sure we all understand what it means. Could you provide the Committee with some background on how ICT is managed in Trade and Investment?

Mr KENNEDY: Okay. ICT is a centralised group within our finance strategy and operations; in other words, our corporate and shared services section of the department. As I said, it is centralised. It is a traditional ICT shop although it is going through a period of transformation and change so that it is more focused on enabling and providing services to the organisation. That is our focus and that is what we are trying to achieve, hence our operating model will change over time to be a hybrid model. There will be some things we will do in-house because it makes sense. There will be other things that we will treat as commodities and obtain those services to the organisation.

CHAIR: Would you tell the Committee about the Department of Trade and Investment project to run finance and human resources and payroll for 16 member agencies in a hosted systems, applications and products [SAP] environment. In particular, when doing so, you might go into some detail on what the difference is from traditional ICT projects and what the benefits might be. There are two elements of the project that I might ask further questions on, if you do not cover it in your response.

Mr KENNEDY: All right. Firstly, it is not an ICT project. It is a business transformation and enablement project. It just happens to be driven by ICT in the back end. The goal of the project is to deliver a single, integrated enterprise resource planning [ERP] tool to the organisation. That tool is broken up between

two components: one is a software as a service, or SAS-based enterprise resource planning [ERP] module, which will deal with finance, procurement, assets projects and all of those components delivered by a systems, applications and products [SAP] business-by-design solution with a fully integrated local payroll component, which will do payroll and human resources [HR].

That payroll and human resources component is hosted and all of the data is stored locally here in New South Wales. It is a transformation and a consolidation program going from multiple enterprise resource planning [ERP] finance systems and reporting systems, et cetera, down to that single one consolidated system. How is it different? Our approach has been fundamentally different to other ICT projects, if you want to call it that, inasmuch as our approach has been to adopt the best practice out-of-the-box solutions, meaning that we will change the business process to accommodate the system, not the other way round. The general rule of thumb has been if we cannot configure the system, it does not happen.

We will be changing our business process. Why are we able to do that? Why are we in a unique position? By virtue of our organisation coming into existence as a result of the last machinery of government changes following the election, we did not have a standard process for payroll, finance and human resources. We had multiple processes. We had overly inefficient processes. We had lots of operational concerns, risks and issues we needed to address. Changing those processes was the best way to achieve the enablement and outcome that we were after.

CHAIR: The Department of Trade and Investment is the first public sector department in Australia, I understand, to specify a cloud solution as first choice, or it was first choice. What were the main factors that were considered prior to making that decision? Could you talk us through the context?

Mr KENNEDY: Yes. Our software-as-a-service approach came about as a direct result of our timeframes and our need for change that could not be accommodated by a traditional method. We had timeframes and a requirement to consolidate our systems and our processes and enabling of our organisation that could not be met by a traditional bricks-and-mortar enterprise resource planning [ERP] approach. In fact, our first approach was to be part of, and still is to be part of, corporate and shared services reforms going on across the New South Wales Government. That is still a fundamental program of work that makes sense.

The problem was they could not address our concerns and our problems in the time frame we required. So, we needed to look for options and the option we chose was SAS or software as a service. The software as a service model enables us to implement faster and have reduced cost and dependency on hardware and infrastructure because you are just consuming the service. The flip side of that and the value to that provided to our organisation is that it means this is the first program of work across our cluster that is focused on the business and the people, not the technology.

CHAIR: Can you explain a bit more how are you focused on the business and people and not the technology?

Mr KENNEDY: Sure. Our approach is a consolidation of processes, so standardisation of outcome, automation of process, to deliver the i-reporting framework and the capability for the organisation. Prior to this program of work we were unable to provide management reporting capabilities, we did not have standard processes and we were not sure what the numbers were. That program of work will deliver one number and that number will be correct and we will have one system, one standard process, one outcome, for those things. We have focused on delivering that business capability as opposed to that technology piece.

CHAIR: Given that you did not have existing processes—

Mr KENNEDY: We had multiple.

CHAIR: It was a lot easier to create an ideal starting point?

Mr KENNEDY: Correct.

CHAIR: Obviously you are going to be providing services for a range of agencies. What was the resistance level and are there ongoing challenges in that regard, in getting other agencies to cooperate?

Mr KENNEDY: It is a project. There are always challenges and opportunities. The biggest single thing we have to deal with and we have been dealing with is organisational change and people change. That is where a fundamental part of this program and our efforts have gone. We have a project team of more than 90 people of which quite a fair proportion are focusing on change management, communications and engaging with the business. Once they understand what we are doing and how we are enabling the organisation, the business has been coming on board. They are willing participants to this program because they can see the value to this program of work. We will get automation, we will get clarity of process, we will be able to manage the organisation.

Dr GEOFF LEE: It sounds like a fantastic, revolutionary approach to run the business, instead of information communication technology driving the business. We drive the business from the business process at first and it is great that we are looking at the ERP system. My question is around the business case that was first put up for this project. I guess it must have been a business case because it sounds fairly sizeable. Can you elaborate on what the costs were previously, the ongoing costs? You do not have to talk about the intangible ones of no reporting system and not understanding where you are sitting at any one point in time, but what are the costs of doing the implementation and what the ongoing costs from there will be, what is anticipated and finally how long you think the total rollout will be, and are you on budget at the moment?

Mr PATERSON: Can I try to take a number of those questions? Mr Kennedy has described the position we inherited after the creation of the cluster. No existing platform within our group of agencies within the cluster was capable of carrying the load in relation to the whole of the agencies. We first examined the other potential service providers that provided multiagency service to see whether they were able, within the time frame that we needed, to deliver a service to us. We developed a business case that examined those other corporate and shared services approaches. But the time frame in which those approaches were able to deliver did not meet our need. We were in a position where we did not have comprehensive data across the organisation. I, as the director general, could not get the timely information that I needed to be able to manage the organisation within the budget provided to us and to be able to provide timely and accurate reporting.

The issues confronting us were highlighted in the commission of audit report. An explicit case study was used by the authors of the commission of audit which looked at our challenge and the nature of the problems that we experienced, and the Auditor-General raised issues in relation to timeliness and accuracy of financial data. We looked at what the options might be. They were not able to do it. We elected not to try to build from scratch an internal on premises facility which might have been what you would describe as the traditional approach, and we also had regard to the fact that we operate in 240 locations around New South Wales at present and a number of overseas offices, and we bring together a very complex mix of different organisations.

So trying to meet our need for information access and an accurate single source of data and together with meeting the business needs of a geographically very dispersed organisation with different backgrounds and objectives and coming to this from a different place, with different existing systems in place, the software as a service appeared to us to be the best option for us in the time frame. We examined that in detail. We prepared a business case on that. That business case was subjected to a gateway review process in April and May this year. We went successfully through the gateway process and we then went to the marketplace, had a range of global providers who bid to participate in this project. SAP was the successful bidder in collaboration with a local software as a service payroll provider, and we have been working with them over the last—

Mr KENNEDY: One hundred and thirty seven days.

Mr PATERSON: —since we signed the contract to move to go live, as I said earlier, in 11 days. So, we are on track and on budget. The question was asked by Dr Lee about how much. We anticipate this will cost us \$14 million to implement and that we will do that within the current financial year and that we will be on time and on budget. So we expect to come in to deliver the project as we anticipated and we expect to deliver it on budget.

Dr GEOFF LEE: Thank you for that. That is fantastic news—on time and on budget. Is there any provision for the training of staff?

Mr PATERSON: All of the costs associated with the transition have been factored in. As Mr Kennedy has already indicated, a major part of this is the change management process for people in the organisation. We have taken on a team of people to assist us in that process and brought in the business managers from the

different component pieces of the organisation to work with us on that. Whatever platform we chose there was going to be a change of process because we had disparate systems in place already. We knew from day one that we were going to be going through a substantial change process. We tried to do something that delivered us the most comprehensive solution and everybody would have needed to change something if we moved to a new system. So, having a comprehensive approach to change management, recognising, as Mr Kennedy has said, this is not an information communications technology exercise, it is a change process. It is first and foremost a change process and we have managed it in that way but we have factored in all the costs associated with bringing people in to assist us in that process.

We have not chosen to have an external intermediary run the project or to run the implementation. We have done that with internal resources. So, we have established a team of people. Given that we are on the record here at a public hearing, I am incredibly proud of the team internally who have been leading this exercise. They have been working heroic hours to deliver this and they have obviously, in a transition of this size, met some significant challenges along the way and learned some things along the way. The team has met those challenges head-on and has worked hand in glove with SAP as a provider—this is a very big transition for them as well. This is the largest cloud-based ERP transition for SAP in the world. This is a big deal for them and a big deal for us, but I am very proud of the people who have been leading it and who have done an outstanding job.

Dr GEOFF LEE: So, 11 days is go live day?

Mr PATERSON: Yes. We go live on the finance system in 11 days. We will go live on the payroll system—I have my fingers crossed here—on the last day of January or a fortnight later. We have to do a number of parallel pay runs after we have the finance system go live. Our expectation at this stage is we will be able to go live on the payroll on 31 January. If we learn some things along the way in terms of the parallel pay run processing that we are doing in the latter part of December and into January then we have got the capacity to be flexible. What we will not do is go live on the payroll until we are satisfied that we have got any issues that might arise resolved.

Dr GEOFF LEE: What are the expected savings you will make, apart from the reporting live, up-to-date reporting which is obviously—

Mr PATERSON: Huge in its own right. Our business case anticipated savings of, in the ballpark, of about \$12.5 million per annum. They are whole-of-government savings because we are not the providers of all of the platforms that provide ERP solutions to us at the present time. We have some of our solutions hosted by ServiceFirst, we have some hosted by the old Land Management and Property Authority and we have already transitioned, I think, nine of the inherited agencies onto our existing platform in Orange. There are whole-of-government savings but our business case anticipated that that would be in the ballpark of about \$12.5 million per annum ongoing.

Dr GEOFF LEE: Well done and I commend you for using your own team to do that rather than a set of consultants that tell you to do the same thing anyway.

Mr PATERSON: One other observation, and this is probably more in David's patch than in mine, but one of the features of what we are doing is a recognition that increasingly and particularly with a geographically dispersed team, we need to be able to work on new platforms, new technologies. So the cloud-based solution means that people will be able to deal with the software as a service provision across our ERP on any platform from anywhere at any time. They will be able to do it on a mobile phone, on a Blackberry, on an iPad or an Android equivalent. They will be able to do it on a laptop, they will be able to do it on a desk top. Because it is a cloud-based solution we are not dependent on premises solution in a particular location and people are not tied to desktops to be able to access the HR and finance systems. All the appropriate controls are in place and all the appropriate security controls will be in place to be able to manage that but it does mean we will be able to deal across multiple platforms.

CHAIR: We will actually know in the fairly near future how many employees we have in those 16 agencies that are covered, but what about the other agencies? If it works as well as we think it might, why would not all the other agencies use it too?

Mr PATERSON: I think it is important that we walk before we run. This is a very significant change for us and I do not pretend that at go-live that every single item will be as we might want it in a mature system. I think that there is quite a bit of work for us to do and for the service provider which is SAP in this case, for them

to work through with us. Are other people looking at it? Without question. Is it an approach that might be considered by others, I think certainly. Scale is going to be important, scale will be a question, as I said, this is the largest scale roll out for a cloud-based ERP for SAP. But SAP recognises that. They also recognise that cloud-based solutions are the future for that business, and they are the largest ERP provider in the world. They recognise that moving away from on-premises into cloud is the path that they have to pursue.

We are doing that with them. I think it is for other entities to have a mature considered look at what we are doing, work out whether it is capable of meeting their needs. We are pursuing this because it meets our needs. We are hopeful that in the second stage of the roll-out that we will be able to bring the cultural institutions who are within the cluster—when I talk about the cultural institutions I am talking about the Art Gallery, the Australian Museum, the Powerhouse, the State Library and possibly the Opera House onto this platform solution. Now that has never been something that was in scope in offering in the past, and we are hopeful that we will be capable of doing that. Stage two, we hope, will be rolled out by 30 June in the current financial year.

Dr GEOFF LEE: You have saved \$12 million which is a fantastic savings. What is your annual budget for the ERP system and its maintenance and ongoing costs? It does not have to be exact.

Mr KENNEDY: The ongoing is about \$3 million a year.

Dr GEOFF LEE: Do you estimate before this system it would cost about \$15 million for all the 16 divisions.

CHAIR: Fourteen.

Mr PATERSON: It is costing us 14 to implement the solution which is a very significant transition and then we anticipate savings of about \$12.5 million per annum. If you take our ongoing costs at three, recognising that the \$12.5 million is whole-of-government savings, so they will have to be in part secured by other parts of government like ServiceFirst—

Dr GEOFF LEE: Would that be 50 per cent of those costs? If you do not know, say so.

Mr PATERSON: I do not recall off the top of my head how you would break out which part—as you know, business cases and where the savings are is complex. I do not want to lock other agencies. They have got to secure the savings.

Dr GEOFF LEE: How much were you spending on your ICT for management across the 16 divisions, before you implemented the \$14 million rollout?

Mr KENNEDY: That is a very good question: we do not know in detail those numbers, the estimate for what we understand our costs will be is in that \$3 million mark.

CHAIR: But you would have known if you had this system in place?

Mr PATERSON: That is correct, that is one of the reasons why we are going down this path of being able to answer those sorts of questions.

Mr RICHARD TORBAY: I commend you on this approach. It is very innovative where you need to be in the future. I think you are blazing a trail for other government processes in the future. I am interested in the ongoing management and clearly the investment in making sure this process is managed in an ongoing way and will create opportunities for others to want to take on board and to have something similar in the future. What sort of investment oversight of management procedures would it have in place to make sure that this is going to be properly implemented, maintained and managed in the future?

Mr PATERSON: I do not say this tritely, but I think that the real test will be if we are capable of making this transition in the complex environment we are operating in in a time frame in which we are doing it, if we are able to successfully implement that with an internal team of people, then I am absolutely confident that that internal team of people will be capable of managing this in a steady state. That is because they are capable of managing the transition from where we have been to where we will be, and that team of people, highly competent team, including David, Chris Martin who is the CFO, the head of HR, head of Corporate Operations

Area, the overall head of finance strategy and operations, Jeannine Biviano, the Deputy Director General, that team of people are stable, highly regarded and are in place and they will be the team that have responsibility for managing it going forward.

The operation will be owned by the business. This is really the first time that we have tried to find a solution that meets the business need, rather than try to craft the business need into the solution. This is designed around being able to meet the needs of people in Primary Industries or Fisheries or Forestry or the cultural institutions, Tourism or the Arts, Liquor Gaming and Racing, or investment attraction—whichever part of the business is going to be influenced by this, it will meet their needs, not just meet a corporate HR or Finance need.

Mr RICHARD TORBAY: What about relationships with vendors? How will you manage that?

Mr PATERSON: I will get David to comment in part on this. SAP has had to work with us as a partner in getting us to where we are. They are the provider of the service, so we are paying a vendor to deliver software as a service to us. We have to manage that vendor relationship as we would any other vendor relationship. They are providing a service to us—I do not want to say in the same way as our cleaning contractor will provide a service to us—but they are a vendor who provides us with a service and we pay them on an agreed basis for the delivery of that service. We expect them to deliver it anywhere, anytime 24:7.

Mr KENNEDY: If I can add to Mr Paterson's comments, we actually do not see SAP as a vendor, we see them as our partner. They have as much skin in the game and in this program as we do, and as much reputation at risk and as much commitment to make this successful because they can see that if we are successful they are successful and the New South Wales Government becomes successful.

Mr BART BASSETT: You said earlier that with the change in government, therefore, there was no structure in place, and an all-of-government approach has been thought about but the timing did not work for you. Based on the amount of time and effort that you have put into this, when that finally does happen are you in a position with this system to transition across to an all of government or are you hoping maybe they will look at what you have done and go in that direction?

Mr KENNEDY: That is a trick question. Potentially both, but if I take a step back, this program of work was always deemed to be a transitional point to enable us to successfully on board to a corporate shared services reform agenda. Going from where we were to all of the disparate systems to this consolidated single system would have enabled us to onboard more seamlessly, if you like. So it was always touted as being a tactical response to the current situation with the end goal being part of the corporate shared services reform and that whole of government agenda. Do I believe there is an opportunity we have presented that this type of approach add an extra string to the bow? Yes, I do, but let us walk before we run.

Mr BART BASSETT: In regard to the risk assessment of this whole project regarding offshore holding and processing of data, how did you manage that risk assessment?

Mr KENNEDY: Risk was paramount. To control the mitigation of those risks was absolutely paramount to everything we did with this program of work. It was part of our tender. It was part of our evaluation. We identified up-front 139 major risks that we had to account for as part of the program of work. With regards to the off shoring of our data, hence why we have a hybrid approach. We have our HR capability locally hosted with all of our discrete information hosted local in Australia. We decided, and we looked at from a risk base and a business risk base perspective of what information did we deem appropriate to keep on-shore and thus remain exclusively on-shore to anything to do with people related, and staff related, payroll related information is exclusively held on-shore. Information that is trans across to Germany, which is where our cloud-based solution and SAP-based solution is hosted, is only to do with that segment of the organisation.

Our risk based assessment showed that the controls and measures that we were, in fact, putting in place with this program of work was significantly better, tighter and far more robust than we could do and possibly hope to achieve ourselves. SAP is best practise provider when it comes to the certification program for security control of data. They have the SAS70, SSA16, ISAP 27001—they have far better controls in place than we do. Also, being hosted in Germany by a German parented organisation, they fall under the jurisdiction of the EU Data Control rules and those criteria which again are more stringent, in fact, than Australian controls.

Mr BART BASSETT: Just to wrap up the answer to that, the issue of sovereignty of data, how was that addressed? The answer was probably embedded in your answer but can you be a bit specific about—

Mr KENNEDY: From a sovereignty perspective?

Mr BART BASSETT: Yes.

Mr KENNEDY: We addressed that in the particular concerns around the US Patriot Act, et cetera. We took a business risk-based approach to anything that we shipped offshore and what we kept onshore. So it was framed around that. We looked at the legislative requirements—if there were any; we looked at the State Records Act; we looked at all of those criteria and assessed what we could do and what we could not do, and, again, having it based in Germany by a non-US parented organisation, we have an agreement in place that no data will reside in the US that fall outside the concerns that most people raise around the US Patriot Act and, therefore, sovereignty will be held. So looking at when we go live, having a repatriation of data to a locally stored repository as well, so that we are bringing everything that we do store off-country back into country.

Mr PATERSON: I would add that data security sovereignty, access to data, protection of data will be substantially enhanced by the path we are going down over where we are at the present time. So this means that we meet all of the requirements in relation to data security and it means that we will be better placed on all elements of data security and sovereignty and the like than we are on a standstill steady-state arrangement.

Mr BART BASSETT: My next question is a bit of a follow-on from some of the answers you have already given, but it is just to get a bit more detail. Previous ERP projects have experienced major issues in that concepts that appears straightforward on paper become quite difficult to execute. How do you think new technologies will impact on this and what lessons have you learnt to date and how will the lessons be shared with other government agencies?

Mr PATERSON: Because we are purchasing a service rather than a technology, we take out some of the risk. We are contracting with another party to deliver that service to us; it is up to that party to maintain and sustain the technology that underpins it. So the servers, the updated hardware, the updated software that will be required over time is the responsibility of the service provider. So SAP takes a lot of that technology and software risk from us to them, and they are providing this service in an out-of-the-box solution, as Mr Kennedy has described, to a range of other providers, predominantly in the private sector. But it means that there is an obligation on them to sustain their systems to be able to meet the contracts they have with us and with a range of other providers, and they are in a better position, as the world's largest ERP solution provider, to be able to keep themselves up to date and to be able to maintain and sustain that, and they have got an enviable record in terms of being able to maintain and sustain.

So the technology risk, in large measure, is borne by them not by us. In the past we have worn the technology risk and we have worn a lot of the software risk, particularly as we have taken in the past other people's solutions and modified them to suit our needs and then—surprise, surprise—sometimes the bits do not fit together as you might have hoped. By buying an out-of-the-box solution it works—we know it works—and what we are doing is changing our processes to manage the task on a platform that works and it is their responsibility to ensure that it continues to work.

Mr BART BASSETT: Only answer what from a commercial point of view you can answer. In regard to a contract for a service provision of this kind, what was the length of the contract that you have signed up to for this and do you see any potential risk long term in the rollover of that, or going back out to tender, and the possibility of those companies having you in a position where they can escalate their costs in the future very considerably because of the changeover cost for you to find another service provider?

Mr PATERSON: We have got a three-year contract with options to roll over that contract. Do we believe that we are captured by them in that system? We are no more captured by them on this path than we were captured by our disparate array of existing systems with an existing provider. Any time you go to the marketplace to try and change something like this there are transaction costs associated with the change. But they will not be the only provider in the marketplace and they will need to remain competitive. Do I think that we have taken a short-term or a long-term position that locks us in financially to a provider where we can just be held to ransom? No, I do not believe that. If I believed that we would not have gone down this path.

I think we are, in fact, in a better position as we will have better systems inside the organisation; we will have an integrated approach, which enables a relatively seamless transition to whatever the future might hold. We are not constrained by owning boxes and having data centres and all of those things. That is quite

often a legacy cost that holds people back in terms of change rather than facilitates change. I think we will be in a better position to change going forward and therefore less concerned by any contractual lock-in over time.

Dr GEOFF LEE: Just following on from what Mr Bassett said, you said that your business processes are driving the ERP design and things like that instead of the other way around—which is commendable and I agree with that. But then you talk about an out-of-the-box solution by SAP to your solutions and then going back and you are fitting the business around that. I was wondering if you would like to comment. It seems to be at odds that business processes should drive your ICT solution—

Mr PATERSON: What we are not doing is we are not changing the system. What is available to us is customisable. We do not change any of the internal processes. All the bits inside business by design link to all the other bits and they operate. What the individual business will be able to do is to dip in and out of that system and get reports that, whether they are managing a project, managing a major contract, managing a large team of people, the system is flexible enough to be able to provide them with whatever data reporting is required for the activity they undertake. But we are buying an out-of-the-box solution; we are not trying to modify business by design. Business by design provides the platform.

Dr GEOFF LEE: I understand, and I agree that that is probably the most cost-effective. It concerns me, though, the cost of ongoing maintenance and the rollout of it in the future. I am sure you have got it under control because in 137 days, or whatever it is, to get this far I think is sensational with an SAP solution. My concern would only be that, in fact, the installation or the go live date is one thing but the actual user adoption and getting everybody to work and getting all the bugs out of the thing is normally where a lot of the costs actually lie.

Mr PATERSON: We recognise that. SAP has described the progress we have made to date as "legendary". So I accept that substantial progress has been made and we will need to get the bugs out of the system. I watched some video excerpts last week of individual team members who had gone unscripted to talk to their colleagues about their experience in terms of the parallel activity that we are doing and the rollout—people who have just been brought from the business to trial this activity or to work with us on the transition, and they have reinforced a couple of points that I would make. One is that it is much more intuitive than any of our existing systems; so it is easier for a person who is on the existing system to transition to the new, because it is a bit like when you pick up a new iPad, they are intuitive in terms of use and—

Dr GEOFF LEE: I have never heard someone describe SAP systems as intuitive.

Mr PATERSON: You will have to come and visit, because it is the new world. This is a brave new world and the systems are more intuitive for individuals, which means that the training costs associated with bringing new people into the organisation—at the moment we have a significant training burden. If we bring new people in to work on our finance systems, and they are all different and they have all been customised, a person from outside the service will never have worked on something that we have got operating on the ground at the present time, whereas we are moving to a position where it will be much easier for new people coming on to the system.

Yes, we will have to work it out but we do not have to work out many of the bugs, because quite often the bugs are created by modifying something that works. What we are doing is taking something that works out of the box and putting it in place. Yes, we will have to do our change management processes and our training, but it is easier to bring new people on, and the experience of users to date—not advocates of the system but the experience of users to date—is that it is more intuitive and it will make it easier for them to train their colleagues.

CHAIR: My final question has been answered in part because I was going to ask about that tension between having an out-of-the-box solution and at the same time having processes; but to what extent has the functionality that you had in the past had to be compromised to fit the out of the box? You have said that it is a very flexible solution. I was wondering if there might have been some compromises approach that you had to make and the extent to which you had to make them. Obviously there is a need for real discipline in not changing from that box, but if the box is very flexible then you are a long way ahead of where you might otherwise be.

Perhaps Mr Kennedy could comment on that discipline to the extent that functionality might have been lost and then if everything is as successful as, touch wood, it seems it might be, to what extent you are, picking

up on Mr Bassett's question, transferring some of those experiences and skills to areas like finance and services where there is more a focus on that procurement management of ICT and other government areas where we are trying to improve the process.

Mr KENNEDY: I think that is a great question. "Compromise" is a strong word. I do not actually think we have compromised; I think we have gone down and we have standardised the process and now we have an end-to-end process that delivers a better outcome to the organisation, that is intuitively easier to use and that is consistent in that outcome. In fact, the capability we have acquired with this new solution far exceeds what we currently have. For example, what comes along with the package is a customer relationship management tool. We also have point of sale capability; we have a business intelligence capability—all of these extra capabilities have come along with this new solution and outcome.

I do not think we have compromised. Yes, we have changed, and when we stand up and talk to people in the business about it we say "How you do things may fundamentally change but what you do will not change; you will still be doing your same core transactional activities, but we are providing you with a more automated, seamless capability to do those outcomes". So it does come back to enabling your organisation. How can we instil and give these learnings back to others? We are hoping that people will have a look at what we have done and say, "That makes sense; let us investigate that further", and if what we have done as an organisation is move that paradigm further along to say there are options and other ways of doing this, then I think we have been successful.

Mr PATERSON: On the contractual element of the question, we used an existing standard form contract. So in entering into this contract with SAP for the provision of software as a service we were able to use an existing standard form GSES contract to undertake this new task. So I do not think we have compromised in a contractual sense; I do not think we have compromised in a service delivery sense. It does mean that individuals will need to do things differently, and so, to the extent that people will say, "This is different from the way we have always done it", we accept that that is an outcome of this change; it will be different from the way we have always done it in some respects, but we think that the transition between that "I wish things just stayed the same" and the new world, I think, will proceed relatively smoothly, and our experience to date supports that.

Mr BART BASSETT: Based on what you have learnt from this, how are you actually going to promote what you have done and the benefits that have come from it so other agencies and other departments and other clusters can see it? Rather than having to come to you to ask the question, how are you going to promote the benefits?

Mr PATERSON: I do not think it is our role to be too much of a promotional agency. I am confident that others are keeping a very close watch on what we are doing. Our primary responsibility is the transition to implementation, bedding down, going through stage two—which is bringing on the cultural institutions—and if we do that successfully we will not need to pursue a promotional activity.

CHAIR: I tend to agree and in fact, the suggestion that it might become legendary may, in fact, become a reality if you can do that. We will not put the mockers on you before you have delivered by congratulating you, but I do thank you both for coming along. It is encouraging to see the progress to date. We wish you well on behalf of all stakeholders in the final stages of the implementation and where it might go from there. I flag that the Committee may wish to send you additional questions in writing, the replies to which would form part of your evidence and be made public. Would you be happy to provide written replies to any further questions?

Mr PATERSON: Can I beg indulgence from the Committee? We are 11 days from go-live. I did not want to offend the Committee by suggesting we find an alternative date for today's hearing but I would beg, if there are questions that you want to place on notice, that we are not constrained by the traditional timeframes. I cannot afford not to go live and after we go live on Finance, I have to get a payroll system up. So, if there are questions, we are happy to try and respond to them but if you give us a hundred questions after today, it will kill us in trying to respond to them.

CHAIR: We had a similar conversation last time you appeared before this Committee and I do not believe we sent you any questions, but we will be mindful of your pressing engagements. In the event that we do send you limited questions, if again I could perhaps ask, within the realms of reasonableness, would you be happy to reply to those questions?

Mr PATERSON: We would be happy to.

CHAIR: That concludes the questioning today. Thank you for appearing before the Committee, Mr Kennedy and Mr Paterson, and we look forward to developments.

(The witnesses withdrew)

PETER JOHN DUNCAN, Chief Executive, Roads and Maritime Services, sworn and examined,

PETER WELLS, Director, Customer and Compliance, Roads and Maritime Services,

PAUL MICHAEL HESFORD, Director, Corporate, Roads and Maritime Services, and

SANDRA COLEMAN, representing the Chief Information Officer, Roads and Maritime Services, affirmed and examined:

CHAIR: Thank you Mr Duncan, Mr Wells, Mr Hesford and Ms Coleman. I draw your attention to the fact that the evidence given today is under Parliamentary privilege and that you are protected from legal or administrative action that might otherwise result in action in relation to the information you provide. I also note that any deliberate misleading of the Committee may constitute a contempt of Parliament and an offence under the Parliamentary Evidence Act 1901. Would Mr Duncan or any of you like to make a brief opening statement?

Mr DUNCAN: Could I say at the outset, I thank you for the opportunity to come to the Committee today. All of us here are relative newcomers to this project, when you think it started in 2004 or before. So I make that statement at the start—in my own case, only for 12 months. But what is important about today is, Paul Hesford, on my left, is responsible for corporate services and the business side of the system that we are talking about in this particular project. Peter Wells is the director of Customer and Compliance and they are the people who use the system and, if you like, the client for the process. He has been heavily involved in some of the more recent changes with Roads and Maritime Services and some of the other interfaces with the system. Sandra Coleman is our Chief Information Officer and she has been involved in the last few years in improving practices for project management and delivery of changes to the system.

In reference to the Auditor-General's report, we have no issues with that obviously, but take the Auditor-General's point that this is a vast, complex and critical computer system. We do over 20 million transactions a year on this system, we have many interfaces, 5 million licence holders, plus others from the point of view of identity, and we have 5.7 million vehicles on the system. So the project itself reduced the system's components from 13,000, in total length, to 750 components to try to simplify what is a vast, complex system.

One of the options at the time, as I understand from my reading, was that we could have completely recreated the system for a cost of \$100 million or more. I questioned whether that was a good figure and the figure that I am hearing from Victoria, which is doing the same project at the moment and their current budget shows that they are going to spend \$158 million on rewriting their systems. These are big systems to start from scratch and the one that we are using, Drives, had not been updated for 14 years, so it was a 1990 system that was being updated in 2004. The current status, we went through a process that the Auditor-General has quite correctly outlined, started in 2004 as a \$9.4 million project, to do 10 to 20 per cent of the refactoring, as it is called—Sandra can explain that to you. Within two years a further business case was required because further work needed to occur. That business case, in 2006, went through the correct process with Treasury and the Gateway review and came out at a \$23.2 million project.

In 2009, with a lot of other changes, government access centre integration and things like that; the project then was identified to be a \$32 million project, to finish it. It was completed for less than that—about \$950,000 less—for I think about \$31 million early this year or late last year. So the work has now concluded. In around 2009 it was realised that there was required to be better project management and as I understand it, Peter and others, and Paul particularly, can tell you today that that has occurred. I think that the Auditor-General has noted in his report of 2010 that improvements in project management reporting were noted at that time, since 2009. We are happy to talk about any aspect of the learnings here and what happened along the way in the project and answer the Committee's questions and we are happy to make a written submission as well, if you wish.

CHAIR: Thank you, Mr Duncan. I acknowledge two things in making some preliminary comments: one, you are correct in saying that the Auditor-General indicates that management has advised at least that it has implemented a formal project methodology and governance framework in the past two years and I know that is within your scope of direct experience. I also note that there has been another restructure, in terms of the Roads and Maritime Services environment and that a number of you are new. It equally would be remiss of me not to say that the project as originally scoped, albeit complex, clearly was unsatisfactory. I do not need to go into the various deficiencies that have been highlighted there. In terms of setting the scene, despite the complexity,

which we all acknowledge, clearly you would have to say, up front, that it has been a substandard project delivery, in terms of cost and time to deliver. To me, that is always a starting point, being able to admit that frankly, if we are going to learn from it. I invite your comments in that regard.

Mr DUNCAN: As I said, we accept the Auditor-General's comments in this process. I am probably not in a position to personally comment on previous people's work.

CHAIR: I think you have to be.

Mr DUNCAN: My point is that, since 2009 it was the Auditor-General who said that he had identified project management improvements since that time. In my time there, I was very concerned about the system when I first came in because of its scale and complexity and made it a point to go to some of the committees and see how the project management was occurring. I have satisfied myself, in the last 12 months, that the project management and the work currently going on is appropriate. Clearly, as you say, there were problems at the start of the process. Management has addressed that with the Auditor-General and we are working on the changes prior to the Auditor-General's inspection of this process. So the changes were already occurring within the system, hence the reason they went back for further business case and Gateway reviews, to identify that they needed to do more work. In those reviews, particularly in 2009, were identified project management improvements which have occurred and that are part of the lessons learned for us.

CHAIR: Perhaps you might provide the Committee with some more background about how ICT services and ICT projects are now managed within Roads and Maritime Services and in that context, what the current status and progress of the project is.

Mr DUNCAN: I might ask Paul Hesford and Sandra to do that together. Paul can outline the project governance side of it and Sandra can tell you where the status of the project is.

Mr HESFORD: In terms of governance within ICT, we have an ICT Executive Steering Committee that meets on a monthly basis and oversees the ICT activities. So RMS probably spends in the order of \$200 million a year in terms of ICT. We have a significant number of systems that are far reaching across the organisation. The ICT Executive Committee oversees and monitors funding and delivery of projects. We have a formal project management methodology and industry standard called Project Management Body of Knowledge [PMBOK], which is utilised across IT delivery. On a monthly basis, projects are reported to the ICT executive committee and we monitor those.

In terms of large ICT projects, not only do we get the monthly reporting, we will have independent reviews undertaken on those projects a third into the project, to identify if there are any issues that the ICT Executive Committee needs to be aware of and also two thirds in as well in terms of getting ready for go-live. So we take a fairly proactive approach not only receiving reports from the projects but also instigating reviews of those projects. In terms of the ICT executive committee, we have an independent member on there and also the group CIO from Transport for NSW as well. So we have not only our own directors on board but also independent members who can and do challenge the projects and the reports that come through. I might hand over to Ms Coleman in terms of the specifics around this individual project.

Mr DUNCAN: Can I just add one point? The concept of the one-third, two-thirds review is a very established concept in the construction area and other infrastructure areas that we deliver. I think as this project would show, if a project is off track by one-third that is the critical time. So it is this one-third review which is a very important change that has occurred in recent times, more in line with broader infrastructure industry practice. I just wanted to make that point. The other point I want to make is that I have a great deal of confidence in having more independence on these sorts of processes with our directors and I think they help a great deal in the process to bring independence with relative experience in, people from the industry and that has made a difference in this case as well.

Ms COLEMAN: On the drives project, as Mr Duncan stated earlier, in 2004 it was business case approved for \$9.285 million. The scope of that was for only 10 per cent of the code to actually be re-factored. What that means is to actually re-engineer the code so that it was more industry best practice standards. In 2006 it was reviewed and, as stated, a business case went to Treasury and approved for \$23.2 million. The scope changed as according in that business case for 100 per cent of the code to be re-factored and that enabled us to move the 13,000 odd different data access statements into 750 components. Those components are reusable

services. In 2009 obviously we did a lot of work around project management. We also looked at the strategic direction of that project to make sure we were going to deliver the project.

We re-engineered that so that we could make sure it was ready for what we call service orientated architecture and the graphic user interface functionality. So basically it would allow us to go into the online delivery channel that we have not previously been able to do. As of December 2011 all of that development work has been finalised and completed. Ernst and Young were engaged in January 2012 to do a quality assurance report, and that has been finalised and submitted. In effect, that project has now been closed from a whole project closure perspective.

CHAIR: For the benefit of the Committee—I know we are all aware, perhaps to varying degrees, of the description of the scope and purpose of the drives project—and for clarity and for the record, can someone give us a description of the scope and purpose of that project, which might then prompt further questions?

Ms COLEMAN: For that particular project, the underlying objective was to modernise the actual drives architecture so that we can utilise further channel delivery moving forward and bring it up to best of breed practice. Obviously it was already a 14-year-old system so we needed to make sure we modernised it to be able to be flexible and scalable for future needs. Obviously we have achieved that, according to that, so we have subsequently done another piece of work around the drives strategy and architecture through an independent company called ThinkPlace. They have noted that the service orientated architecture has enabled us to move into those different channels. It has also allowed us obviously smartphone mobile application development capabilities, Service NSW integration, as well as other national regulators like national heavy vehicle, et cetera.

Dr GEOFF LEE: My questions are not so much about the drives program because there is a lot of reporting around that. Following on from your questions, the first one is your "best of breed" comment. Do you believe what you have now is a best of breed?

Ms COLEMAN: Yes and we have had some independents come and review that to quality standards and make sure that they do deem that best of breed moving forward.

Dr GEOFF LEE: So world's best practice outside is the New South Wales best site.

Ms COLEMAN: Correct, yes.

Dr GEOFF LEE: We know that ICT moves on very quickly. Do you have as part of your strategy—I am sure you do—can you identify what the next steps are in terms of what big projects you have online? I guess the problem is the old drives program cost a lot of money; I understand none of you were there, so what can you do about that? I guess it is the planning and budgeting and timeframe for the implementation of a two-year program, three-year program or four-year program that you are looking at? You say it is a very complicated thing, which I am sure it is, but I was wondering what your planning around that is.

Mr DUNCAN: I might ask Mr Wells to answer that as the client, if you like, and then where it gets to from the budgetary point of view.

Mr WELLS: Thank you for the question. I might try to give you a sense of where to from business point of view and a customer point of view with the database. Mr Duncan already alluded to that this is a large database. It conducts around 23 million transactions a year and we collect around \$2 billion for the roads fund. The roads fund is the critical pool of money that runs the assets for New South Wales and the general community, whether they be motorcycle, car or truck drivers. It is mission critical that we collect the right money from the right parties and that we also keep the driver licence records correct. The forward direction for this work is quite complex. There are a number of things happening. The Service NSW program that you may be familiar with is, if you like, a one-stop shop concept to offer a range of services through motor registries or other venues rebadged and renewed and Service NSW. The drivers database has to interface with that program.

We are also working with the heavy vehicle regulator, which is a national regulator for trucks and buses to bring forward better programs for access and safety and compliance. That has to dip into the drives database. We are shortly to release a smartphone app for registrations to encourage people to go online. We have Treasury commitments for online targets to progress further transactions to online. Very simply put, a transaction we conduct online is in the order of 17¢ to 27¢ per transaction; a face-to-face transaction is in the order of \$8 to \$10 to complete. When we talk to our customers about what they experience the online people

give the highest satisfaction rate of all. The people walking out of a motor registry today give around 92 per cent satisfaction rate—higher still for those people online. So from a business point of view whole-of-government to progress online is obviously attractive.

In terms of the work, before I hand over to Ms Coleman, if there are those broad imperatives for us about cost efficiency, government reforms and the biggest picture sense, we have to make sure that drives is nimble and able to link to a wide range of things and be more scalable. The programs we have got coming in at the moment are quite complex in policy changes through government. Some of those recently, for instance, are tattoo parlour licensing, where to assist the police and other agencies it is important to link to our facial recognition program that is linked to drives so that the right parties are given the right licence for tattoo parlours. We run firearms licences, security licences and a queue of forward programs that we have to integrate. That sort of sets the scene of the complexity of what we have to keep digesting and moving forward on and to be ever more linked to the web and online to satisfy very much where the community is going.

Dr GEOFF LEE: Do you have discrete projects that you are working on? You mentioned briefly the one-stop shop which must add a complexity level that you welcome obviously.

Mr WELLS: Absolutely. We have a forward queue of what we refer to as the drives forward work program and that might be anything from technical fixes that Ms Coleman's team might identify, the tattoo parlours program, might be seniors photo cards, the online transactions, the smartphone applications. So there is a long queue of projects. There are quarterly releases that we carefully manage and test. As part of the testing, we grab, if you will, the cohort of transactions from a period of time, run them through the dummy database offline to see whether a new code, a new system will trip over in any way.

Dr GEOFF LEE: Are those upgrades done internally, externally or internally/externally?

Mr WELLS: We do both. We have a range of staff who are skilled in coding in this environment. Also to cope with the capacity requests—and it is very obvious to us that the requests will grow exponentially in terms of the functionality for what we need to do either through drives or linked to drives. So more and more we are offering that to the private sector to boost our coding capacity and also to allow innovation and different thinking and approaches. As quite a specialist environment, we have had to conduct that quite carefully and assist the private sector partners in doing good coding work that we can use and making sure we have private sector partners to boost what we are already doing.

Mr RICHARD TORBAY: I am interested in the investment in staff training. Obviously the range of changes that are going on, the rate of change, the complexity and I am sure other ICT projects that you have commented on, the implementation process is the monitoring and I suppose the agility and the change that is necessary in making sure that corrective action is continually taken. What sort of investment or processes are put in place around that?

Ms COLEMAN: We obviously look at the industry best practices, what is coming through from an ICT space around qualifications and training and what is new basically that is a trend coming through from industry. Then we look at training those people accordingly. A lot of our in-house development staff and systems staff go across to what we call user groups that have that information around the actual technology we are using within RMS. So they do participate in a lot of those conferences so that they can get that new innovation training to come along and have a look at what we need to do to make sure we upskill them appropriately and qualify them moving forward so that we have that capability in the organisation.

Mr HESFORD: Further to that, we have a number of staff who are qualified, whether it be in SAP, et cetera, and we continue to maintain their qualifications in those applications as well. So not only do they attend the ongoing training but they may well attend conferences, et cetera, user groups, as Ms Coleman said. So it is not only about growing skills but it is also about maintaining existing skills and making sure we are linked into the appropriate forums in those as well.

Mr WELLS: I wouldn't mind giving you a sense also from our customer side. Quite often they will be in either motor registries or at our contact centre in Newcastle and the complexity of questions is quite astonishing. We might have everything from someone saying, "I've moved from Queensland and I've got these two trailers. This one is new, this one isn't registered. What is the process for New South Wales?" Our staff know. Further, someone in the country will have a births, deaths and marriages inquiry, where a child might have been born and they are returning to do the naming of the child in births, deaths and marriages. To my

repeated amazement, our staff know the answer and are able to give a good customer experience, but the complexity is very strong and the need to keep our staff across our core transactions and the related ones, and indeed to then set up Service NSW with the very best possible chance for conducting this into the future, there is a lot of staff training on the customer side to make that a really good interface.

Mr DUNCAN: On the training issue—it is something I have found out in recent days—I asked about staff capability and turnover. While we are new at this level, if you like, the staff in the drives area particularly, I understand, are very loyal to the program and the work they have done and it is now quite a rare type of program. So both staff and contractors have become very committed so we have a very good internal expertise actually doing the work. I think that is an important aspect.

Mr RICHARD TORBAY: Linking them to the feedback from the front of counter level, I am pleased to hear that because I think that helps in addressing corrective action that is necessary based on the direct feedback that is coming from there.

CHAIR: Just as an aside before I go to Mr Bassett, are those people with contractor expertise full-time employed staff or external contractors? What sort of employment arrangements are they on because I know in the past there has been an issue in that area?

Mr DUNCAN: I think there is a blend of all three really. We have both our own contractors in-house, if you like, but also Sandra might be able to give you a bit of an indication.

CHAIR: I particularly pick up comments that the Auditor-General has made in relation to long-term external contractors and the desirability of either moving them to full-time employees or if you are going to have the internal expertise, making it internal?

Mr DUNCAN: And we certainly are doing that and part of our reform process at the moment is heavily concentrating on that. I think even the last response to the Auditor-General we were able to show a drop in that across the whole organisation not just in the sector, so it is certainly a focus of ours and in our reform process at the executive it is a constant process to see if we can consolidate.

CHAIR: Did you want to add anything?

Ms COLEMAN: Just that obviously depending on the volume of work that is coming through from a project perspective we will obviously need to have that capacity arrangement where we will need to get external contractors and as part of our forward work plan we are doing packages of work that we can outsource out to external contract arrangements so that we can get that throughput but we would still like to keep those key resources internally from a knowledge perspective and also from a quality assurance perspective.

CHAIR: I think the focus was more on when they are there for a significant period of time as opposed to use for their short-term expertise.

Mr BART BASSETT: Just picking up on the figure that you mentioned earlier, the \$200 million per annum. You also mentioned the \$2 billion you are collecting through registrations and the like. That is 10 per cent, if you like, from a maintenance cost point of view for the collection of that money. I seek some clarification and a benchmark with other government departments and I will then ask a follow-on question?

Mr HESFORD: In terms of the \$200 million, the \$200 million is across all information technology systems across the whole of Roads and Maritime Services, so not just the Drives platform. Within the Drives platform we spend something in the order of \$10 million to \$15 million a year in terms of new functionality that Peter was talking around in terms of enablement, whether it would service New South Wales, tattoo parlours, et cetera, so there is new functionality that is added to the system, but also the maintenance activity that happens on a quarterly basis as well.

There is a fairly rigorous testing regime that we undertake before any new code is implemented into the system and also we have a warranty period that runs out after each quarterly release as well, so we probably spend in the order of \$10 million to \$15 million a year, depending on the volume of work. The \$200 million cuts across all of our information technology systems, so whether it is to do with traffic management systems, whether it is asset management systems, whether it is the backbone in terms of the finance, human resources systems or document management systems as well, so the \$200 million is across a broader spectrum.

Mr BART BASSETT: The work you are doing crosses over into other departments—you have talked about the tattoo parlours, which go across into policing as well—and we have number plate recognition technology now being rolled out in highway patrol vehicles so fines are being collected from that at a higher rate. How do the two information technology systems work between Police and the Roads and Maritime Services? What meshing of the two is required from maintenance and cost point of view? Is there any funding coming back from Police to the Roads and Maritime Services to support this ongoing development and maintenance of the system?

Mr MICHAEL DALEY: Good luck. We tried that before.

Mr DUNCAN: I think our funding is more directly Treasury funding so obviously the \$2 billion or more that we collect goes straight into Treasury so it is collected. We are really the collection organisation so any investment back comes through our Treasury grants and recurrent grants but Peter Wells could probably tell you more about the interface with Police and other systems because that is the critical amount of this work every time something changes. For example, just changing organ donors on licences and taking that off the card has created work for our system and it will be part of our quarterly upgrade now to take that off the card. It frees up some real estate if you like on the card, as Peter refers to, to put something else in there as one of these components for the future, but all of those policy changes have an impact on the system and any of our funding comes through our recurrent process to do that, but Peter can talk to you more about the interfaces.

Mr WELLS: Just to give you the sense of interface with the police: if highway patrol officers by the side of the road intercept a particular driver, we use a product that we refer to as Drives 24. It is a 24-hour summary of the Drives transaction, so if someone has transferred a licence interstate, it is summarised overnight and it is available to the highway patrol officers and also to a range of other parties. It might be the security agencies, our heavy vehicle inspectors and others. For the highway patrol officer recently we were able to not only give Drives 24 access but to enhance it to give photo access.

Mr MICHAEL DALEY: Real time?

Mr WELLS: From Drives 24, as batched at midnight the night before. That allows a police officer to check—and you can imagine that some people might try to present themselves as the wrong person at the side of the road. If they have the photo there they can instantly see if they are pretending to be maybe a cousin or a relative or whatever. We are able then to offer that and that has been very beneficial to the highway patrol, in the feedback that they have given back to us, in identifying some people that were, in whatever way, trying to pass themselves off as someone else.

Mr DUNCAN: Can I also say that insurance companies and other people want access into Drives, so we have even got requests at the moment, which we are currently declining, as insurance companies and others take services offshore, asking can they access our drives system from offshore, so there are some very complex relationships here that people are requesting. We are very careful of the risk side of things so it is not just the police and other agencies; there are other organisations that have need to go into the Drives system.

Mr WELLS: I add that there are 600 or more fields in Drives so we will give careful access to the level that people need for the task. We are very mindful of the privacy of individual members of the community so the police, for instance, would have quite wide access. Insurance companies only need very specific things to check for that vehicle and driver records.

Mr BART BASSETT: Thank you for that clarification but as this is on the public record and we have talked about insurance agencies being offshore, could I seek a clarification? We have asked previous departmental officers about the sovereignty of data. Can I ask the same thing of your department and how that is managed for security?

Mr WELLS: We turn quite a deal of our consideration to security of personal records in Drives and increasingly it is becoming one of the premier databases for proof of identity of a person. Probably the related one that is similarly high level would be passport information held by the Commonwealth Government so any access we give to that data needs to be for a legitimate and lawful purpose, so we ensure that if access is granted through Drives 24 we have what is called a mask that will give you access to a number of level of fields depending which agency you are from and we audit that to make sure that access is for a legitimate purpose each time and we ask those agencies to manage that interface.

If, for example, there is someone who would want to access it for bad reasons, if you had criminal intent, for example—it would be an attractive database to access—we are very diligent in making sure there is only legitimate access. By the time firms are legitimately basing themselves offshore as an example of an insurer, we will pause to think, "Hang on a minute, do we have sovereign control of that data once it is accessed offshore" and we will not necessarily grant that. Often with either insurers or banks, there are regulatory hurdles they have to clear before offshoring different functions and this would be one of those where we may not necessarily accept that an offshore party can access these records. We would lose some degree of control should there be anything bad that occurs with that access.

Mr MICHAEL DALEY: Historically, I recall that making changes to the Drives database is very slow and unwieldy, for example, when we changed the points for speeding bans. Even as Minister I was told, "We will put that in the queue and when that is done in three months time"—because you run two databases and shut it down for the week. Is that still going to be the same way with Drives or will the updates improve the speed at which those modifications can be made?

Mr WELLS: I think there are probably a number of principles here with these very large databases. Drives can process in the order of 10,000 or more transactions per hour. For entities such as ourselves—and there are private sector people with whom I am in contact such as Westpac or Sony—they have large databases with private records and you have to manage them very carefully. A small error from my point of view might affect tens of thousands of customers so a small error is not necessarily a small error when you are thinking of Drives.

For reforms that we are bringing through, because we have spotted such a key database and an engine for allowing both the customer and government to bring in better services and better functions, part of the thinking of the re-factoring was to add more horsepower to what we can do with Drives so it speeds up what is possible but certainly the appetite for reform and new products is ever growing, so we do have a challenge in terms of making sure we have got sufficient functionality, good capacity long-term and growing capacity. It remains a positive tension for us to stay abreast with the reforms but in a timely way while not giving away any security or privacy issues.

Mr MICHAEL DALEY: My question really went to the time it takes to make a modification or change to the business rules and then having them effected in Drives. Is the update going to speed that capability up or is it still so critical that it is going to take quite some months to do it?

Mr WELLS: It does speed it up. We have quarterly releases, so if there is an urgent thing to do we can still do that and bring it forward and we will have more capacity to do urgent things. We have plans forward for each quarterly release. The coming quarterly release is booked up; the one following that is all but booked and they are more and more certain as they come close. If there was an imperative for government to do something important, where ever possible we would make sure that still occurs.

Mr MICHAEL DALEY: You are going to let the Minister jump the queue?

Mr WELLS: That is correct.

Mr DUNCAN: Could I add that the way customer expectations are now with access to this type of information, there are almost daily requests to change processes.

CHAIR: It was a Daley request.

Mr MICHAEL DALEY: He is on the ball, isn't he?

Mr DUNCAN: Sorry for that slip. There are constant requests for changes and one of the things that our reform process has done is enable a more web interface around it so the database becomes a core database with other things around it so it is evolving into the right place for future technology integration, which is good; it is not something that is staying stable and we hope to be able to satisfy faster change in the future without compromising security or people's information.

CHAIR: I am glad the shadow Treasurer has put on record that the current Minister should be treated with special status. It does, however, highlight a broader question. While I know you are not responsible for how things were managed in the past and we have touched in a direct sense—

Dr GEOFF LEE: May be that is why you are new.

CHAIR: It may well be why there are new appointments but again my view is that if you do not understand what has gone on in the past and how it might be improved, then you are half blinded. I am interested in knowing both in terms of timeliness and efficient management of projects, record management and other issues what mechanisms have been put in place. I know you have touched on it but I want to hear a little more about what mechanisms have now been put in place to ensure future projects and processes are managed more efficiently within budget and are there any outstanding issues you have identified that have not yet been addressed but will be?

Mr DUNCAN: I will start and I might ask Paul Hesford to follow up with the detail. A big change that has occurred in recent times is the development of a non-infrastructure program management office, looking at how we can improve practices outside. When we say infrastructure, we mean the more traditional roads or maritime infrastructure where we are building things on the ground. This non-infrastructure is more the information technology and other types of works that we procure. It is a very big change in our thinking to make sure that the good project management skills that are seen in one area of the organisation are across the whole lot and Paul will go through with you the set-up of the executive review process and the governance that has been put in place.

All of the things that the Auditor-General has requested we have implemented, right down to making more detailed minutes available so reviewers such as Auditor-Generals and others can come in and see the decision-making chain. We always had minutes of meetings; we had more action-orientated minutes out of those meetings. The Auditor-General made very detailed requests, which we have implemented. I think Paul has outlined the one-third, two-third reviews and also, for myself and for the executive review groups to be able to get at any time or have a concept where we can bring in independent review of the project to see that it is tracking well, and I think that is important. I think that is important.

I made the point that in our own governance, we need to bring independents in and obviously our cluster chief information officers [CIOs] and people like that, so that we have good innovation with the rest of government. I personally have kept in contact with the broader government ICT changes, the new strategy, and I can see that what we are doing is in line with that; likewise the new Transport for NSW CIO being on our committee brings that rigour into it to make sure that we have got that alignment. Capability and the sorts of things we mentioned before, all of those from central agencies—we welcome that sort of improvement and change. Paul, you might go through the detail of changes that have occurred since 2009.

Mr HESFORD: Just in terms of the establishment of this non-infrastructure program management office, it establishes a framework of policies, procedures and processes in which projects run through, right the way from the beginning at the conception of an idea right the way through to the delivery. I suppose that some of the challenge has been people jumping straight to business case, which I think was probably one of the risks that happened within the drives forward work program here, and that goes back to the concept of what it is we are actually trying to achieve and largely to be agnostic around the platform that is going to deliver that. What is the business problem that we are trying to solve?

As part of that, we make sure that we have got sufficient work that is done up-front as part of the scoping phase. In terms of the process we run through at Roads and Maritime Services today, concept papers are generated by the business around what their business needs are. They go through what we call the review and advisory panel, which comprises key members of the general manager fraternity who meet and they are largely from the business. They actually challenge those projects to say, "Well, why are we doing this? Why are we doing this? What about if you bring that together with this? There are synergies. We were looking at this as well." So we try to get a whole-of-organisation perspective.

The review and advisory panel will then rate those concept papers and determine what are the ones that, from a business perspective, they believe should go forward. They go forward into the development of a more detailed scoping document and business case. They will develop the business case and the detailed plan and they actually go back then to the review and advisory panel for them to review and challenge. They undertake a peer review whereby somebody external from the area looks at the business case and says, "Does

this stack up?" They may well turn round and say, "Well, what is the do-nothing option? You could perhaps explore doing a managed service approach", or whatever. So there is quite a lot of challenge that goes on throughout, and that is even before it gets to the ICT executive committee.

I think we are far more around making sure we have got the right concepts coming forward—you know, that they have been adequately scoped—and that we have actually undertaken the research around what are the alternatives and making sure there is a clear delineation around those alternatives. Then, as I say, it then comes through into the ICT executive committee. We will review them and challenge and approve them. We have also enhanced the benefits realisation and the benefits tracking processes, so we were very good in the past putting up, "Well, this is the cost of a project. We need \$20 million for this." Now we have got to work out what is the benefit? It is solving a business need, but what are the benefits?

We also now start to track those benefits throughout the whole process. In the past we would have done a benefits realisation at the end of the project. We are getting more mature at actually tracking the benefits throughout the projects. If a variation comes forward, we go, "Okay, what are the variation and the benefits?" When we do the third reviewing, not only do we want to understand what the costs and the risks are, but have we done an update on the benefits as well? So it is a far more continuous process that we run through, and it is not only around cost and scope but also around benefit. As I say, we are getting more mature over time as we run through these. It is definitely been a journey that we have been on. We continue to enhance the processes.

CHAIR: Are there any sort of main or fundamental issues that have not yet been addressed that you have got on the horizon? In that context in relation to the new ICT strategy, what issues or aspects have been brought to the fore through that process? What impact might they have on ICT projects in your agency?

Mr HESFORD: From an ICT perspective, obviously it is now forming part of the Transport cluster and the changes that have come about with the appointment of the group's chief information officer [CIO]. There is a new methodology that has been brought in, in terms of the ITIL framework, which is industry best practice and benchmarking. We have implemented the ITIL framework, or we are in the process of implementing ITIL within Roads and Maritime Services, as is Transport. At the moment we are at benchmarking what our current performance is and how we track against that.

In terms of strategy, we have the whole-of-government strategy. Transport is now working through the development of the ICT strategy for the whole of the cluster. We have our component within that in terms of what our accountabilities are. In terms of our journey that we are on in terms of improving the ICT governance, I think it is making sure that we recognise the right projects. We have a whole legacy in terms of the architecture of the multitude of systems that Roads and Maritime Services has, and the integration with Maritime as well. So there is a big piece at the moment that we are undertaking around the architecture to understand all of the systems that we have got, how they fit together, and how we can actually rationalise them so that they are whole-of-organisation systems rather than systems that address individual point issues as well. I think that probably the next big piece of work that we will be undertaking, or are in the process of undertaking, around the broader architecture of all of the systems.

Dr GEOFF LEE: I was interested in what you had to say about your strategy. Clearly for most of your work, in terms of strategy, people just want to go in and do a transaction. They probably, like me, do not want to even walk into the Roads and Maritime Service office. I think the online solution is a far more time efficient way of doing things. I was interested in your analysis that it costs approximately 17¢ per online transaction versus \$8 to \$10, which I think is wonderful, and so do the banks, certainly. You do 20 million transactions a year?

Mr WELLS: It is 23 million.

Dr GEOFF LEE: How many of those would be online? What is your strategy? If you are talking about those magnitudes of cost savings, certainly part of your strategy, like banks did 10 years, push people to automatic tellers and then push people to online.

Mr WELLS: Yes.

Dr GEOFF LEE: I am sure the Treasurer and the Minister for Roads and Ports would be very interested in your ICT strategy to get from your 10 per cent online to 90 per cent online.

Mr WELLS: Absolutely. There are two pools of transactions—that which you currently do need to come into a motor registry for, so it might be proof of identity or sighting key documents for someone who is emigrating to Australia, or whatever it might be; and then there are those transactions which can be conducted online. So of the total pool of transactions that we conduct, there are around 20 per cent that are conducted online or just a little over and gradually growing. For those transactions that are possible to do on line, we are at around 47 per cent and just recently cleared 48 per cent online. We have a target with Treasury to reach 60 per cent of eligible transactions; so not the entire pool, but that pool which can be conducted online.

Dr GEOFF LEE: I understand.

Mr WELLS: What we are wanting to do is increasingly to add more transactions to that which can be conducted online, so we have got a number of those coming forward. For instance, while the app for a smart phone, or the application, is not new—you can already do that online—we believe that offering that on a smart phone will capture a whole new cohort of transactions. We have realised now that as we have gone past 30 per cent and 35, when we compare to banks, insurers and other peers of that sort, they say things like, "In the Australian context, that's quite a high level." We are mindful to give all the opportunities, where people can legitimately go online, to encourage them there. This is worthwhile. It saves money. They are the most satisfied customers of all in feedback, so it is noble in both senses.

We are now wanting to offer things, such as to do further clustering of transactions for business and fleets—people who might be couriers or taxi fleets or trucking companies, or whatever. We already batch them, and we run through them in batches manually. We can explore doing that online as the next reform. We are even thinking, for some of the online transactions, there are all sorts of things we may be able to offer in the future. We are currently running a range of relatively informal consultation through the customer's eyes. So if you are an individual person or a family member or whatever, or if you run a fleet of vehicles or you have a wide range of staff who drive vehicles, we are busily consulting informally people as citizens, business owners and fleet managers on their needs and the trends they see in managing fleets as well as the future of vehicle and licence-related transactions.

Dr GEOFF LEE: I understand, and the expansion is excellent. If you are migrating more and more people online, do you expect that will decrease your need for maintenance, costs of your ICT or your whole customer service aspects? Do you expect a decrease in costs of face-to-face services or the total service component of your budget because you are migrating people to online?

Mr WELLS: There are two big spheres to account, if you like: the face-to-face transaction and the contact centre or phone transaction which we will be migrating to Service NSW. We are working with that organisation to do that smoothly. We will retain what is termed tier two of complex transactions, so it might be that you have a fleet of vehicles, for example, that would remain a tier two or more complex transaction and it will retain a Roads and Maritime Services [RMS]. But the regular day-to-day, face-to-face contact, the phone contact for transactions and the first portal in for web transactions will be through Service NSW.

CHAIR: I think we are done with questions. Are there any other final comments you would like to make? Otherwise I thank Mr Duncan, Mr Hesford, Mr Wells and Ms Coleman very much for attending this inquiry today. The Committee may wish to send you some additional questions in writing, the replies to which will form part of your evidence and may be made public. Are you happy to provide a written reply to any further questions?

Mr DUNCAN: Yes, we would.

CHAIR: That concludes the Committee's questioning today. We again thank you for appearing, and keep up the good work.

Mr DUNCAN: Thank you.

(The witnesses withdrew)

(Short adjournment)

ATHOL CHALMERS, Federal Government and Industry Liaison Adviser, Australian Computer Society, sworn and examined:

CHAIR: I draw your attention to the fact that the evidence you give is under parliamentary privilege and you are protected from legal or administrative action that might otherwise result in action in relation to the evidence you provide. I also note that any deliberate misleading of the Committee may constitute contempt of Parliament and an offence under the Parliamentary Evidence Act 1901. Before we commence questions, would you like to make a brief opening statement?

Mr CHALMERS: Yes, thank you. I would like to outline the work of the Australian Computer Society, and essentially what we do. We are the professional society for the information technology profession. We represent individual professionals. Nationally we have about 22,000 members. Essentially, we do five things. First of all, we provide an assessment and accreditation system for professionals. We use a framework called skills for the information age, or SFIA, which is a globally recognised framework for assessing and accrediting information technology professionals. On the one side is a set of skills you would need to be an information technology professional and on the other the level of competency you have in those skills. Basically, we assess people against that framework and give you an assessment of what level of skill you have in certain information technology competencies. We run that assessment process and depending on what sort of skill level you get we would certify you as a certified professional or a certified technologist.

The second thing we do is run a lot of training and professional development courses. It may be you would be certified as a cloud computing expert with a certain level of competency. If you or your organisation wish to get to a higher level, we have a professional development program where we can educate and train people to get to that level they want. There is a whole stream of work around educating and professional development. The third thing we do, we are the accrediting body for all university courses in information technology. Virtually every university in Australia that has an information technology graduate course, those courses are assessed by us to ensure the subject matter and level of competency and teaching meets what we would regard as a highly regarded information technology course. We do that to each university course around the country.

Fourth, we are also the organisation that the Commonwealth Government uses to assess visa applications from people who want to work in the information technology industry here. The Commonwealth recognises the society as the professional body for the information technology industry. We would do many thousands of those each year, and make recommendations on all of those applications. The final thing is we are active internationally with our peer societies globally. So, we are a member of an International Federation of Information Processing, which is essentially about 50 societies like ours around the world. So, we participate in the international forums with our sister societies, exchanging information and discussing the works and priorities that we do.

CHAIR: How do you liaise with the New South Wales Government?

Mr CHALMERS: Our main liaison is through the information and communications technology skills and capability working group. Under the strategy that the New South Wales Government has, one of the working groups is the information and communications technology skills and capability working group. We have a person who is represented on that working group. As you are obviously aware, the whole skills issue is a key part of that strategy. Our liaison is principally through that working group. We have some interaction with some individual agencies and departments but it is not very significant at this point. It is primarily through that working group.

CHAIR: Highlighting that skills and capabilities area in a general sense, obviously that is an aspect that is of interest to this inquiry, particularly as it relates to skills and capabilities within the New South Wales public sector. From your organisation's perspective, how do you think those skills can be improved? How can they be kept up to pace with what is a rapidly changing industry and what role do you think industry associations have in improving skills?

Mr CHALMERS: In improving the skills, there are three areas we see. I like to look at it as the supply side and the demand side for these information technology skills. At a base level it is important that you have a framework for assessing and accrediting and certifying people's levels of skill. If you look at other professions like the medical profession, lawyers and accountants and the like, they have those well-established professional

societies that provide those levels of certification which give employers confidence that the person they are hiring can do what they say they can do. Information technology is a relatively young profession in a sense, compared to those other ones, so we are only now starting to see the emergence of professional societies for information technology people. We have this framework that we call SFIA, the one I outlined earlier, which essentially provides that for our industry.

I think the first thing is that organisations need to adopt a framework like that which is globally recognised so that when they hire people they can have a certification that says yes, that person can do what they say they can do. If they want to move those people to a higher level of competence in a different area of information technology, they can work within that framework to do it and work with a society like ours to train people. When they are putting out job specifications and they want to hire people, they can do it within that SFIA framework. So, you are increasingly seeing organisations advertising for positions where they say: We want an IT contract manager and you need to have the following SFIA qualifications.

So it becomes a language for recruiting people as well. It also means that if you are bringing in an outside supplier, so you are outsourcing some of your information technology work, the people who are supplying you also need to provide evidence that they have those levels of skill against that framework. We see that as a foundation step in making sure that people in your organisation or coming into your organisation have the level of skills and competencies, et cetera, that you require to do the job and you, as an employer, have confidence they can do that job.

The second part on that supply side is the ability to professionally develop people within their information technology area. There are so many areas within information technology now, it is a bit like the medical profession—there are so many areas in which you can specialise. In this rapidly changing environment you need to have a good professional development program to move people into other areas or upskill people as you need to. So, in addition to having a framework you have to have a very good professional development focus. If you look at information technology in particular, it is such a rapidly changing environment.

If you look now at the big issues such as cloud computing, big data analysis, social networking, cyber security and mobility and applications, 10 years ago there would not have been such a big demand for them. The world of information technology is changing so rapidly, so you need to be constantly looking at your skills plan, your professional development focus. That is on the supply side. Again, in that area we see deficiencies where organisations are being caught out where they have not looked at the skills they are going to need in the next few years, they have not done the professional development and now they are finding they have to bring people in from overseas or from outside suppliers because they have not done the professional development.

The third part, which I think is the demand side, really goes to this sort of issue of strategic planning around what your IT skills requirements are. Again, we see—and I think it is being increasingly recognised—one of the deficiencies we have had is at a sort of management and leadership level, that not enough attention has been paid to what are IT skills requirements are going to be in three to five years, and planning for that, with the result, as I said earlier, that some organisations are now finding shortages—they have not got those skills they need and they have to bring them in from somewhere else; yet they may have a lot of very good IT people in the organisation who happen to have a skill now which is not in such big demand; they have got a lot of the other skills you need, they just need a bit of retraining to be brought up to the upper level. So I think the framework for assessing and hiring people is the first bit. The second bit is that professional development layer; and, thirdly, at a management and leadership level, really doing the detailed planning about what skills you might need; I think that is key.

CHAIR: From your observations in relation to the New South Wales public sector compared with the private sector, how have they performed on those measures?

Mr CHALMERS: To be honest, I am not close enough to know how the New South Wales public sector performs in that area. But I would just say as a general rule—we work with some organisations in the Commonwealth sphere and we work with private ones—there generally would be a consensus now that they have not planned well enough around their IT requirements and are now finding themselves in these shortage areas. I think there was almost a sense some years ago that IT was the area that was out that side of the place, they were sort of bolted onto the business doing their stuff; now it really needs to be a central part of the whole business planning process.

The other big thing that is emerging, and I think this is relevant to the New South Wales sector and the findings of the Auditor-General's report, is that increasingly now the soft skills are the important skills. We talk to big corporations and other government organisations who say "When we hire IT people the technical skills are sort of a given, we can see the technical skills, but if you have not got the other softer skills, like the project management skills, the stakeholder management, business analytic skills, we essentially will not hire you". So we are seeing a big emphasis now on what we call those softer skills, and really that is where a lot of the work we do in our courses is now being focused—on trying to bring IT people into the business who just cannot do the technical bit but they can do all those other things that are really important to determining whether the business achieves or the organisation achieves what it needs to achieve.

CHAIR: I do not know how familiar you are with the new ICT strategy but perhaps you might give your impressions or your thoughts in terms of the impact of that new ICT strategy on improving skills or otherwise?

Mr CHALMERS: Again, our involvement is really through that particular working group, but we are seeing some really promising signs there, and in the discussions we have just had around that SFIA framework is something that has been discussed at quite some length in that working group and there seems to us to be an enthusiasm within the group that we need to adopt a framework like SFIA. So that is really encouraging. The issue with that SFIA framework is that it is a global framework; anybody can, essentially, adopt it and you can self-assess. The question then becomes why would you use an organisation like a professional society? The issue there, of course, is that the assessment is being done by an independent group and you actually get that certification of an independent group with the logo that says you have actually achieved it.

We are seeing a general enthusiasm for establishing that framework, so we think that is a really, really important and good first step. Also, within that group there has been a lot of discussion around if we have that framework then how do we deliver the sort of professional development—an ongoing professional development that is required to make sure the skills are still up-to-date and relevant? So from the part of the overall strategy that we see, we are seeing a lot of encouraging signs that it is moving in a direction we think it really needs to go to address that weakness that was identified of perhaps not the contract management and project management skills that the Auditor-General had found.

Dr GEOFF LEE: My question is about procurement—obviously, we are looking at the procurement of public sector ICT. Bearing in mind the old adage of no-one got fired for buying an IBM, a lot of government departments and a lot of big companies choose big vendors to the exclusion of smaller and medium-sized vendors because of the issues of reliability and being able to manage many vendors. From your position, what lessons could the New South Wales Government take away in terms of encouraging the use of small and medium-sized vendors to deliver ICT services for government departments with minimal risk to the reliability of the delivery of projects and also the efficiency of managing a large number of smaller vendors?

Mr CHALMERS: This is not an area where you could say ACS has any particular expertise—the area is the skills of individual IT professionals; so we have not got any particular position on that. As a general rule, I guess one of the arguments about using SMEs is that, in particular, you tend to get perhaps a more responsive sort of organisation. Some of the bigger organisations can be sometimes, if they are the bigger corporations, less responsive because they are big and they have got a whole process to go through to respond.

Dr GEOFF LEE: Are there any particular barriers that you see from your 23,000 members? People may suggest that "government departments will not deal with us because we are too small and we are not on the accredited list". Is there anything from your experience, from your society, the ACS?

Mr CHALMERS: Not really. Our members may have some views on that and they work in SMEs and large corporations are a whole mixture of where our members sit. But that is not the sort of feedback that we get from them when we are talking to them about what we are doing with them. There is no particular view comes back to us on those sorts of issues.

Mr BART BASSETT: Just a general statement of what you may have picked up from your members: The Auditor-General's finance reports have reported on ICT projects that have gone over budget and over time. I will run through three things and you can answer as you feel it is appropriate. What do you think are the main causes of failure in ICT project delivery? How do you think agencies can improve the management of those projects, and how do you think this can be addressed?

Mr CHALMERS: Those things go to the skills and competencies of the people who are running those programs. We have within the suite of education programs that we offer IT contract management and project management. One of the things we are seeing, and it goes back to what I said earlier, is a much greater emphasis by organisations on those softer skills; so there is a deficiency in those areas. I think what was found in that Auditor-General's report is not an uncommon finding that we are seeing across other parts of other organisations we deal with. To that end, for example, we are looking at whether we can strengthen our suite of programs that we have in that area to make it a more important part of our whole certification process.

We would keep coming back to the fact that those things happen, those overruns happen because the people who are running the projects do not have the necessary suite of skills. In response to that—and it is something that we have seen emerge in the last couple of years in particular—we are looking to strengthen the suite of programs that we can offer in that area because we have seen that demand, I guess, from our individual members and from some of the organisations that we deal with through those members. So in 2013 we are looking to add some more programs in there to strengthen those softer skills. I keep coming back to how it is a skill issue, it is a competency issue, and I think we can provide some processes and tools to help address those concerns.

Mr BART BASSETT: Coming back to your idea of smaller operators providing services, various submissions received by the Committee talk about the development of a service catalogue that is currently issued by the Department of Finance and Services. How do you think this will help improve project management and service delivery, especially from your members' point of view, as you are representing them, and what does your organisation think about benchmarking costs and making this information available to all government agencies?

Mr CHALMERS: I would understand a services catalogue essentially being—and correct me if I am wrong—a sort of a centralised, within the Government set of services that are available in the IT where you can choose which ones you want and from a particular set of providers.

Mr BART BASSETT: Yes.

Mr CHALMERS: Our experience with that, and through some of the members' observations, is that it certainly does lower costs for agencies because, essentially, the range of services and the terms and conditions and prices are generally best practice and benchmarks; so individual agencies do not then have to go through the process of going out to market, going through a tender process and working with various suppliers to come up with a final decision. It is a much easier and less costly process for individual agencies. Also, by centralising, of course, you get the full weight of a whole-of-government organisation dealing with the various suppliers, so you can usually get a better price and some better terms and conditions.

Certainly, in our experience and talking to our members, it is better for the individual agencies in general. Some agencies will say it means they can lose some flexibility because it might have some particular requirements and the services catalogue might not be quite what they want, but, again, generally there is room to move within some of those arrangements. It also means that for the suppliers it can often be a lot easier as well because they get their service into the catalogue and then they are not dealing with X amount of agencies individually to sell their services. In general, we have seen that it is a lower cost, less resource-intensive process for agencies and it delivers better value for money, I suppose, at the end of the day. That is, essentially, the feedback and our observations.

Mr BART BASSETT: Just a question to follow on from that, based on what you have said, because you are representing so many individual, small service providers, if that were the case, what sort of flexibility would you like to see in that sort of catalogue so that new players who have gone through certification can end up in it?

Mr CHALMERS: I am probably not in a position at this point in time to provide an answer on that one; it is not an issue I have discussed with any of the members in particular. Our members are individuals; some of them will be in the SMEs, some of them will be in some of the bigger corporations, but it is not something that I have really had a discussion internally about what it might mean for them.

Dr GEOFF LEE: The Auditor-General has also raised concern about the impact of significant variations in the project specifications. How do you think this can be addressed in the process of purchasing ICT?

Mr CHALMERS: I guess this comes back in the end to if you have a more centralised, standard process. This is specifications for the delivery of certain services, which might be standard across a lot of agencies, I am assuming? Again, our experience in dealing with some of the agencies in the Commonwealth level is that moving to a more centralised management process gets rid of a lot of those variations that you get in various specifications and leads to a better value-for-money outcome for the individual agencies.

Dr GEOFF LEE: Also, has it been your or your members' experience that government departments put onerous conditions on the vendor so that the costs are exacerbated because of the onerous de-risking of any contract?

Mr CHALMERS: Again, I am sorry, that is not a conversation or a view that we have got from our members. They would have views I am sure, and some of them will be in situations where they will be in SMEs, but that is not something I could give you an ACS view of right here; it is not something we typically ask our members about. So I am not really in a position to offer a particular view on that from our membership base.

Dr GEOFF LEE: It is better not to say anything then.

Mr CHALMERS: That is right. I would not like to misrepresent them.

CHAIR: One final question in relation to your view of accreditation of an area in government versus a person. To what extent is it necessary to accredit both and what is the more important accreditation: is it the individual or is it an area within the government?

Mr CHALMERS: That is an interesting question. Our focus is clearly on individuals, providing a level of assessment certification for individuals. At this point in time we do not assess or certify areas or departments or agencies; we work with them to try and help them develop, et cetera, their individual members. But it is something we have looked at and are looking at—whether you in fact can go into areas or organisations and they can say "We are an ACS accredited" whatever it might be.

It is something we are looking at, which again is a little bit in response to demand that we are seeing now, that some organisations want to see that as a way to attract talent. So if they are seen by somebody as an organisation that takes assessment of the professional development of their IT people as an important part of the way they work, that might help them to attract talent. We are seeing an emergence of that sort of demand, so we are looking at whether it is something that we might put into our suite of products and moving from, as you say, assessing individuals, to having some sort of process of certifying an organisation.

CHAIR: Around that, I suppose not just the expertise but also some of the quality processes that might be associated with it?

Mr CHALMERS: That is right. We would have to develop a whole assessment process sitting behind that: What do we assess? Processes, skills et cetera, to arrive at a point where you say that organisation or that area is certified as—whatever we choose to call it. So that is an active topic of discussion that we are having at the moment, internally.

CHAIR: Do you have any final comments you would like to make?

Mr CHALMERS: No, thank you for inviting us. I am happy, if there are other issues that come to mind—

CHAIR: The Committee may wish to send you additional questions in writing; the replies to those would also form part of your evidence and be made public. Would you be happy to provide a written reply to any further questions?

Mr CHALMERS: Absolutely.

CHAIR: That concludes our questioning. We thank you for appearing before the Committee on behalf of the Australian Computer Society and we look forward to ongoing discussion and input from your organisation as part of improving the ICT landscape, both public and private.

Mr CHALMERS: Thank you.

(The witness withdrew)

PETER RIORDAN, Deputy Director General, Corporate Services, NSW Department of Education and Communities, and

MICHAEL McMAHON, General Manager, Learning Management and Business Reform program, NSW Department of Education and Communities, sworn and examined:

CHAIR: Thank you for attending the public hearing of the Public Accounts Committee. We are holding a hearing in relation to the procurement and management of ICT in the New South Wales public sector. We have heard from a number of stakeholders, including NSW Government agencies, suppliers and industry associations. Again, we thank you for appearing before the Committee to give your evidence.

I draw attention to the fact that your evidence is given under Parliamentary privilege. You are protected from legal or administrative action that might otherwise result in action in relation to the information you provide. I note that any deliberate misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901. Before we commence with specific questions, Mr Riordan, would you like to make a brief opening statement?

Mr RIORDAN: Dr Michele Bruniges, Director General, had hoped to be here today but had a prior commitment with the Premier and so was unable to make it. I am deputising for her.

CHAIR: We are happy to make way for the Premier to take precedence. I note that apology and thank you for making time yourselves today. Perhaps a good introductory question would be to ask you to provide the Committee with some background about how ICT services and ICT projects are managed in the Department of Education.

Mr RIORDAN: Fundamentally, it depends upon the size of the project, so different governance arrangements would apply to different sizes of projects. So anything ranging from a project like the Learning Management and Business Reform [LMBR] project—a project of significant change in technology—would have a detailed governance arrangement, ranging down to what may be a project to amend or alter an existing system that requires some program work to be done. At the core of everything that we do these days—I am not sure it was always the case—is ensuring that the business requirements are met. That is, what are the user requirements and how can they be accommodated by the systems?

In a large project we have an extensive governance arrangement which builds up from inputs from users at user level, at school level or people in the Finance directorate or the Human Resources [HR] directorate, or in the TAFE environment, they will define their requirements and be part of a formal advisory group. That escalates to implementation groups which then further refine and make sure that there is no inconsistency between various areas of the organisation, in terms of what they are seeking and to validate those requirements, that they can be accommodated within a systems solution and the overall budget within which we have to operate.

On top of that, would normally be a project control group, drawn from various areas of the department and on occasions from other agencies, depending upon the nature of the project. We will invite people such as quality assurance advisers, for example, to attend in order to ensure that a project is meeting all the probity requirements. That group would be the ultimate decision-making group for what occurs, what timing occurs and for monitoring budgets to ensure that projects remain on budget. For small projects, such as amendments to our system, usually a more informal user group would be set up to ensure the requirements are captured. That group works with the information technology directorate experts to ensure that those requirements are put into a system that will work effectively for the end user. It depends upon the scale of the type of governance that is in place but every project, no matter how small or large, has a governance arrangement in place to ensure that the user requirements are effectively captured.

CHAIR: You mentioned the Learning Management and Business Reform project; perhaps you might give us a little more information as to the scope and purpose of that project. The Committee is broadly aware of different levels of knowledge on that project but, for the record, could you talk about that project a little bit, particularly its scope and purpose?

Mr RIORDAN: It is a major transformational change project for the organisation. It started some years ago now. The first discussion occurred around 2005 or 2006. The Department was aware that its aging

back-office systems—which had largely been built in-house and did not speak with each other—were in need of replacement. A project was commenced to look at the replacement of those back-office systems, predominantly Finance, HR and Payroll. At the same time, in the school environment, a demand was emerging around student administration and learning management, to ensure that we had the tools necessary to capture student achievement, student attendance, student welfare issues et cetera. Those two major change projects were rolled together to be the Learning Management and Business Reform project.

There were a couple of elements relating to the back-office system replacement: the finance system had been in place for 25 years; the HR parallel system had been in place for almost 20 years and had been adjusted over time. They were no longer commercially supported, either in TAFE or in the school environment. So the decision was made that we needed to do something about that if we were to continue to provide an efficient service to students and the people of New South Wales.

CHAIR: Can you give us the current status and progress of that project? Can you tell us if it has been completed and, if not, when is the expected completion date of the project as a whole, but also of the different components that you have identified?

Mr RIORDAN: I will ask Mr McMahon to comment on that.

Mr McMAHON: We are currently in what we call stage two of LMBR, so that is the final piece of LMBR. Up to the current status we have delivered corporate and TAFE finance. That was part of stage one. This year we delivered a budgeting and planning solution to 229 schools. Next year is the major year for deployment, so we will be delivering the budgeting and planning, another release, to the 229 schools in February. Then, in June, the fully integrated Finance/HR payroll for the 229 schools will be released. There will be a series of HR payroll rollouts to TAFE between June and November and the final rollout to all TAFE institutes in November next year. By the time we get to December next year, the only thing that will be remaining will be the rollout of the solution to the remaining 2,000 schools which is scheduled to take place in 2014. So by December 2014 the LMBR will be finished as a program. Part of that period is around the transformation to business as usual and making sure the changes that we are making are sustainable changes and are taken on by the department.

CHAIR: Before I pass to Dr Lee, obviously you have got the corporate and TAFE project and the budgeting and planning for schools. Within that, is there a payroll and HR function as well?

Mr McMAHON: Yes, it is Finance and HR payroll and Student Admin. Learning Management [SALM], the end piece around all the management and administration of students.

CHAIR: Why were the corporate area Finance and HR payrolls rolled into the same project? Why were the two components of the project, as I said, put together? Because they seem almost, to me, as potentially quite different bits and bits that might have called for different solutions.

Mr McMAHON: One of the biggest advantages that you get with systems applications and products [SAP]—and SAP is the solution that we are using—is the integration. And if you roll out HR and Finance separately, you have to provide a lot of interim solutions while you do not have that integration. That is one of the key lessons learnt from the stage one implementation, because we had a Finance solution, without an HR solution employed, which meant, as a department, we have to put in a lot of interim processes. I am getting into the technical side—the interfaces to existing systems. So, by doing it all together, you de-risk the business, from a disaster recovery perspective, from the impact to the business. You also reduce the amount of change, rather than having to keep going back to the business with different changes. It is a better approach.

CHAIR: I have some further questions but for the moment I will defer to my colleagues and ask the Deputy-Chair if he wishes to ask some questions.

Dr GEOFF LEE: I have a few short questions and I am sure you will be able to answer them. The Auditor-General reported that phase one of the project costs rose from \$153 million to \$210 million and now it has fallen to \$176 million. That is a fantastic saving; well done. What were the causes of this and what have we learned from this organisation?

Mr McMAHON: To go on record to make it clear that unfortunately what was factually correct, the Auditor-General reported that the project budget has risen from \$153 million to \$210 million. In reality that is

not actually what happened. What happened was we had two separate buckets of money in budget papers, one for TAFE and one for department for LMBR. Because TAFE is a separate legal entity we could not just have one bucket of money. Those buckets were \$176 million and then there was \$100 million odd for the SAM component. As Mr Riordan mentioned earlier, there were two different programs. Overall the budget was \$386 million. That has not changed.

CHAIR: That is \$386 million?

Mr McMAHON: Yes. So overall the total cost of the program is \$386 million.

CHAIR: And you are saying that has not changed—

Mr McMAHON: No.

CHAIR: —from 2006?

Mr McMAHON: No, it has not changed. Sorry, from 2006—

Mr RIORDAN: It went up by \$14 million.

Mr McMAHON: Yes. It has not changed since 2009. What we did is we wanted to have a single bucket of money for LMBR because as the general manager I need to be able to manage my program and understand where the money is coming from, how we are spending it, are we on track, et cetera. I discussed with Treasury around correcting these books to reflect where we are with the program so we changed. That is why, although the \$153 million went up by \$10 million, the other bucket came down \$50 million, \$60 million. So in actual real terms there was no change. There was no increase and there was no decrease. The actual \$386 million is still the same.

CHAIR: Based on what you are saying, why did the Auditor-General not understand that?

Mr McMAHON: I actually had to do a release to the media after the Auditor-General's report because the media immediately hooked on this thinking it was an overrun. What happened was unfortunately I did not get to see the brief before it went to the Auditor-General. It was done through our finance organisation and if I had seen it at the time I could have explained what had happened, because we have all the correspondence with the Treasurer, with the Minister, with Mike Baird signing off on the change and everything like that. Unfortunately it was our fault as a department that we never got the communication corrected before it went to the Auditor-General. Then when it was communicated immediately I did a press release to, I think, the *Australian* explaining that it is not an overrun and then explaining the detail.

Dr GEOFF LEE: That is good to know if this is simply a case that it was hidden. In 2013 you have the major rollout to the other 2,000 schools—

Mr McMAHON: Sorry, 2014.

Dr GEOFF LEE: In 2014 you have the major rollout to the 2,000 odd schools. In 2013 you have it to the 200?

Mr McMAHON: Yes, 229.

Dr GEOFF LEE: At this stage are you confident that you are on target to specification and within that budget?

Mr McMAHON: Yes.

Mr BART BASSETT: You made mention of the additional money from Treasury of the \$14 million because you were looking at an integrated rollout approach across the whole of the department rather than in sections. Is that correct? What was the reasoning for that change and why was the decision not made upfront to do it that way, and was it the right decision, now looking back, to do it combined rather than separately?

Mr RIORDAN: It was a major project. At the outset we embarked upon a journey which was to deliver a new finance system into the corporate areas of schools and TAFE and to start the process of building a common HR system across the organisation. At that time in the marketplace there was no product for student administration money management so our expectation at the start of the project, back in 2006, was that we would have to build it ourselves; we would not be able to use a commercial supplier. As the years passed—and that was always going to be in stage two of the project—obviously some commercial players saw some advantage in this field and some opportunities developed for us, which meant that the cost of that part of the project declined, because we were able to go to a supplier who already had a product and then get them to vary/amend their product to our particular needs.

A decision was made around the \$14 million extra. It was not extra money from Treasury; it was an approval to use capital funding that the department already held for the LMBR project. That approval was given by a former Minister. It was within the program rules at the time that if a 10 per cent contingency existed the Minister had the authority to allow that expenditure to occur if they were satisfied it was necessary. The pressures that emerged were issues that had not been clearly articulated in the original business case that had been approved by Treasury, particularly around the establishment of a finance shared service centre, which means that we could centralise transactional processing to drive economies of scale. They had not been fully costed in the original business case.

There were some additional training requirements to ensure that we were able to embed the LMBR system across the organisation. That was set at that time as well. So the decision was taken at that point in time, rather than waiting until those pressures got to a stage where they were overwhelming. The decision was taken within the rules that applied at the time to create a 10 per cent contingency of \$14 million to the project so that we had a budget of \$386 million. We knew what it was for, we knew it was an eight-year project. While we have changed some of the deliverables in terms of the timing, the scope of the project remains the same. It will be delivered within the budget, plus the \$14 million that was approved by the Minister, in the time frame that was endorsed, which is an eight-year time frame.

Mr BART BASSETT: Just another part of that question, the Auditor-General also noted that the department revised its approach in 2011 about the appointment of a transformation services provider. Can you explain to the Committee what the role of that provider is and was, and what has been achieved since that appointment?

Mr McMAHON: The role of the transformation services provider is to bring in external expertise and commercial expertise. The organisation is still there so it is essential and it is a consortium of a presence of IT. We went through a rigorous procurement process over a period of six months and various consortiums, through elimination and involvement of 100 stakeholders and DEC, to make sure that we picked a transformation provider who culturally was a good fit but also could bring in that expertise, external commercially as well as government experience.

Some of the benefits they brought is also resources. Within the department we do not have the capacity or expertise to do this on our own. It is anywhere between 350 and 500 resources delivering this program so as you can imagine it is pretty huge. Some of the expertise they have brought is really around the rigour of change management, the stakeholder engagement, keeping reins on scope and actually looking at the deliverables and whether they address the business requirements. So it has been a positive move in doing that, and they are still there and we continue to work together to deliver this.

Mr BART BASSETT: You said you have stayed on budget, which in a lot of circumstances, congratulations to you on achieving that, compared to some others. Do you believe, by the appointment of that transformation group, which had commercial understanding coming in, do you think they have played a significant role in maintaining the budget where you started out and what sort of involvement have they had in making sure that they have either run a risk assessment committee or an ongoing management rollout view with other people in the department on a regular basis? How have they managed that?

Mr McMAHON: We manage that and we also have an independent QA performed by KPMG as well. So between the three of us, I think it works very well together. We obviously bring the expertise of understanding the department, government and education itself. They bring the rigours and the approach and the discipline of we have something to deliver. Then our independent QA sits and analyses both of us and keeps us honest and making sure we are on track and on budget. I think it is fair to say that they have made an addition to making that happen.

Mr RIORDAN: If I can add to that, we also have a LMBR audit sub-committee, which is a sub-committee of the department's independent audit committee. A member of the independent audit committee chairs that sub-committee. I am a member of it, as is another senior executive member of the department. It brings together internal audit of the department, the quality assurance advisor, KPMG, and Mr McMahon in his role as LMBR general manager and other key senior people of the organisation into the room on a bi-monthly basis or, sorry, every second month basis to examine what is going on in the LMBR project. It is just another part of the governance process which ensures that a budget is on track, that risks are being identified and appropriately mitigated to give confidence to the audit committee, the director general and the Minister that the project is remaining on track.

CHAIR: Even though it seems that you have kept on budget, which is pleasing to note compared to what our impression was before we started this session, \$386 million is still a lot of money and it must be a very complex project. We heard evidence from another government area earlier today where they had taken a fairly disciplined approach in terms of maintaining a more out-of-a-box solution rather than tailoring it to existing systems, legacy systems, perhaps. In areas like payroll and HR, which potentially you can do that more easily than in an area like student learning which perhaps is more complex and unique to an environment, to what extent did you actually contemplate taking that sort of approach and thereby keeping the costs significantly lower, which was the case in the other entity?

Mr McMAHON: Absolutely. One of our key guiding principles is standard SAP unless you can argue otherwise. We tried to guide the business users and understanding around the efficiencies, the ease of use and not to go away from standard unless there is an absolute policy need, legal need or stuff like that. So absolutely it is one of our guiding principles. But we are sticking very close to it. We do not have a lot of customised non-standard stuff in HR and payroll. HR slightly, because we have staffing agreements and union implications, industrial relations implications and stuff like that. We have to be a bit more sensitive but it is a guiding principle we stick to standard where possible.

Mr RIORDAN: There are some issues with it like the complexities of the employment relationships that sometimes exist. For example, school administrative staff are paid full wages during term time and receive half pay during school vacation periods. That is then translated to 26 equal pays but we then have to construct a system which recognises what happens if somebody resigns in a period of time before a school vacation period. There are a lot of complexities that arise both in the school system and the TAFE teaching environments that are not necessarily present in other environments. It has some unique employment conditions because of the nature of schools and TAFE and the fact that the teaching years run in a particular way different to what we would normally expect in a normal commercial operation so the commercial areas of the department or the public service areas of the department operate.

CHAIR: To what extent—I know you are more than halfway through the current project—are you sharing experience with other government clusters along the way so that duplication is minimised?

Mr McMAHON: I have a close relationship with the corporate shared services whole-of-government reform and also the whole-of-government Taleo program and we also communicate with the Department of Finance and Services about any whole-of-government ICT stuff. I certainly make sure that with what we are delivering we try to use that as a starting point and then look at the impact on our organisation and where we may need to tweak it or change it. For example, we started with the latest corporate shared service model for whole of government and then we have analysed that from a business perspective and looked whether there are gaps or where it does not fit for education and where we have to change it.

CHAIR: What impact will the new ICT strategy have on this project or other ICT projects in your agency?

Mr McMAHON: The chief information officer who works for Peter Riordan is managing the ICT strategy at the higher level. With regard to this program, we will probably be done and dusted around the delivery aspect. Then it will be more going forward, when I talked about the transition, to be business as usual and then how does that ICT business strategy take things forward because part of LMBR is a new service delivery model? That is how do we deliver services, where do we deliver them from, who delivers them and what are the business outcomes?

Dr GEOFF LEE: Will the LMBR program allow administrative staff a lot more control within schools?

Mr McMAHON: I would not say a little more control.

Dr GEOFF LEE: More streamlined?

Mr McMAHON: I do not know how much you know about the department but there is the Local Schools, Local Decisions initiative.

Dr GEOFF LEE: Yes.

Mr McMAHON: So the responsibility will lie with the principal in the school. The security adaptation reference monitor [SARM] role may change and how they actually execute tasks but that will be much more efficient. Rather than maybe having to produce the same information three times to three different people, they will do it once because we will have a centralised single source of information. The role will change but responsibility-wise it will depend on what role they are carrying out.

Dr GEOFF LEE: Will there be any changes to regional offices in terms of its implementation?

Mr McMAHON: Potentially, yes. There is a current restructure within the department that is nothing—well, it is not nothing to do with the LMBR but it is not driven by LMBR. Part of the service delivery model which we are yet to finalise is understanding where the services are delivered from because, as you can imagine, with 2,200 schools, they are nearly all different but 80 per cent of them are probably very similar and it is working out what is the same that can be done efficiently, transactional-wise, and then where we need to cater for differences. So all that piece of work is happening now; we need to design all that.

Mr RIORDAN: To bring it down to some tangible stuff, we will be looking at more employee self-service, so if I want to apply for leave, I can do that online through the system rather than filling out a paper form that I give to the principal. The principal can then approve that online.

Dr GEOFF LEE: Like most companies?

Mr RIORDAN: Yes. Accounts payable and receivable are managed out of a shared service centre so we can drive economies of scale by doing transactions without having school administration staff worrying about whether that box of pencils has been paid for. I have an invoice from this company and this company, and every month I get the same thing. This can all be done centralised. The order is placed at the school level; box of pencils—the box of pencils turns up, the form is turned up and somebody else in a shared service centre then approves the transfer of the funds from the department to the supplier.

It is better for suppliers, better for schools in terms of not having to worry about mundane transactional activities, cheaper overall for government because we do drive economies of scale. Significant benefits will flow from having a better system that is integrated so that finances are integrated with human resources, which are integrated with student administration and money management. So one entry about one student is then captured by the system; one entry about one teacher is captured by the system rather than being imported five times.

Dr GEOFF LEE: The student information is captured. Are there any thoughts about integrating it into the Community Services portfolio because students often have their own issues?

Mr RIORDAN: They do. A couple of years ago we were successfully negotiating legislation through the Parliament as well as detailed guidelines about information sharing. Privacy of course is a critical consideration in relation to the holding of student information but there is a legislative provision and guideline in place which enables information to be shared freely between relevant government agencies, whether it be Health, Community Services or Education to help manage student wellbeing and welfare in the school environment and virtually every young person is in the school, hopefully. Some, of course, are not.

Dr GEOFF LEE: Would you foresee that as being a seamless transaction, that once the rollout in 2014 is undertaken, with the right authorisation a community worker may be able to access a student's learning records if they suspect there may be some issues?

Mr RIORDAN: At this stage, no. It will still be a request from that agency to Education for that information and vice versa.

CHAIR: I have a question in terms of the ownership of software and how it is treated. The new ICT framework envisages that software developers own that information technology themselves. It was flagged that the Government will not attempt to assert proprietorial ownership over it, and I suppose that is attractive in some ways but in some ways it may involve certain risks. I understand that your project has not progressed on that basis but, rather, there is a proprietorial ownership of sorts in terms of the tailoring of the project?

Mr RIORDAN: Yes.

CHAIR: And that it is treated as an asset of the education area rather than another model which might be used viewing software as an ongoing service rather than as an asset owned by the department. Can you give me a little commentary around that in terms of the reality with your project and how you see that sits with the other model, which is perhaps the model of the future, and whether or not you see some transition over time and, if so, how?

Mr RIORDAN: One of the key benefits of the LMBR project because of its size is when we negotiated the original contract for finance and human resources with SAP, we actually negotiated on behalf of ourselves and 23 other agencies that were going to be using or currently use SAP to use our size and negotiating power and the fact that we were pretty rigorous in our negotiation strategy to drive a sound and competitive price—a worldwide competitive price—with SAP which then flowed to those other agencies.

I think that was the way in which the benefits, as existed in 2005-06, of a whole-of-government approach in terms of SAP users benefited beyond the education department in terms of the intellectual property. It is a very interesting and vexed question. If we can reduce the cost of software through a services model, as opposed to an asset-based model where we hold our intellectual property, which reduces the costs of these systems to the taxpayers of New South Wales, that has to be a good thing.

We are not that special that we need to hold that to ourselves. That is my view about it and I think as this develops and as suppliers become more sophisticated and the Government becomes more sophisticated as a procurer of these types of services, if we can commoditise them in some way that will invariably reduce the cost. At the moment the costs are high—as you see from the size of the program—and a lot of the costs relate to the ongoing licensing and software maintenance costs.

Mr McMAHON: Adding to what Peter said, my background is transformation and a commercial environment so I know exactly where you are going. Information technology is a service or human resources processing or pyroprocessing is a service which comes with related software and is something we want to be doing in the future. I come from the United Kingdom where it is quite well established and even in government there are places that use it. Are we ready to do it right now? My opinion is no. There is a bit of change in thinking and culture that needs to happen both within the Government and also as a taxpayer in understanding what governments are trying to achieve but it is absolutely something that we would be looking to do going forward.

We do not want an asset that actually costs money to maintain but, to be honest, I know commercial companies will tell you they are ready and can do it—cloud and security in cloud and all this kind of stuff. I come from that environment and sometimes there is a lot of talk that says it is ready but I would just be very cautious in checking and then taking the time and the transition towards that model.

CHAIR: Do you want to elaborate in terms of the security concerns you might have on the cloud model versus what you have got and why your security is so much better? I hope you did not work on the National Health Service [NHS] project?

Mr McMAHON: No, but I worked on the bid for the National Health Service about eight years ago. I worked for ADS and we did not actually win the bid; we actually withdrew before and part of the reason we withdrew was because that single record that they were trying to implement—the other companies were saying, "Yeah, we can do it, it's fine", but the reality was they were trying to do this across multiple agencies, multiple locations and different drivers. They had not done the stakeholder engagement first and that is the key piece. We want people to want it.

CHAIR: I digress. I ask more on the security, looking at cloud versus why your security is so much better?

Mr McMAHON: What we have just now in security is it is within our control and it is within our own firewalls and we understand the implications. Are we liable to be hacked at some point? Every industry gets hacked, even Defence gets hacked. I have worked in the Ministry of Defence in the United Kingdom so I know that hacking happens. Will you ever prevent it? No, but at least if you have got control of your own security and you are not depending on some other company or their exposure, then your risk is less because you know your risk within your organisations, within your own structure within your infrastructure.

Will it be something in the future is secure? Yes. I know Hewlett Packard have done a lot of work in Defence and have had their security on the cloud approved. That is a great step because if Defence are approving it, the chances are it is going to be fine for Education and Health but I just do not think it is quite there; I think it may be another year or 18 months away before I would like to see it actually happening and then feel comfortable that it is the way forward, but I do agree that it is the future.

CHAIR: Do you have any final comments or statements that you want to make?

Mr RIORDAN: No, just thank you for the opportunity to come along and talk about LMBR.

CHAIR: Thank you. I think it was very important for you to clarify some of those budget figures as well because that puts quite a different interpretation on some of the things that the Committee is looking at. Thank you for appearing before the Committee today to give evidence. We may have some additional questions in writing. The replies to those questions, if they transpire, will form part of your evidence and will be made public. Would you be happy to provide written responses to any further questions?

Mr McMAHON: Yes.

Mr RIORDAN: Of course.

CHAIR: That concludes our questioning today. On behalf of the Committee, thank you for appearing. Keep up the good work. We look forward to seeing the project deliver what is promised on budget and on time hopefully.

Mr RIORDAN: Thank you.

(The witnesses withdrew)

(Luncheon adjournment)

CHAIR: Thank you for attending this public hearing of the Public Accounts Committee. The Committee is holding hearings in relation to its inquiry into the procurement and management of information and communications technology in the New South Wales public sector. The purpose of this inquiry is for the Committee to hear from a number of stakeholders from New South Wales government agencies, suppliers, other businesses and industry associations. Thank you for making the time to give evidence before the Committee today. I do not know if you are known to each other but you all obviously have an interest in information and communications technology [ICT]. I am sure you have an interest in each of your entities that you represent but I thank you also for having an interest in the effective and efficient management of information and communications technology as it relates to the public sector and how the public sector thereby engages and interrelates with private sector organisations.

VIRGINIA CHOY, Director and Business Development Manager, PretaWeb Pty Limited,

DYLAN JOHN JAY, Director and Chief Technology Officer, PretaWeb Pty Limited, and

RANDALL EDWYN LUMBEWE, Managing Director, Syndeticom Electrical and Communications, affirmed and examined:

JOSEPH RAYMENT, Account Manager, Ethan Group, and

ANTHONY VICTOR MILLER, Managing Director, Wot-Link Pty Limited, sworn and examined:

CHAIR: We are going to keep it reasonably informal if we can, mindful of the fact that a number of you might want to speak on the same question so we will allow that to occur. Obviously you have read the terms of reference so you have some idea of the broader scope of the inquiry. Each of you has made a submission, which we thank you for. Before we proceed to questions I will give each of you a couple of minutes to make an opening statement or other comments by way of introduction.

Mr MILLER: Wot-Link Pty Limited specialises in helping organisations hyperlink their office. All they need is an internet connection and we help them effectively run Microsoft as a service at a per user per month capability. They can with just a month's notice either increase or decrease their requirements. It has taken five years to actually get to this point—we use the word "cloud" as part of our vernacular now and quite frankly we were doing what we were doing before it was part of our vernacular. So we have been a little bit ahead of the curve and it is tremendously encouraging to see the New South Wales Government take the steps that it has to, if you like, open the doors further for a catalogue of services. I would be particularly interested to speak in that vein and largely around the incentives for the in-house ICT Chief Information Officer's department area and what will motivate them to continue to seek innovation. That will be the focus of what I would like to address.

Mr LUMBEWE: My company is Syndeticom, which is a rather strange word, but it means connect. We currently employ 28 persons and we have been in operation since 1992. As you are aware, there has been the expansion of the cloud into all businesses, and of course this has associated information technology infrastructure for the likes of data centres. To name a few data centres, there are Metronode, which the Government knows of very well, Global Switch and Fujitsu, et cetera, et cetera. What our company does is supply and install the communications cabling that transports the data from this cloud to the enterprise, or for that matter, to the outside world, or to the enterprise in other buildings. So it can be within an office space or in a data centre.

The cabling work entails, traditionally, copper or fibre-optics. Part of our offering also is on data centre infrastructure management software whereby organisations can manage their assets, their connectivity, capacities and so on. We saw the 2020 panel as an opportunity to open up our customer base and provide services and products to the State Government agencies. Of course, that was a wish list. I have to say, just checking our financials before I left the office, I think we may have done about \$10,000 worth in the last 12 months: Having said that, I do not know that we have actually pursued it so actively. So we have concentrated our business on customers with whom we can work consultatively and collaboratively. For many of them, we are preferred contractors. Out of that market, we have more to do with the finance market than any other vertical market. There will be 10 major corporations, nine for which we are the preferred contractor.

The opportunity to be here today is really to express what my business sees as a way to improve how the Government can work with contractors, such as ourselves as well as many of our so-called competitors, across all ranges of sizes of businesses and many others in our industry to improve the outcomes for your enterprise in our part of the ICT infrastructure, and leverage off the expertise that small to medium-sized enterprise [SME] contractors can provide to your business. Unfortunately, I guess, the cabling side of the ICT industry is the least sexy part, but I think that most people would recognise that if you have not got it, nothing works. Thank you.

CHAIR: Mr Rayment?

Mr RAYMENT: I want to thank the Committee Chair and the Committee members for inviting us along today. We do appreciate the opportunity to respond to this important discussion. Just a bit about the Ethan Group and what we do: Ethan Group is an information, communications and technology service provider. We

offer systems integrations, technology sourcing, ICT procurement, telecommunications and ICT consulting services. Our clients include medium size businesses, larger multinationals and most importantly, with respect to this discussion, government departments. One in two Federal agencies utilise our procurement services and we are a supplier to the whole-of-government through AGIMO, which is the Australian Government Information Management Office. We sit on the desktop hardware panel and the commercial off-the-shelf [COTS] panel.

The subdivision that I work out of concerns itself primarily with facilitating the Federal Government with its ICT requirements and acting as an intermediary between large vendors and government departments. We are also a supplier on the ICT 2020 panel, but what I would like to talk about today is the utility of utilising resellers as opposed to dealing with vendors directly. Thank you.

CHAIR: And Mr Jay and Ms Choy, do you both wish to speak, or would one of you like to make introductory comments?

Ms CHOY: I will just make some introductory comments. PretaWeb is a highly active ICT supplier to government via the ICT 2020 panel. For the last three years we have been working with the Department of Finance and Services and we provide our PretaGov NSW content management website open-source cloud solution powering 14 websites to agencies covering the superdepartments of the Ministry of Health, Family and Community Services, State Transit Authority, Environment and Events NSW. We also develop and support a customised intranet for the Commission for Children. We have found that the ICT services panel has been instrumental in allowing us to engage with government as a small to medium-sized enterprise [SME]. For this parliamentary inquiry, we would like to comment on how future engagement with small to medium-sized enterprises can be improved.

CHAIR: Excellent. We should have the opportunity to cover off on all those areas of particular interest. What we will also do is just ask some general questions and again invite all of you to potentially have input. Obviously, given the time constraints, we would appreciate it if you could keep the comments as concise as possible, as you have done to date. We will be going through until 2.30 p.m. Thanks for also giving a brief overview or description of the companies or work that you are involved in, but can we particularly focus on the impact of the ICT strategy on small to medium-sized enterprises?

I think it is fair to say that you all fall within that category of small to medium-sized enterprises, which are very important drivers of our economy. It is certainly a good thing that the strategy indicates a greater willingness or openness of government to engage with small to medium-sized enterprise organisations, but I ask you to describe in your own words what you think the impact of the ICT strategy will be on small to medium-sized enterprises, such as yourselves or others in the industry. You may respond in no particular order.

Mr LUMBEWE: Our industry, from the electrical and communications cabling contracting segment, as I mentioned, is the least sexy bit. It is incredibly costs driven. That is what we find. The industry climate at the moment is not very healthy, I have to say. It is certainly not as healthy as many would suggest it is. We find it is very much a buyer's market, so if you are going to do any ICT infrastructure stuff, you would want to do it now because the margins are very slim. We have seen evidence where contractors are going in at single digit margins where we have been looking at having to pay our bills on credit cards so that we get the 1 per cent or 2 per cent that we might get back out of the credit card organisation that actually helps us with our margin. It is that slim.

Of course, we have all seen the builders who have gone to the wall—the likes of Southern Cross, Reed Constructions and so on. Again, it gets down to being a very price-driven exercise. There seems to be little in the way of looking at other services and value-added services. It is all just so price-focused that, to me, it has had a great impact on the way that some of these contracts are handled. Needless to mention, the end result is one where the original tendered price will be very, very different from what the end result is. At the end of the day, the contractors will be going for every variation that they can.

Unfortunately, the scopes of works and the functional specifications are never so prescriptive that they define everything that the client needs or wants. You would look sideways, and you will end up with a variation. Not all contractors work like that. There are two different types of contractor: there is the one who goes for the tenders market and there is the other one who goes for the longer-term relationships and so on, and we tend to be the second type rather than the first.

CHAIR: Dive in, guys.

Ms CHOY: The proposed services catalogue from the new strategy will be highly beneficial to our core offering of website software as a service [SAS] solutions. If the proposed services catalogue is modelled on the United Kingdom Government's CloudStore where they have commoditised ICT services and all vendors are listed, their pricing is predetermined and it is totally transparent, then it will have a really strong positive impact on small to medium-sized enterprises in New South Wales as it will reduce the time and cost to small business previously spent on the traditional tendering process. In the United Kingdom, we are approved suppliers on the UK CloudStore, so they are actually ahead of New South Wales in that sense.

I think it is terrific because what they are trying to achieve there is to encourage agencies not to go through a tendering process as they did before but rather to flip through a catalogue of services, and actually go to the vendors and ask them questions, which they could not do previously. Then they can choose, they short-list three companies, or they can just go to one company directly and procure their services through the catalogue. Also the emphasis on software as a service [SAS] and cloud solutions with the new strategy in general is particularly good for us because that is what our core service is.

Mr JAY: One other aspect in the strategy is talking about having a centralised internet service [IS] provider where you can have virtualised servers. I am not 100 per cent convinced that will result in savings. I think that the open market is better, particularly, say, for public websites, which is what we deal with. I would doubt that it would be able to provide the same kind of value for money. That was a central part of the strategy, I believe.

Ms CHOY: Yes. A concern relating to the services catalogue is that we worry that it will not be adequately promoted and mandated to agencies and they will remain using their old tendering process. That has been our experience with the ICT 2020 panel. We have come across a few agencies that actually were not even aware of the 2020 panel at all and they still went through an open tendering process, which is very costly to the agency and also costly to a small to medium-sized enterprise like us. In some cases, the cost of the tendering process really just prohibits small to medium-sized enterprises making a submission at all, so it is very important that NSW Procurement actually promotes the services catalogue well.

Mr RAYMENT: I will be very brief on this subject. Effectively our position is that the current strategy empowers larger vendors and integrators to effectively own their projects. This relegates small to medium-sized enterprises to the sidelines, effectively. The thing with small to medium-sized enterprises is that we understand vendors and their budget cycles, such as when they would have an excess of stock they are looking to disseminate or when they want to flood the market with a particular product. At the moment, small to medium-sized enterprises do not currently benefit from the strategy employed by the New South Wales public sector, and certainly not as much as they might, should they be utilised to the best of their ability.

CHAIR: Mr Miller?

Mr MILLER: I would just like to support the comments that Ms Choy made, but can I add to that what I think the impact on the ICT strategy would be? We would need to carefully look at two things. One is: Where is the incentive for the existing information and technology [IT] shops to actually buy from the catalogue? There is a propensity, and I put it in my submission, that just the behavioural characteristics of IT shops tend to keep the status quo. I think the real challenge for the Government is that, while there will be more and more capability added to the service catalogue, how do you drive change and encourage—what is the incentive, if you like—the buying dollar to move into that service catalogue?

Ms Choy also made reference to the United Kingdom Cabinet office. The United Kingdom Government, actually, introduced what was called the VMO, the Vendor Management Office. I guess it has characteristics that are similar to the procurement shop, but they actually went further. Instead of having more the request for tender [RFT] process, it is more about measuring service levels that are actually provided. That model is impossible to introduce unless you have a base line with your existing application so that you can compare apples to apples. If I give you a really easy example, I would say, "What is the cost of putting Microsoft Exchange to every government user in every government department? What is that cost today?"

I doubt if anybody knows. But I could grab 10 or 15 providers in the marketplace and they could give you, down to the nearest dollar, what it costs to deliver per user per month Microsoft exchange to the desktop. I think what you will also find is that the status quo of an information technology shop encourages what I call the absorb cost model. In other words, we are in a world where the status quo is a budget that business leaders give

to the information technology shop every year and businesses are in a queue trying to get some service back out. But you have already paid them in advance, for the whole year. So, again, what is the incentive to innovate? This is the key point I would like to make.

While you are opening the door for a whole of government service catalogue, potentially—and I repeat potentially—it is forward if you do not all so introduce some kind of vendor management office that focuses on total cost of ownership for an information technology function that that is a discreet information technology function that is delivered per user per month, and the other thing is probably more important, and that it is some kind of baseline of performance because you will get the SMEs lining up to show that they can do that job but they will never get a guernsey unless there is some baseline that we can compare ourselves to.

CHAIR: How do you best do that?

Mr MILLER: In my submission I suggested—actually, let me go beyond my submission and get into some interesting ground, and that is my suggestion would be to empower you CFOs—not your CIOs but your CFOs—and your auditors to measure the benefits of projects and, for that matter, any discreet spending in the business as usual space. You will be starting to focus, you will disaggregate or breakdown the discreet cost of information technology function delivered for a user in a government department. Once you have a clarity and that intimacy and knowledge, you are then in a better position as a buyer to stop doing it yourself internally within an information technology department, but getting it done for you or buying a service from the catalogue of services. So, in summary, the total cost of ownership would be one focus; measuring and getting a baseline around performance, so you get a discreet information technology function for a discreet cost for a user per month and an outcome that stands alone and can be measured independently.

CHAIR: Does anyone else want to say anything further on the impact of the information communications technology strategy on SMEs?

Mr LUMBWE: With the tendering process—and Mr Miller and Ms Choy mentioned innovation—the Government spends a significant amount of money on consultants, and for good reason in many instances, I am sure. With the issue with that, in many instances, is the agencies do not know what they want. They do not know what is out there. So you have an organisation like that with web development, and they might have some fantastic creative ideas and at the forefront of the marketing and what people are expecting and how best to use Google ad words and all the other stuff that goes on in the web, for example. Yet, they cannot put forward all proffer those ideas because they are in a tender situation and they have intellectual property I do not believe the consultants are in a position to tender that work out.

So there is a reluctance, I see, as many organisations to tender work to the government department because there are some unknowns. The specifications are poor. There is no relationship there. If we take our own examples of how we purchase stuff—why do you purchase the car you do or why do you purchase the suits or trousers or dresses and shoes? Because the last person gave me a really good service and they have a really good product, and so on. You mentioned the notion of commoditisation, and a lot of that is, but there are other services that sit in behind that do not get recognised by the various agencies or departments that are wanting to get that work. If they worked more collaboratively with some of the contractors and some of the vendors, they would get a better outcome.

CHAIR: I am picking up a theme on the desirability to encourage or promote more innovation. My observation is the fact that the new strategy recognises intellectual property or the software development, for example, being owned by the technology supplier rather than the Government, is something that might encourage innovation to be put up or explored more so than it might otherwise historically have been when the Government tended to own the intellectual property. I invite any comment there but also in the innovation space what the impact of legacy systems might be on innovation and perhaps in a restrictive way most likely but if there is any upside hanging on to the legacy systems and innovation I would be interested in hearing that too. So, focusing on innovation, ownership of intellectual property and impact of legacy systems, can I throw that out there for comment or contribution?

Mr JAY: I just want to add to Mr Miller's point about measuring. I think, with regard to legacy systems, measuring the cost that is currently there is important. For instance, I think the New Zealand Government spends \$200 million or \$400 million—it has a cost on how much it spends on public websites for the whole of the New Zealand Government the United Kingdom has done a similar audit. We have no idea what we spend in New South Wales. When we go into a Web job for an agency we are not able to find out how much

they were spending before because I will not tell us, and no-one is forcing them to tell because it might be potentially embarrassing.

CHAIR: They might not even know?

Mr JAY: I am sure they know; someone knows—just to emphasise the measurement point.

Mr MILLER: If I gave you three takeaways—there is the do it yourself, do it with you or do it for you models you mentioned largely the do it yourself information technology running everything is a model we are all really familiar with. We have tried outsourcing, which is closer to the do it with you model that is a bit like getting someone to mow your lawns but using your mower and petrol. Today we have a huge investment in the do it with you model. We have a contract is, suppliers, de facto employees, but we call contractors, using government desks, and if you walked footpaths of any government department you cannot tell whether somebody is an employee or a contractor, they are all there just doing a job so, the do it with you model is very entrenched.

Because it is so entrenched, particularly around supporting legacy systems, it is hard to unravel the multitude of contracts and, if you like, imbedded culture that exists. So, the challenge is how to move to do it for you model. That is where you hold the accountability for the delivery and the service discreetly in the supplier's hands. So, your focus shifts. I have already suggested what my recommendation would be around the CFO, but the CIO cannot keep up. Today, we all know that there is an army of business users out there that are frustrated by the inability to get their job done. There is pressure on them from the stakeholder, the citizen—I am stating the obvious here. The driver for the CIO is maintaining a business as usual budget. So, the incentive is to spend that wisely and most of that is dedicated towards a legacy system. So, what I mentioned in my submission is that in a way information technology is trapped in a status quo.

How do you shift from that environment to, let us say, do it for you model? It is about disaggregating the legacy solution. Without taking on any particular accounting system—there is a big one called SAP, for instance, that is a fully integrated capability, but if you look at today's model, and company called Xero, you can go to their website and look at all the add-ons that are already interfacing into Xero. I mention that specifically. The old model is the SAP tightly integrated legacy solution, and the new world cloud deployment, as a model, is a Xero. So, how do you move from one State to another? You do not throw the baby out with the bathwater. You do not suddenly turn of one big system. You look at the data elements and disaggregate the components of function that are supplied by some of these large systems.

CHAIR: We had a number of parties give evidence this morning. Two cited SAP projects. One was more of a traditional model, which was developed an asset owned by government; the other was more software as a service model. Perhaps I am suggesting that necessarily seeing SAP as an old model might be old thinking, I do not know?

Mr MILLER: It is interesting how the reinvention of applications to be more responsive to the end user's requirements and back to Randall's comments, it is getting closer to that faster deployment. You pick from a catalogue of business function, if you like, and can deploy that. The systemic issue today is there is no incentive really for the current information technology shop to move away from its legacy investments—in fact, they are being encouraged to continue to maintain it. The real challenge is to drive that more brokerage, in other words, the CEO becoming more of a broker of services rather than try to do everything themselves.

CHAIR: And maintaining an empire of sorts which the CFO might cut through, taking a longer-term financial horizon?

Mr MILLER: Definitely. And Vivek Kundra, I think I have said, more than adequately addressed that internationally.

CHAIR: The same question, around innovation and some of those aspects I have referred to?

Mr LUMBEWE: One of the things I have noticed with private organisations I have dealt with is where the CIO report directly to the CEO. I have always found that information technology is better driven when that management structure is in place. Where you have a CIO reporting to the CFO there is always a conflict. When you think about how businesses have been transformed over the last decade, information technology, if that was not bear the CFO would not have a job. So, I see a lot of this discussion relating around how the management

structure is situated as to who is then going to drive the technologies to improve the business. Along with that would be the processes and so on that go with the procurement of some of these services.

Mr BART BASSETT: Just a follow-on question from comments made about the cloud. The chair has talked about some presentations given this morning. One organisation felt that the security now being offered by the service provision and to the cloud is good, and another presenter was still a little bit concerned about the security of that at this stage but felt it may improve over the next 12 or 18 months, but something they could not confidently look at in regard to storage of data. I know Mr Miller has been involved in cloud over the years and he has said that today as well. Could you all make a comment about what your feelings are out there in the marketplace with security around that storage of data?

Mr MILLER: A very interesting question, Mr Bassett. The security elements—again it all depends from which paradigm or where someone sits on the subject. If I drew an analogy, looking at a banking service it would be like saying, "My money is safer under the mattress than it is in a bank". Many IT shops fervently believe that they have the most secure environments and they are comparing themselves to a data centre which is to the standards that Australia has built its data centres. It would be like comparing your mattress to the bunker grade environment.

So there is, I think, misinformation around security when it comes to data centres. In fact, what has confused it, in my view, is this discussion around public versus private cloud. If you looked at the security paradigm on an axis—and I apologise, I do not have a diagram to describe this—you actually have a public cloud, and, if you think about it, it is more akin to, let us say, your Google, which is perfectly reasonable for, let us say, non-classified data. Then you have, let us say, moving along to a more secure state, the in-house IT shop or government department that has put a lot of time and effort into building up their firewalls and so on. But then you move further to an even more secure environment with the economies of scale, much better levels of expertise and knowledge and rigour, and that would be the secure data centre, as I call it, where the private cloud deployment of software as a service is available.

I have tried to summarise it really simply, that going from the Google model to the in-house model to the secure data centre model is really where the discussion of security should lie, and if we are going to move it from our in-house environment, we either move it into something that is less secure—such as a public cloud model—or we move it into one of our accredited government-endorsed secure data centres, and it is from that environment that we can confidently leave our data within Australia and the sovereignty of that data is then therefore maintained.

I go one stage further and say on premises security should be viewed either the same as or perhaps even less than the secure data centre. On-premises, secure data centre—we should be indifferent; for us as users sitting behind our computers behind our desks which should be indifferent to those two models, and over time I think it will be the secure data centre that will just logically win out through economies of scale.

Mr RAYMENT: I first of all would like to agree almost entirely with what Mr Miller just said. I would also like to add to that that two of Ethan Group's largest clients—the Department of Foreign Affairs and Trade and the Department of Defence—both of whom, prior to the Dell acquisition of Wyse were one of our largest clients with respect to selling thin clients and they both successfully adapted the use of secure offsite locations in creating a secure network for their cloud services and they continue to buy from Wyse, from Dell themselves, but also they are now interested in various other suppliers such as Samsung and HP, who are the largest suppliers of thin clients globally. My point is that it is entirely possible to be under cloud and be secure, and the Federal Government has proved this.

Mr LUMBEWE: We do a lot of data centres, and not just the small agencies but the big ones—anything up to a couple of hundred cabinets, so some of the bigger data centres within Sydney—and Anthony is correct inasmuch as security is an issue with these data centres as bunkers. There are two types of security I suspect you are talking about: one I would think is logical, which is access into the various softwares, whether it is coming out of a bunker or whether it is coming out of the backyard or your garage with a PC sitting in there. So the logical security needs to be applied and then the physical security.

Witness the circumstance that Virgin and Jetstar experienced just the other week when there was a glitch in one of the data centres and it dragged the whole system down for about 3½ hours and left all these passengers stranded. In a proper data centre or a proper data centre environment that data centre would be completely replicated: you could switch that off and it would not matter; they would not even know. That is the

way it is supposed to work. Of the many financial institutions, their data centres that we do, you can switch those off and they would not meet a glitch; they would not miss a trade, they would not have an outage; the most it would cause is a bit of a concern, but at least they would maintain their operation.

So there are two types of security that need to be considered, and I guess from the physical side of things with the announcement of the Metronode arrangements that that is important, and I am not sure what the situation is there with that particular entity in terms of what has been agreed to, but I would be very concerned if the Government did not have a good backup strategy.

Mr JAY: I would just like to add that—again, what Mr Miller said was absolutely right—going back to the UK G-Cloud, I think some of the things they have added in terms of security seem quite fair and reasonable; they have said that you have to evaluate as a department, from an agency point of view, what the risk is and they have different levels of risk. So not all applications and all things you are doing require huge amounts of security. If you did that then you are pricing everything sky high.

What they do is if you are doing, say, a small agency website, maybe it is not the biggest risk; if you are doing a very important government website then the provider that you pick should be security accredited, and then using international standards for accreditation of the providers and the data centres and having a framework that everyone works with that is the same framework across the board, again if it is on a tender-by-tender basis then people get different requirements; if it is a framework that everyone sees and understands and they can say, "Okay, it is worth us as an organisation going and getting that accreditation", I think that is a fair way of doing things.

Mr BART BASSETT: Some of you have answered this question in part, so I will just give you an opportunity to maybe expand on it. How can SMEs get the prospective buyer's attention with limited resources and small market presence?

Ms CHOY: I think this is a very relevant question for SMEs because one of the biggest challenges is to get into the sales radar of an agency. When we got onto the 2020 panel New South Wales procurement said "You must go out there and engage with the agencies and market yourself", and we did try that with several strategies, but agencies do not want to talk to vendors, basically; so it is really hard to get their attention. What we think could be helpful with the new services catalogue is maybe to have some kind of government-approved expo where whoever wants to participate at a low cost to be in an expo the agencies, the buyers, can come and speak to all the vendors and find out what their services are and even discuss what their requirements are as well. I think that would be a good way to get exposure.

Just having the catalogue modelled on, as we said before, the UK CloudStore would be terrific, where you have got all the pricing and you encourage the agencies to go to the catalogue to look for vendors. Ratings and reviews, I think, with the catalogue is very important. So once an agency uses your service there should be a means by which you can rate that vendor's services one to 10 or whatever—similar to what you will find on the Amazon Bookstore and things like that, or eBay.

CHAIR: I understand the Federal system is more of a star-rating system and that works well. I am getting a nod from Mr Rayment. Are people familiar with that system?

Mr MILLER: Data centre as a service multiuser list has only just been released by the Department of Finance and Deregulation through the Australian Government Information Management Office. This is excellent work done by the Federal Government and it does borrow somewhat from the UK's experience. There is a \$80,000 limit, however, on this multiuser list; so, in a way—to answer the question—SMEs have still got the challenge once they get past, let us say, a pilot or a try-before-you-buy kind of engagement; there is still the pressure of a full-blown RFT process that awaits the SME.

Also, let us keep in mind that SMEs do not have the deep pockets and the ability to sustain the capability for lengthy periods of time, and we all know that the purchasing processes can be drawn out. So the biggest risk to SMEs is that it is just too hard and, therefore, seeding money from government into SMEs does not occur and the SMEs do not grow and get nurtured to actually work in cooperation with some of the larger systems integrators. So it is really a catch 22 situation. I am sure you are aware of this particular challenge. How do we make sure that we get this addressed? I think the ratings system, trade shows, and compensation perhaps to make it a level playing field for the SMEs to be able to stand and provide their specialist services and capability and then let the buyer make the decisions and if the products are any good then they will be engaged.

CHAIR: You said compensation. For unsuccessful tenderers or—

Mr MILLER: No, I meant from a subsidy perspective. The subsidy, let us say, for a trade show may be X thousands of dollars; the Government could perhaps, just picking up on Ms Choy's point—provide, let us say, a reduced or subsidised facility.

CHAIR: Does anyone else want to respond to Mr Bassett's question?

Mr RAYMENT: I would just like to touch on what Anthony just said. I completely and full-heartedly agree that the \$80,000 limit with respect to the Australian Government Information Management Office poses an additional challenge. Just going back to the original question as to how might small and medium-sized enterprises get prospective buyers' attention, we would ask that you include us on the panels that are typically reserved for larger vendors. I can name two right now: the ITS 2007 panel, which relates to the supply of desktops, laptops and servers, and the ITS 2846, which conserved itself to the virtualisation technologies. What we are talking about is that the small and medium-sized enterprises that are resellers are, effectively, professional consumers. So we are uniquely suited to convincing vendors the need to lower their prices. We are aware of vendors' budget cycles when they are looking to sell en masse for a particular product and, on top of that, good resellers develop relationships with vendors that they do not have with each other. So we are in the best position to convince them of the need to lower their prices lest they lose out on offers that they know nothing about.

The Government can, effectively, maximise the benefit that SMEs can provide so long as they ensure that price is not dictated solely by the particulars of demand but also of supply as well. What is more, we are vendor agnostics, resellers are vendor agnostic: we do not push a particular product or a product line; rather, we source and recommend the products that we believe to be the best possible products to suit the situation, and in this the interests of the client—which, in this case, would be the New South Wales public sector—coincide entirely with our interests. Projects can put to tender that require a certain specification, rather than a particular model. The question you have to ask here is—if you consider the price negotiation administration of the supply chain is a service in and of itself—can government really do it better than the private sector? I am not saying I know the answer to that. We might not be able to, but it is worth investigating.

CHAIR: Are you suggesting that your value proposition is, taking one of the two areas you mentioned, computers, laptops and the like, are you suggesting that you can potentially supply the same product at a lower cost as a reseller, or are you saying that the overall cost, which includes the procurement process and ancillary functions around the process, as opposed to the actual product, should be looked at in a wholistic way and that you can do that cheaper—or both?

Mr RAYMENT: That is a valid question and I think that "both" is a valid answer. Vendors are not obliged to disclose the particulars of their supply chain; they do not have to tell end users when they have got an abundance of stock that they are looking to get rid of or when they are looking to flood the market with a particular product. If you ask a person to give you their best possible price, as opposed to telling him or compelling him to lower it, you will often find a very different result. The reason why I would advocate the use of intermediaries is that we have relationships with vendors; they do not talk to each other about what their offers are going to be. While we do not disclose things, per se, we can indicate to various vendors that their price is not good enough for this particular offer or that they may need to lower it in particular areas. The majority of the margin on any particular product comes from the vendor, not the reseller. On average, the reseller's margins are in single digits. If we do a job correctly, we lower the price of goods by a greater extent than the margins we exact.

You also have to consider that you have to take a wholistic view of this, in the sense that there is more to procurement than just the end price. You have to consider how sure you are that the product is going to arrive on time, or that it is going to arrive at all and that small orders, as well as big ones, are going to be looked after. On top of that, you have got things like returns and units that are dead on arrival and warranty claims need to be properly handled. If you do not employ a reseller, you are effectively asking government departments to deal with that with every different vendor you have worked with. However, if you employ a reseller to handle that aspect of your business, all you have to do is rely on one person who is held entirely accountable.

I would also make the case that small and medium-sized enterprises [SMEs], as resellers, can do things that some large vendors cannot. So, for instance, Ethan Group is a provider for Aircservices Australia and in

managing their ICT needs and requirements, we keep a buffer stock of products to avoid stock unavailability and we would absorb the price increases to maintain price stability. On top of that, we log warranty calls on their behalf, with multiple vendors. We do this because it takes less time to get the requests processed when a central administrator, familiar with warranty protocols, takes charge.

Currently, the Australian dollar is artificially high, thanks to the mining boom and as a result, large multinationals can take advantage of this to appear as though they have lowered labour costs, especially with respect to cloud networking. Considering the immediate future of the direction of ICT globally, we are seeing a transition from purely hardware-based products to cloud services. That is, information stored in remote service that can be accessed by dumb clients. By the way, I use that as a term of art, rather than a term of abuse. So previously pure product sales, that is, computers bought from Dell, Hewlett Packard [HP] or Toshiba, are in the process of being supplanted by secure cloud services.

Dumb clients are bought in bulk and packaged as cloud-based solutions and consequently the costs of maintaining and developing these cloud-based solutions is taking a more prominent role and wages become a more significant component. Due to our high dollar in comparison with, say, the American dollar, these large multinationals, such as Dell or HP, can take advantage of this to appear as if they have lower labour costs than they actually do. It is a short-term aberration in our currency which effectively decimates the playing field. It is an area in which Australian SMEs are distinctly qualified to step in and provide a lot of these services, especially considering that the producer no longer has to be the maintainer of such goods.

Denying us the opportunity in this regard firstly, eliminates any advantage that can be obtained from market competition and in doing so raises the propensity for inflated prices; secondly, it does the New South Wales economy a disservice. If you followed the American election, you saw that both candidates pledged to give tax credits to companies that employed Americans. I am by no means asking or recommending that we do something similar. All I would implore you to do is to consider creating a level playing field for Australian companies, capable of providing quality and cost-effective solutions, to see that they get a fair chance.

Mr JAY: I would like to add a couple of points to that. One is about the resellers. What we do is, we are effectively a reseller for open source software. Open source software is one of those things that does not do very well on those particular panels we have just talked about. For instance, if there is a content management system [CMS] panel and an open source, they will tend to want to get the vendors in, so it will be Microsoft or Netcap or whatever company. The organisation that we represent is an open source organisation, a non-profit organisation. It does not have reps or the ability to come and represent itself; it has only us, resellers and the different people who contribute to it.

It is a very different style of organisation. Those are equally valid pieces of software that will not get represented in those kinds of panels where you are looking for software and you are looking only at the vendors. This is where the services approach works well. Open source works well as a service and that is effectively what we do—we customise and produce that service. We are not sure how much business goes through the CMS panel any more. Hopefully it is all going through the 20/20 panel but we believe it did not work, in terms of providing the right solution.

The second point was about outsourcing and the idea of giving preferential treatment to local companies. One of the problems we have seen with some of the deals is that a bigger company can come in and, because of their size, they can present a very good tender response but they then outsource that overseas. I don't know how you solve that problem. I know, for instance, that the United Kingdom is looking at making the bigger integrators use local SMEs and auditing them. I do not know how effective that will be. It is hard to compete with big companies that have a big reputation and end up using providers who are not necessarily as good and who are not locals.

Mr BART BASSETT: Just a general question and I would like a general comment. The Auditor-General has made comments about the ongoing contracts for the maintenance of departments' IT systems and that, because of the complication of changing over, those ongoing management contracts tend to just get rolled over with not a great deal of investigation as to the benefits to the department. Would anyone like to make a general comment about that? Do you think it is changing? Do you think it is systemic? And what do you think could be done to make a change in that regard?

Mr MILLER: I think the essence of this is around focussing on what it is that the business areas of government departments want to achieve, rather than getting caught up in how to deliver it. If I could flesh that

out a little bit. What you want to do and why you want to do it is focussing on your outcomes, focussing on the deliverables or outputs and then making sure that you are realising the benefits to achieve your political requirements and serve the citizen. When you get caught up in doing it yourself or even doing it with a supplier and you do not go into the do-it-for-you model, in other words, buying services, the business buyer or the sponsor runs the risk of getting caught up in how it should be delivered. The evidence across all jurisdictions is that projects start off so well and they are so well articulated around the "what it is" that supports the business case but when it gets to the delivery area the "how" becomes a little politicised and there tends to be additional moneys and additional spending put aside to, if you like, get caught up in that "how".

What I am suggesting is that the future should be more about focussing on what it is that the Government wants to do and less about trying to get caught up in how to deliver it. Quite frankly, buy a service. Do not be forced to eat in the one office cafeteria for lunch every day, where they do not have a menu, and they do not give you a time for lunch and you pay \$20 for a meat pie. Open up that capability, focus on what you want and then select the service. That, I think, is the answer.

Mr LUMBWE: I think there will be some services and maintenance offerings where local knowledge of the systems is very important. And, of course, how do you put a value on that? Whether that is, for example, your voice override PC system or your PABX or a piece of software you have already configured for the client and you have an intimate knowledge of. I take the point that there is perhaps no real return on investment [ROI], there is no real investigation on what the ROI is for the spend on the maintenance. Perhaps it is something that could be considered here and I know, certainly from the cabling side of the business and the maintenance of that, there is not a lot of maintenance that has to be done.

The maintenance for cabling is very little but I know when we do work on the PABX side of things, there is a cost which seems inordinately high. However, I think it is hard to put a value on the fact that you will have a person available 24/7 to support those PABXs or voice systems or video conferencing systems, for example and, of course, the local knowledge surrounding that. There is a whole bunch of things or management software platforms that have been put in place now to manage infrastructure, to get more knowledge of the systems that are in place in software tools. And I think that then removes some of the intellectual property out of a vendor's head or out of the head of a particular person within the agency and puts it into a system. That is probably a good move for all organisations and it fits in with quite a few management strategies.

Mr JAY: I am not sure it completely answers your question, but one of the jobs we have done was the Victorian State Emergency Services [SES] and we went in with a partner, who is a hosting partner. They are a lot bigger than we are. It came down to who was going to be the primary contract holder. The SES asked us to be there, as the smaller one. Often it would be the other way around, one would feel more comfortable having one's maintenance and support covered by the big company in the picture. This goes back to the point I made earlier, that you do not always get the best support out of the large company.

That was our experience in that regard, that the project manager in charge said that he thought that we had a lot more skin in the game, a lot more to risk. We were going to make sure this project worked well and it did end up being the case. There were a lot of discussions and we were fighting for our client to get the best results out of that project and the project was successful because of that. The Government could learn a lot by picking smaller vendors. Sometimes you are going to get a better result and less risk, rather than going for the big vendors who are much bigger than the Government and can care less, in some instances.

Dr GEOFF LEE: I start by saying I am a supporter of SMEs tendering to the Government. I have been in your position for many years, so I understand. But sitting on this side, I say—and I know you know it—that the problem for government is the history and the transparency of all the costs and the total cost. As we know, SMEs probably provide the service of the subcontractors down the line anyway—we realise that—but for the taxpayer it is about the most cost-effective thing. It is hard to put in a document: Are you going to do a little bit extra on the side? And once you build up those relationships, it is possible. I believe we are stuck in a situation—and this is not a comment from the Committee but from me.

How do we allow our bureaucrats to transition themselves from being risk adverse? They get a kick up the bum if they do something and fail. Nobody got in trouble for buying an IBM so we go with the big company and they will do it and if something happens we go, "Well, SAP did it. It's not our fault". A small company can go bankrupt and not provide those levels, and we know that sometimes the levels of government contracts are onerous, to say the least. I have a couple of questions for Mr Lambewe. What are the barriers that you face? What can we do as legislators to resolve the structural problems of having SMEs? Do you have two or three

points? It is all right to say that we should have an expo and we should tell everybody, but the fact is that it is hard to tell people. There are 326,000 people in the public service in New South Wales and they are a diverse group of buyers. What can we do as legislators to encourage that? What are those structural barriers?

Mr LUMBEWE: I have half a dozen or so things. They are points that I have as suggestions, and I am happy to table that. I think a preferred contractor list, particularly for our part of the industry, would assist because a contractor not only knows the product and has the experience that is required but they know the sites. At the moment you will get another contractor in, for example, to do some cabling work in here and if it is someone who has never been in here before it can be quite onerous.

Dr GEOFF LEE: I understand preferred contractors—I was one of them—and we all struggle to get on a preferred contractors list. If the cost is \$1,000 it is up to the individual contractor to worry about the peculiarities or the nuances of the site and wear those costs.

Mr LUMBEWE: I understand that. I guess every now and again you have to have a bit of a price check to see whether they are giving you the right price, but there are not many contractors who would prostitute themselves because you only ever get one customer to, excuse the expression, screw a client over. If they are prepared to lose the business that way, it is not a nice way to go. You need organisations that have local knowledge and experience. But moreover, when you think about products such as ours, 55 per cent, 60 per cent of a contract will be related to hardware, that will be cabling components, if you like, and the other 40 per cent, 45 per cent will be the labour component.

So to me it is important, if you are going to choose someone you need, first, someone who has full-time staff, not subcontractors because there is no ownership. It was mentioned a little earlier about outsourcing, whether it is outsourcing overseas, for example, which is easy to do with software. Whereas the likes of what we do, we have full-time staff and we can see the difference in what we do and how we do things compared to others who will use part-time and subcontract staff. There is not that level of ownership. There is certainly not the level of workmanship and commitment.

I see agencies discouraged from having discussions with vendors, afraid that might overstep the boundaries of probity. I think Ms Choy mentioned that earlier as well. Not everyone knows everything. It would do well for IT personnel within the agencies to go out there and explore, and if that is by way of exhibitions and so on, I think that is a good idea. As I said, I am happy to table this. I think having not just a preferred contractor list but also a preferred vendor list—whether that is half a dozen vendors; whether it is the Samsung, the Toshiba, the HP or whoever supplied the PC or whether it is the various cabling system suppliers—and then agree with contractors on a cost-plus model. That way the Government can get economies of scale.

If they know that your project is worth \$25 million a year for cabling work, for example, they will give you a hell of a lot better price than what they will if it is just a \$200,000 project. You never seek to take advantage of those economies of scale with the cabling system vendors. You may have three or four different vendors, all on an approved list, but at least get a 12-monthly update on prices and you can then work it out with whoever the contract is to have a cost-plus model. We do that now for private enterprise.

CHAIR: We would love you to table that document.

Dr GEOFF LEE: I will be brief. I would say to everybody to table those brief things, that we can put those in our reports. I know some of you have done that already but those structural barriers. Mr Rayment mentioned about not being part of the decision making process. That is a huge issue. If you are not around a round table talking about how we will select vendors or suppliers, you know who gets cut out at the end of the day. Mr Rayment, you do a lot of work with the Federal Government. What are a couple of things they do particularly well that we can learn from them?

Mr RAYMENT: They have a centralised agency by which they manage procurement—AGIMO and the Department of Finance and Services in particular. They charge agencies a central admissions fee, around 6 per cent per order for items that are on the whole-of-government agreement and it works extremely well. It ensures that things are put out to tender appropriately and correctly and uniformly. On top of that they also allow for a greater economy of scale by mixing orders together and then separating them after they have been delivered. They also have a great way of keeping track of orders. It is extremely useful in this respect.

On top of that they also have great relationships with the suppliers on those panels. They see the utility in utilising resellers. They have a very open decision-making process. They consult and conform and inform and ask directions from those who are on the panel. By the way, that includes suppliers, vendors and resellers who have managed to make some sort of accord. I think it is a great way. It is something great that the State Government can adopt, a centralised agency, and also the fact that they have included more than just vendors and large multinational corporations on their panels.

CHAIR: I will ask each of you to make closing comments. I will touch on a couple of areas that perhaps we were going to explore a little more and if you choose in your closing comments to touch on those, then so be it. It has been mentioned that SMEs have been hesitant on occasion to bid in response to tenders, perceiving that they will not be selected, and the whole issue of how access to SME products and services might be easier to reach. Also, in a number of submissions that we received there is reference to the preferred contractor list, which has been touched on today in the review of contract, a current 2020 contract and how that might impact on SMEs. Otherwise we invite you to make any other comments or any aspects of your submissions that you particularly want to highlight in your closing submissions.

Ms CHOY: I think to break the habit of government awarding projects to the IBMs of the world, the Government needs to engage good business analysts to break down large ICT projects into smaller components of smaller value. That will allow the procurement of agile innovative SMEs such as ourselves. We are pretty confident you will get a much better outcome by doing that. Agencies tend to go for the large integrators to implement major projects. To sum up, I am positive about the new ICT strategy in terms of the services catalogue. I hope the Government will move forward with that.

CHAIR: We have got that message loud and clear.

Mr JAY: I would like to add a little more to that. The best projects that we have been involved with had project managers who moved across organisations in different agencies if agencies had available people who knew how to procure a website and done so many, many times. They sell a particular product, they would ask the right questions and they would create a very focused tender and it would make it much more inviting for people to respond to. If you have a very focused tender that knows what it is talking about, what you tend to get instead is you get these big kitchen sink tenders where they have asked for everything under the sun. Anyone who is looking out there will go, "They don't need half those things but if I don't have it I'm not even going to get a look in." So they do not bother responding to it.

The Federal Government seems to be centralising that. That seems like a way of doing that. You could have those central skills in a central place and those people become experts. On the other hand, those bigger companies tend to have experts who move from project to project to win tenders, and they are very good at it and they are good at writing the tenders in such a way that it will result in lots of variations down the track. It may seem good on paper but it does not in the end. Small companies are not so good.

Mr LUMBWE: I go along with what Ms Choy mentioned. She said that SMEs are more agile. Without a doubt they are. The involvement of some of the larger organisations, some of the larger multinationals in the IT world—the larger the organisation, the larger the margins—they will subcontract the work out and it is absolutely nothing for them to put on 30 per cent or 40 per cent. They will not even get out of bed for 30 per cent and they will put these large margins on it. I think the point Ms Choy made is that when you are dealing directly with the people who are doing the work it is much more cost effective.

Mr RAYMENT: With respect to the 2020 contracts, the 2020 panel, the contract is broad and it is a flexible framework for departments. The problem here is that not enough departments use it. We would advocate and recommend the development of a framework that includes trusted and preferred SMEs and vendors on the same panel. We would encourage the Government to, if not mandate, then strongly encourage departments to use it. At the moment they were only two projects this year that were even slightly applicable to a rather robust company. One was the VOIP retainer assessment and the other was the energy efficiency appliance calculator. There was no real integration procurement or migration work, and it is a shame. It is a wasted opportunity because we would like to be able to work with government hand in hand and we are capable of doing so. Let the best tender win.

Mr MILLER: I have only four points. Firstly, empower the CFO, the project management office and the auditors to measure benefits of the project as the projects move into business as usual and become part of the furniture and on an ongoing bases so that you can be assured that your benefits of all the money and effort met

the original business case and the organisation objectives right through to project land into business as usual. That is point one. Point two is encourage CIOs to be brokers of services. Move away from do-it-yourself and move beyond the do-it-with-you into the do-it-for-you model. That would drive a whole bunch of incentives that we have talked about today. Point three is establish a vendor management office which has the characteristics of procurement but goes further by focussing on service level agreements for these services that are being provided. In fact performance of those service levels is the key to the judgement of whether you are getting bang for your buck and value for money.

Point four is that as we move from on-premises infrastructure shops to secure data centres, fantastic and the New South Wales Government is well advanced in that space and that is a great start. It is not the end. We are on a journey and I would encourage the thinking around not just making the move to a secure data centre but to move up the value chain from infrastructure as a service through to software as a service and then ultimately to business as a service. I would say that that term "business as a service" will be bandied around more and more.

CHAIR: Mr Miller, Mr Lumbewe, Mr Rayment, Ms Choy and Mr Jay, you have all been illuminating and generous in sharing your thoughts and your time and the Committee thanks you for that. We may wish to send you some additional questions in writing, the replies to which would also form part of your evidence and be made public. Can you indicate whether you would be happy to provide a written reply to any further questions?

Mr LUMBWEWE: Yes.

Mr RAYMENT: Yes.

Mr MILLER: Yes.

Ms CHOY: Yes.

Mr JAY: Yes.

CHAIR: Thank you for your affirmations. That concludes our questioning today. Mr Lumbewe, we will take the document as tabled.

Document tabled.

CHAIR: If there is anything else that anybody did not have the chance to say that they wish to highlight, we would be happy to take that as well. Thank you for appearing before the Committee. I wish you all the best with your respective enterprises.

(The witnesses withdrew)

MARGIE O'TARPEY, Chief Executive Officer, Australian Institute of Project Management,

CHRISTOPHER JOHN MANSFIELD, New South Wales Chapter President, Australian Institute of Project Management, and

MIKE EHWAZ KANO, New South Wales State Councillor, New South Wales Chapter, Australian Institute of Project Management, affirmed and examined:

DAVID HUDSON, National President, Australian Institute of Project Management, sworn and examined:

CHAIR: Thank you very much for attending the public hearing of the Public Accounts Committee into its inquiry into the procurement and management of ICT services in the New South Wales public sector. I draw your attention to the fact that the evidence is given under parliamentary privilege and that you are protected from legal or administrative action that might otherwise result in action in relation to any information you provide. I also note that any deliberate misleading of the Committee may constitute a contempt of Parliament and an offence under the Parliamentary Evidence Act 1901. Before we commence with more specific questions, would either Mr Hudson or Ms O'Tarpey like to make a brief opening statement?

Mr HUDSON: I would like to. I would just like to position the Australian Institute of Project Management [AIPM] for you and also give an overview of various things we may raise notwithstanding the questions you may ask. The Australian Institute of Project Management is the peak body for the profession of Project Management Australia. We represent over 10,000 members in Australia and we are now well and truly engaged internationally as part of the international community through our association with the International Project Management Association.

We do note—and I think it is worth knowing—that as a practice, our engagement internationally now tells us that the Australian community of practice engage at about twice the rate of our international peers. Certainly when we benchmark ourselves against larger organisations in the international framework the Australian participation rate of practitioners, comparing ourselves to the British, is twice as high and to the Germans is three times as high.

We have developed standards over a number of years across a range of areas and we would just like to make the point that they are very broadly based. The Australian Institute of Project Management is certainly focused on things above the practitioner level. Our engagement is in the space of what we would call enterprise project management. We would define that generically as three principal areas: governance and strategy, that is, the overall governance arrangements for project delivery overall and within a project, including the alignment of the project to strategic objectives—that is one. The second is the importance of best practice project delivery methods. The third general area is the importance of the development and sustainment of a human capital strategy within an organisation.

Now we would tie to that, in this particular instance because of your focus, as well the issue of market engagement. We certainly tie that in. Our view is we would probably talk to those four areas principally and like to address through questions or just through responses our views on issues in governance and our views on what we see as systemic problems in practice through practice standards. Certainly you would probably expect us to make a statement about our belief in and our request that parties embrace a competency-based approach to the development of project management capability, and we would certainly like to talk about how we would see project management practice standards fitting into the discussion on market engagement because we believe there is an important issue there and we have raised that separately with other government entities in Australia. Perhaps I will stop there and move to questions.

CHAIR: If you wanted to elaborate on any of those areas you have articulated or identified I am happy for you to do that now before we ask specific questions or would you rather do so partway through?

Mr HUDSON: Perhaps through questions if we follow through.

CHAIR: Thank you for outlining particularly the role of the Australian Institute of Project Management and who you represent. Could you give us more information about how you liaise specifically with the New South Wales Government?

Mr HUDSON: Certainly. I will make a few comments and I will ask Chris Mansfield for an engagement perspective. The Australian Institute of Project Management is a federated body, so we have a New South Wales chapter and the New South Wales chapter is the principal entity for engagement with the New South Wales Government. We have engaged over successive years, based out of Sydney, a one-day workshop program in project practice in government and we have certainly maintained effective engagement through that vehicle. Our best figures available at the moment suggest that between 150 and 200 of our active members would be members of the New South Wales public sector and that is a very active area for us, but perhaps Chris might like to elaborate on that.

Mr MANSFIELD: Certainly. As stated, the New South Wales chapter is part of a federated model. New South Wales is the largest chapter in the country, representing just over 25 per cent of the overall membership, so it is a significant-sized chapter. The way we engage is through monthly events as well as the establishment of special interest groups. David alluded to the fact that we host a one-day event. We hold what we call a government forum where we invite government participation. It is typically held in Sydney to ensure that we get maximum numbers from the government. This year in March the theme was "Doing More with Less", so we had about 250-odd people attend that particular forum, mainly from government, and that is one way that we engage with government.

The other way we engage is through actively looking at the sorts of topics that our members wish to discuss. A couple of our counsellors on the New South Wales chapter council are members of government agencies, so it is important that they have got the opportunity to indicate what the public sector is looking for with regards to events. We take that into consideration and then we host those events. We also host our project management achievement awards, which is an opportunity for organisations to submit, based on certain criteria, their projects for recognition by industry. That is typically sponsored through government. A number of government agencies have submitted their projects for award and recognition. We engage with our members that way.

Both the Office of State Revenue and the Sydney Harbour Foreshore Authority have also sought to have their organisations recognised for building their capability within project management through PMO accreditation, so we have been working with those organisations as well. We engage on a number of different levels. We establish special interest groups as well to encourage people to participate on a monthly basis on areas of interest. We tend to have good representation. Our events typically draw between 30 and 50 people to each of our events. Of course there is going to be a percentage of those people who are from the public sector.

Mr HUDSON: Can we say, talking about what we do now and into the future, we would be very happy to formalise this relationship and take any role this Committee would like to take in terms of ongoing engagement through structures as an expert witness to you.

CHAIR: Thank you for that offer. That is probably not appropriate in the context of our Committee structure and the nature of our inquiry, but that might be an offer that can be reiterated to a more permanent government entity. We will move from this inquiry and move on to another, albeit with some recommendations for the Government to consider and respond to. You are obviously well familiar with the New South Wales Government's ICT strategy, which has undergone quite a bit of work of late. What do you think the impact of that strategy will be on the project management?

Mr HUDSON: I might defer to Mr Kano on this briefly, but our view is some of the areas of the ICT strategy seem to deal directly, some a little indirectly, some perhaps not at all. But the areas of governance, the areas of contract engagement, the areas of skills development seem to be some fairly direct ones. I will defer to Mr Kano for this response.

Mr KANO: Procurement reform certainly has significant impacts on project managers. Traditionally some of procurement has been centralised in some agencies and IT and especially IT project procurement has sometimes been done by people with no experience in IT. Some organisations—and I have worked at Sydney Water in part of my career—have certainly separated IT procurement from generic procurement. That will certainly be an opportunity for an improvement across the New South Wales government area. A challenge for smaller agencies is whether you try to delineate procurement expertise separate from project expertise or whether you expect the same people to do both roles and have certain levels of competency in both of them. That is really an issue for those smaller agencies that currently try to do both.

I think that certainly may have an impact on what the commission sees as appropriate skill sets for project managers for smaller agencies. The other two areas for me coming from the strategy were around the ICT skills and innovation, more in terms of the actual ICT skills. You have talked about also the outsourcing of particular skill sets, which I think is certainly appropriate where you are looking at complex technical skills you may only need for a small period of time. You may not be able to offer that either to the individuals who do not wish to work in a permanent capacity or the dollars that you are able to offer will not be attractive. If you are looking at an SAP architect you are not going to be able to offer \$300,000 a year to make it attractive for them to work permanently in the public service. There are issues about how you procure certain skill sets, especially quite unique technical skill sets.

More broadly in the project management area, groups especially in the Department of Finance and Services now have invested quite heavily in competency-based assessment of their project managers and creating levels of competency. I would certainly support that and AIPM is the industry standard for Australia in terms of competency models. It is very easy to sit an exam and it is very easy to study for an exam and cram it all in and it all sort of exits the brain a few days later. It is very important to actually look at the competencies of someone, that they have demonstrated certain skill sets over a period of time and that has been fully assessed. Within AIPM there are things like the certified practicing program director and program manager components.

A significant portion of our membership is certified at those levels, so they have proven they have done those things against multiple criteria. They are subject to external assessment. That is actually in place in a couple of the larger departments of the New South Wales public sector. I think the ICT skills area is certainly an area where greater standardisation across the public sector is going to yield efficiencies. There are certainly also some opportunities in terms of the innovation as certain skill sets such as cloud expertise become very hot at the moment and in the years to come and social media also becomes a very hot skill. A lot of the existing workforce may not have those skill sets, so it is whether you procure it or you train people up.

The other area which Mr Hudson has also alluded to is governance. Increasingly globally many different consulting firms and peak bodies are flagging that governance is often the cause of failure of projects. When we look at people who sponsor projects, mostly they have a day job and their day job is not project delivery. Their whole focus might be to run a registry or a hospital or a police service or something within the education sector but we expect them to put on a hat as a project sponsor or as a member of a governance group and suddenly think in project language—thinking about benefits, schedules and project risk management. They often do that very badly.

A lot of different organisations globally are starting to highlight ways to support sponsors especially to be more skilled in their roles and to support them hopping between two hats. I am sure for you as well you have got multiple hats you have to wear every day. We all have different techniques to help us work out which hat we need to wear, when we need to wear it and what we need to do for it. When we look at ICT skills what I did not see within the document was actually a commitment to developing a governance set of skills, so what a sponsor should be demonstrating on top of what they might already have for business as usual management. I think there are some opportunities to further extend the ICT skills area in terms of the governance population.

CHAIR: The Auditor General's financial reports have reported on ICT projects that have gone over time and over budget. There are unfortunately quite a number of them. In relation to those projects I would be interested in your organisation's views as to what the main causes of failure in ICT project delivery might be, how you think particularly the New South Wales government agencies can improve management of ICT projects, and otherwise how those problems might be addressed.

Mr HUDSON: Certainly. I might say that our response is coloured a bit because I took a little largesse here because in an earlier role I actually led the Queensland Government's procurement of its payroll and human resources system replacement through the late 1990s. That excludes the issue of Queensland Health, which was done separately, and I think you would regard that as a study in its own right.

CHAIR: Disclaimer noted.

Mr HUDSON: Except for Queensland Health and Queensland Education that was the movement of every other agency through the Y2K barrier in that period across into a new framework. That was a very interesting role for me. The things we would say to this are that this is an extremely complex area. In our communication, we do publish these things, about why mega projects fail, Ed Merrow, who runs an entity called the Independent Project Analyst, talks about these things. He massively markets his products in here but he is a

very smart guy. It is hugely complex and I think we need to move away from the view that we just take the project team out and shoot them every time because they are the usual suspects. It goes deeper and Mr Kano has alluded to a number of them.

If we address the areas perhaps coming back again systematically and look at governance and practice and then perhaps the market, from a governance perspective there are virtually no project sponsor skills. Mr Kano has addressed this. We tear our hair out at this particular thing. Even when we address entities and suggest that they should give their sponsors education, the classic argument is they are too busy. Of course they are too busy. They are running around putting out the bushfires that they created through their poor sponsorship skills and competency. Yet this has been studied quite seriously across the world and there is no reason why we cannot develop a competence base for project sponsors. Frankly it would take something like, if they were really good listeners, about a half a day or a couple of breakfast sessions to bring them up to speed.

Another governance area covering particularly the areas addressed in your strategy and value for money, Australia will shortly have—perhaps a plug for AIPM—next year the first competence standard in portfolio management, so addressing specifically this area of governance and project selection. We will be enabling that. We would certainly love to see engagement widely across governments to validate the fact that the standards that we spent three years developing will add value. But again the absence to date of formal competencies in the area of portfolio management I think has hindered us. We have had for over a decade standards in project directorship, operational project directorship, project management and project practitioners, so they come in there. I think engagement in the area of organisational project management maturity, that is a term that is now well referenced, there is a lot of literature on this topic, and we would see that largely as a deficiency in overall capability across, as I said before, governance, project delivery and human capital. They are particularly the missing areas.

In the area of delivery and addressing an aspect that has been raised several times in your studies is, starting from the beginning, requirements. Why are requirements not addressed? Partly because as a practice we are again tearing our hair out getting people to understand that requirements management is now a new discipline and it sits on top of scope management. Most practitioners can give you the buzzword "scope management", but it is a new practice and it is a corollary practice to scope management. We would love to see the discipline of requirements management—that is, how it is defined, the right models for definition and how requirements themselves are managed across the project lifecycle—as a corollary to the scope, which is the work that is done within the project. That would be fabulous.

Another issue is lack of realism. Through perhaps coming back to the software gap in the software projects, seeing a more realistic assessment of the gap that would lead to better time and cost expectations in the project. And it may be stereotyping a little, but moving away from the common perception that we simply tweak the time and cost parameters in a business case to make the business case palatable. We certainly need to move to a culture that is a lot more open and fundamentally framed around issues like the gap in the software. If I could go back to my own experiences, understanding the complexity of government models in many ways, and this is not a criticism in any way, but we fully understand that government business models, government business rules, even a payroll system that has multiple shift options, multiple salary levels, all sorts of problems, inherently make even the implementation of good best practice in international software very difficult and leads perhaps in some cases to an underestimation of the gap.

If I can use the Queensland experience, the principle was that we would move to a situation where we adopted international best practice as the basis for the software implementation. But we moved away from that before we got too far down the track. In the market engagement, and this is similar to other advice we have given, there needs to be two factors. Firstly, Mr Kano has alluded to competency standards. We would suggest that a competency-based skill base model is far preferable to a knowledge based or examination based. That could be provided. But that competency has to sit within and without. Our suggestion would be the government has to demand that service providers are fronting up their project practitioners as certified, competent project managers but you cannot manage contractors without the existing skills internally as well. Government has to realise that it has to retain parallel skills in order to manage that. Perhaps if we leave it there to that question. They are some of the key points.

CHAIR: The Auditor-General also raised concerns about the impact of significant variations in project specifications. Some witnesses have suggested, dare I say it, that some of those might be even in-built in responses to tenders. How do you think that issue of significant variations in project specifications can be best addressed? We have heard some witnesses suggesting that they are in-built intentionally because that is how

they make their money. We have also heard another witness saying that they are very disappointed with staying within the box of a software application purchase, which reduces the scope for variations. They are some of the comments we have heard, but the Committee is interested in your perspective.

Mr KANO: I think a challenge in the public sector—and I now work in the Federal public sector—is the funding structures, which are often annualised. A challenge is that often for your project budget you have to go through some additional submission process: You do not just get a project budget to play with; you have got to go out there and get it. You normally have to compete with a myriad of other agencies and go through the hoops with a couple of central agencies to get those dollars. In that context, you are likely to present in a particular way and to various deadlines that are normally on an annual cycle. You are racing to have a certain level of information, so you mostly cut corners because you mostly procrastinate and then do not get your act together until the last minute. So you come in often too low relative to what you are seeking, but you are also playing games—just like my nieces and nephews do in terms of their pocket money allocations—in terms of how you present something, the size of it, and in terms of what your bosses are likely to agree to, even though you may know that it is likely to be significantly more than that.

Ways around that are to benchmark to comparable projects elsewhere. In terms of information technology [IT] departments, you can certainly benchmark utilities against utilities in other States and other countries to look at field resource management or a maximum implementation and how much it cost for this many users and how long it took. There are ways for central agencies or senior management to assess the validity of people's initial bids. I think the point which I think the previous presenters also alluded to is that some vendors are extremely skilled at building bids in a particular way which will allow for growth. That is part of their market operation. I think if you benchmark projects to other States and internationally, and you can only really spend that effort for your larger projects, then you have some ways of sort of checking off where they are at and what they are doing.

The challenge is also that when a vendor starts to say, "We weren't paying for that.", or, "We haven't paid for this."—I am just thinking of in the place I currently work a challenge that they have experienced with a large vendor—the vendor is very skilled that its own interpretation of the procurement contracts that are sitting in front of them, and often the agency itself is not as skilled at it, so they are outgunned. People work out ways that things actually were paid for were not paid for, and so on. I think initially the Auditor-General was flagging, and especially I think with the Roads and Traffic Authority [RTA] investigation, was around very poor initial scoping requirements and definitions to start off with. That is more common in the public sector than areas in the private sector where you are not always as attuned to a single annual funding cycle.

There are not a lot of terribly easy answers because, if you insist on so much detail early, then you spend so much time trying to characterise the thing. By the time you actually get through the bid process, you have actually selected the wrong version of the technology and you are years out of date. There were experiences in Victoria with some of their emergency services, I think, where they selected certain things that were significantly versioned out of date, which then created implementation issues for the Amadeus and the emergency services. I do not think there is a simple easy answer for that one.

CHAIR: Sure.

Mr KANO: I think the other aspect that the Auditor-General alludes to is that big projects are different to smaller projects. Most organisations do not go off the rails with their smaller projects. They have methodologies that work. Frequently they leap into a larger project and think that they can just stretch everything and it will be fine, and Bob, who ran the \$1 million project, is going to be fine on a \$100 million project; we just need to give him a bit more support. And of course he is not fine. It is much more complex and the methodology, the risk approaches, the governance approaches, and the status reporting all fail. The Auditor-General frequently flags project failures: they are the large projects that fail, not the small ones.

I think every agency has its methodologies that people adhere to. It is when you go up in the larger area that project complexity is a very big research area globally. A couple of the universities in Sydney have also got various funding arrangements now for project complexity research to sort of flag what you should check. This is a challenge with Gateway where Gateway does not actually go, "This is more complex than this agency has experience with. This has a much higher likelihood of failure. We need to do extra things."

Mr HUDSON: I might just pick up a couple of those points. Again, I did hear a couple of these comments from the previous speakers. To take up a lot of what Mike said—maturity of project requirements and

selection of contract type go hand in hand. Given the difficulty of doing things—like managing the technology horizon, which needs to be done in a studied fashion with a project—do we make a commitment? It is something I looked at in the Queensland situation. Do we make the commitment now to the known horizon of technology and freeze our requirements now, knowing that we will end up with perhaps less capability than everybody would want but a more assured project, or do we set the project in a way that we understand that we are going to embrace a horizon and we will run the project in a particular way?

One of the project management standards that runs globally talks about progressive elaboration of project planning from that perspective. Either way, they have to be matched because it is a very simple equation: If you do not know your project requirements, then it makes sense to go to a costs-plus type of model because it is a much more mature model, and even though it takes a lot of oversight by the contractor to effectively run a costs-plus project. This comes to your point, Mr Chair, about variations, and I understand because it is a classic view: Yes, of course, you go to the market and you ask a vendor under adverse circumstances to quote on a fixed price contract. They will build risk into that and they will automatically look to the inclusion of variations because, frankly, it is the only way they make money.

As a business owner in my own right, I know that as a director of a company I do not make money because I was trained in Monopoly. I make money because I am required under law to do so. I am actually required to trade my company to profitability. I think we need that perspective. So the contract type and requirements maturity are probably one of the more important equations.

Dr GEOFF LEE: Thank you for coming in. Mike, I was very interested in your views, and all the views of witnesses present, that we need more focus on competency based skills, not simply knowledge, and that it is the larger \$100 million projects that seem to go pear-shaped, not the small \$1 million ones. I suggest to you that there are the right competencies within the New South Wales public service, but in disparate spots of it. Having said that, I should add that there is probably no consistent approach to \$100 million or \$200 million projects. But my question really is about project complexity.

Traditionally, or anecdotally anyway, it seems that we, a government agency, will employ a large company to manage a large project and they will subcontract it out. They will be the de facto project manager. Basically, they wear all the risk and the complexity. But what sort of methods do you advise the Government that the public service can adopt to manage large projects, but employ small vendors and suppliers themselves or medium size ones so that we get away from having to use large suppliers and vendors every time? Is it possible, for example, or is it inefficient? Should we leave it to the market?

Mr HUDSON: I might just say that the study of complexity—Mr Kano addressed this—but just in general, rather than giving a glib answer to you and saying, "Here's the answer", I think a direction we would give is suggesting that there be an engagement with this emerging practice and study of complexity in projects because it is very interesting. It is very difficult to paraphrase in two or three minutes that one might give to that. That would be one statement, for a start. I think there needs to be an engagement between the New South Wales Government and this very clear and emerging discussion area of complexity.

Mr KANO: Firstly, I think a large vendor may be appropriate for large jobs because if you need, say, 500 testers to work through the code on some large rollout, many smaller players will not be able to do that and you will be expecting them to actually form some sort of collaboration with other entities they may not have a history of working with, so you are actually increasing your risk of failure and you are increasing your risk of a lack of consistency in behaviour. It depends also on what technology you are implementing. If we use things like Gartner or Forrester, who have various things like magic quadrants and lines to talk about whether a technology is mature, or cutting edge or bleeding edge, and so on, generally the smaller vendors either will be in very bleeding edge environments, which predominantly government would not be leaping at for the whole-of-government—you might play with a small agency to do something in that way through seed capital, but you normally would not say to the Department of Health, "We want to go with tablet-based e-Health. Let's just implement that.", and you are not going to take that sort of risk for that sort of mobilisation of that workplace—the smaller vendors tend to either be people who traditionally actually get the outsourced work from the large vendors, or they may be people who are very innovative and they are in new spaces and complex spaces. They are different populations.

One group is more start-up firms, so they tend to be really bad in terms of quality, but they tend to be very creative people. That is not necessarily what government normally wants. Government tends to be very prescriptive. I think it also does come down to whether you bundle jobs together. If you are looking at major

data centre relocations and so on, you can start to make very large jobs, which for the larger vendors are attractive. I do not think there is any consistency there. The previous panel who were presenting here made reference to the Australian Government Information Management Office panels. I suppose I have had to wade through those. The panels for project assurance have over 300 different parties on them.

One could argue that they actually are almost the complete cross-section of everyone who provides project assurance services in the information technology [IT] space in Australia. That is one of a number of panels that are very large. It has everyone in it. It has the Accentures and the Deloittes, but it also has single-person businesses as well. If you are purchasing that, you do not actually get a sense of which one is going to be better for me, and so on. You can use panels to at least give smaller participants an opportunity to present themselves and to convince someone they should be selected, but you have also got to look at capacity. If it is a five or 10-person shop, you cannot do something for the Department of Health, but you might be able to do something for the Sydney Harbour Foreshore Authority.

I think the bigger agencies are pretty realistic that they cannot always use smaller vendors because of those capacity issues. I do not think there is a single answer for that. I think there already are legislative drives to use New South Wales based businesses. Under the Federal and State information legislation Acts, there are significant restrictions on where data records can sit. That significantly curtails the use of international-based vendors. If you are doing an e-Health rollout and you are looking at the data records for, say, my parents, then the testing of those records would have to be done in Australia. You cannot take that clinical data outside of Australia, whether you are Accenture or a small vendor just around the corner. There are also some other constraints in terms of how you use even an international vendor.

Mr BART BASSETT: Various submissions received by this Committee talked about the development of the service catalogue that is currently being commenced by the Department of Finance and Services. There are just two points I would like to get an answer on: How do you think this will help to improve project management and service delivery? What does your organisation think about the idea of benchmarking costs and making this information available to all government agencies?

Mr HUDSON: In general, we would come back to probably our core proposition: If you are talking about project management per se, one needs to establish that as a different skill set, which by the way is another issue. As organisations mature, they realise that good project managers are not necessarily good technical managers and vice versa, so it is a discrete competency. As far as our netting is concerned, we would suggest, as far as the service catalogue is concerned, provided it is competency-based then it can add value, from our perspective. But I am not too sure how far we would draw the bow.

Mr KANO: Were you meaning more in terms of IT infrastructure like data centres, cabling, provision of desktops—

Mr BART BASSETT: It was really a general question about the catalogue so that smaller players and the like that are providing services would have an opportunity to be accessible to different departments.

Mr KANO: I think generally the service catalogues at a Federal level have worked quite well. The challenge has been when a minimum scale has been set. So for data centres, the service catalogue federally specifies a minimum floor area of 100 square metres; most smaller Federal agencies do not require 100 square metres in a data centre, so they are forced to cobble together alliances with often disparate entities. I think it also allows significant cost benchmarking, which helps to get rid of some of the potentially shark-like behaviour of some vendors that has been alluded to earlier.

I think the challenge is more when you move away from tangibles to less easily tangible. A data centre is very tangible but, generally, where panels fall down and service catalogues, it has been in aspects of IT security, and that is very intangible. That has been probably the worst area at a State level in terms of the existing panel contracts—it is very hard to benchmark and very hard to cost. But I would certainly support them. It is similar to the use of things like case-mix funding in health where you standardise the cost of a hip operation no matter which hospital you are in. So if you want to be in an expensive hospital for a hip operation you are going to have to cross-subsidise. I think they will be very valuable; it is more how you implement it and taking people through a change process and ensuring that they have no alternative but to use the service catalogue.

CHAIR: There is one final question, which I would ask you now to take on notice because we have somebody waiting on the phone. Perhaps we might consolidate this in a letter to you and ask you to respond in

writing. One aspect of the inquiry has been to look at skills and capabilities in the New South Wales public sector. We are wondering how in particular you think project management skills can be improved in the New South Wales public sector, how we could keep pace with the rapidly changing industry—and the pace of change, I think, is generally quicker in the private sector than in the public sector—and, thirdly, what role you think industry associations, including your own organisation, have in improving skills, including in the public sector. I also flag that we may wish to send you additional questions in writing, the replies to which would form part of your evidence and be made public. I take it you are happy to respond to that additional question and any other questions that might go to you?

Mr HUDSON: You would be surprised, Mr Chair, that we would be delighted to respond to those two questions.

CHAIR: Thank you very much. That concludes our questioning today and we thank each and every one of you very much for appearing before the Committee and for the role that the Australian Institute of Project Management plays in making the system work better, whether it be public or private.

(The witnesses withdrew)

SUZANNE CAMPBELL, Chief Executive Officer, Australian Information Industry Association, before the Committee via teleconference:

CHAIR: Ms Campbell, thank you very much. This is Jonathan O'Dea. I am Chair of the Public Accounts Committee. We appreciate that you are able to give evidence over the phone today as Chief Executive Officer of the Australian Information Industry Association in Canberra. The Committee is comprised of six members from the Legislative Assembly, five of whom have been here today; two members are moving in and out but there are three members in the room at this very moment.

We have authorised the media to broadcast sound and video excerpts of the public proceedings, so the proceedings will potentially be broadcast elsewhere in the Parliament and the media may be listening. As you are in Canberra it is obviously difficult to swear an oath or make an affirmation. However, I ask you to keep in mind the gravity of giving evidence before a parliamentary committee. Would you like to make a short opening statement before we move on to questions?

Ms CAMPBELL: It will be a very short opening statement. I wanted to thank you for the opportunity to appear this afternoon and to present evidence in support of the Australian Information Industry Association membership. We have enjoyed a very collegiate and satisfactory working relationship with the Government of New South Wales and are keen to continue to work together to support the growth and development of the ICT industry, driving the digital economy and building industry capability. I am looking forward to your questions this afternoon to progress those priorities on behalf of our members.

CHAIR: Thank you, Ms Campbell, and thank you also for your submission that you forwarded to the Committee's inquiry. In that submission you state that the priorities for the Australian Information Industry Association are to grow and develop the ICT industry to drive the digital economy for the benefit of our nation and to build industry capability. Would you mind telling the Committee what initiatives you have underway to achieve those priorities?

Ms CAMPBELL: These three priorities are part of the Australian Information Industry Association's strategic framework, which was brought into force by our board in August this year. To illustrate these priorities I will refer to are only a selection of the programs or initiatives that we have underway in support of each of these priorities. If I can start with growing and developing the ICT industry? We certainly take a very active approach to supporting innovation and one of the programs this year that demonstrates that point is a national series of information sessions on ICT and the recently implemented Research and Development [R&D] tax incentives aimed at encouraging the ICT sector to innovate.

Additionally, we have provided input to the Business Tax Working Group on their proposal to scrap the research and development tax incentives, arguing that this would adversely impact the development of research and development and stifle innovation. We have established a national framework of Special Interest Groups, aimed at topics which are of interest to our members and include, for example, education, health, the environment, and the digital economy. Through these special interest groups we are able to ensure the ICT sector is relevant across the broader and multiple industry sectors. These are some of initiatives in support of growing and developing the ICT industry.

In relation to driving the digital economy for the benefit of the nation, we are actively engaged with the Federal Department of Broadband Communications and the Digital Economy in support of their national digital economy strategy. This year we have been focussing on both teleworking and cloud computing. In relation to teleworking, we have undertaken an extensive series of State and Territory based forums, promoting teleworking on behalf of the department and also on behalf of our members. These activities were co-hosted with others, including Telstra, Cisco, Ai Group and the department itself. In addition, following the recent Prime Minister's Forum on the Digital Economy, the Australian Information Industry Association [AIIA] is developing an action plan that outlines a series of activities the AIIA will undertake in support of outcomes and priorities identified by the Prime Minister and forum participants.

We hosted a cloud conference in February this year in Canberra, to profile and raise up the prospect of cloud computing and we have provided input on a range of Federal Government policies and issues relating to data privacy, computing, intelligence, security, environmental waste and other matters.

In relation to building industry capability, this is a priority that I know we closely share with the NSW Government and for many years we have been leaders in an event called the iAwards which is structured to recognise and reward ICT business innovation. We have been actively involved in raising awareness and looking for ways to address the current ICT skills shortage. Just last week we participated in a workshop with Senator Evans on this very subject.

In Queensland we are partners with National Information and Communications Technology Australia [NICTA] and the Australian Computer Society and various Queensland universities in forming an initiative called Group X which is focused on raising the awareness of ICT as a career option. In various States we run programs called CollabIT which are focused on supporting small to medium enterprises [SMEs] and building their capability so as to be able to effectively participate in the digital economy. That is an overview of some of the initiatives we are prosecuting in support of those three strategic priorities.

CHAIR: Your submission also talks about "ICT concept viability service". Can you explain to the Committee a little more about what that is and how it will improve the management of ICT projects?

Ms CAMPBELL: Yes, I can do that and I can be particularly well informed on this subject, as I met just last week with Intellect Technology Association in the United Kingdom. This is an approach of advocacy which has been developed by Intellect in the United Kingdom. Intellect is the sister association of the AIIA, with similar membership. This approach was developed in conjunction with the United Kingdom Cabinet Office. It is designed to support public sector customers to have a two-way dialogue with the ICT market, before there is any commitment to a project and/or a tender process. It is designed to inform, rather than replace, other proof-of-concept or feasibility work and it is about conversations which can occur on neutral ground, on a level playing field, without any commitment to a commercial outcome.

Concept viability is designed to help customers understand if and how the market can contribute to a solution and informs, if they wish to proceed, how they should shape their request for services. Clearly, there are benefits to both government and customers. For customers, it provides a one-to-many engagement with a range of technology companies, including SMEs. It raises the profile of the procurement opportunity to perhaps a more diverse supplier base than traditional techniques might allow. It identifies potential areas for innovation because it is forward-looking, rather than backward-looking. It provides early visibility of risks and challenges and innovation opportunities. It also allows the pros and cons of different technical, commercial and delivery approaches to be explored.

For suppliers, the benefits include early insight into business opportunities and the strategic drivers behind them. It allows for issues or concerns to be raised, without companies feeling their positions in procurement are threatened. It supports emerging technologies and associated risks to be discussed frankly, allowing supplier expectations to be managed. Suppliers can then decide, at an early stage, whether they wish to bid for the work, saving the significant time and cost traditionally associated with longer engagements. It also allows suppliers to interact with potential supply chain or consortium partners, without any obligation.

Looking at the range of activities, the United Kingdom Intellect organisation also supplied concept viability since 2004. I can assure you, the list is extraordinarily extensive and it includes, for example, in 2011 Cabinet Office inquiries about electoral reform transformation programs, higher education systems, service desk procurement, future ITC sourcing, secure email exchange—an extraordinary range of ICT supply initiatives. And that is just a subset of those that were prosecuted in 2011. More recently, this process has been applied to the Ministry of Defence, individual councils, Cabinet Office and the Department of Work and Pensions, to assist them in achieving outcomes and to the mutual advantage of government and suppliers. So that is a short overview on the intention of the concept viability approach.

CHAIR: Certainly it seems a concept well worth further examination in Australia. Obviously in the United Kingdom it has been embraced. What is your sense of the Australian context in comparison?

Ms CAMPBELL: I can assure you that we have had very warm conversations with a number of Federal and State government representatives. We have had only a glancing acceptance of the concept, and what I mean by that is an individual project in an individual government agency. We have not imported the whole methodology. The opportunity is for us to do so under licence from Intellect. We have not done that but we continued to advocate the aspect of early engagement and that concept is certainly well understood and appreciated by everyone that we have spoken to. The challenge has been finding a way to make it actually happen.

CHAIR: In your submission, another comment that has particularly been picked up is that ICT is thought of, or the perception that ICT has been often an afterthought or an add-on, but that it should be more integrated in industry planning at the outset. How do you see that that could be better achieved?

Ms CAMPBELL: I will begin by sharing with you one example of this afterthought challenge. In the recent New South Wales Industry Action Plans relating to manufacturing, international research and education and to professional services, for example, none of them included the role of technology in taking their prospective industries into the future. None of them acknowledged in those plans the relevance, in terms of the transformational change opportunities, the disruptive change that will inevitably flow from technology. In addition, there was no linkage between the digital economy and the other plans that were tabled, at least in the draft that we were provided for comment. So, it is not a single industry challenge, it is quite a pervasive challenge.

To address the challenge, certainly we would say that ICT needs to be incorporated in planning from the outset. The view of the AIIA is that ICT should be an implicit consideration in the development of any new policy, program or initiative. So when Roads and Maritime Services is thinking about roads, the consideration should not just be about building a road, but also about the ICT systems that are associated with roads. Building a road today does not have to be the same as building a road yesterday or the day before. The same would hold for any other infrastructure program, initiative or policy change. The capacity for ICT to be applied needs to be considered before proceeding through the development phase. It simply means that the potential of ICT impacts, implications and opportunities need to be considered to ensure that they are addressed and leveraged early on and integrated into the next phase of the business case development or the execution approach.

Depending on what the initiative is, these practices could become routine just as, for example, in other times gender considerations, disability considerations, environmental impacts, infrastructure considerations, community impacts, all of those things have been taken up and incorporated into the machinery of government. What we are suggesting is that ICT should also be taken up and considered each and every time. To include this, you would need industry engagement in discussions and development workshops, industry consultation, programs and project templates that include an explicit assessment of ICT criteria. Not just ICT as it exists today, but as it is anticipated to exist when the project is at maturity, because the lead time of so many projects and initiatives is quite attenuated.

CHAIR: That is consistent with an innovation-type mindset which has been a theme of some earlier comments that we have heard.

Ms CAMPBELL: Exactly consistent with that.

Dr GEOFF LEE: I think you have made your case well, enunciated in terms of the role of ICT as an embedded part of every project, whether it is a road, a new health system or whatever it is. In your view and in your association's view, how would we assist SMEs engaged with the Government in these projects when traditionally there have been some barriers inherent in the system against the smaller businesses?

Ms CAMPBELL: I would say that there are, in fact, already some initiatives under way to facilitate the engagement of SMEs. Specifically, we are working with the Department of Finance and Services to prepare a short form IT contract for low risk and relatively low value—say, less than \$150,000 value contracts. The contract is being drafted in plain English and is designed to facilitate SME engagement explicitly. The contract is proposed to reduce red tape, reduce costs and make it easier for SMEs to transact business with governments. I note there are already a number of other initiatives under way to engage SMEs. For example, the apps4nsw program and the Collaborative Solutions program are good examples of how government can work with SMEs.

We need to find other ways of doing so. We currently have a proposal in front of the Department of Finance and Services about running, for example, further speed-dating initiatives, where SMEs have the opportunity to present their capability to government officers. In Canberra we run a program called CollabIT that I referred to earlier. In that program we are currently filming SMEs so that their profile is available online, so that any government agency or agent representative in the Australian Capital Territory can easily become aware of the SME and their capability.

Mr BART BASSETT: The New South Wales Government's ICT strategy establishes a whole-of-government approach to ICT. What does your organisation consider would be the main issues regarding the successful implementation of a WOG approach?

Ms CAMPBELL: A whole-of-government approach. You said that it was bit hysterical this afternoon. I think this is further proof of that point.

Mr BART BASSETT: I said it in the first part of the question. I was just testing everybody here.

Ms CAMPBELL: Make sure they were all awake.

Mr BART BASSETT: And you all were. Well done, everyone.

Ms CAMPBELL: If we think about the way that the Government in New South Wales is already proceeding with single points of contact, for example, the appointment of Michael Pratt as the Customer Service Commissioner, we begin to form a model which is about a single point of contact for citizens. The Government has recognised that need in making it easier for citizens to engage with government. This same model applies handsomely to business engagement with government. Other ways that this might be of advantage is in relation to information sharing across agencies to ensure that all are across the initiatives of one agency or aware of potential opportunities to share ICT resources or infrastructure.

Your cloud computing options could be leveraged by multiple agencies or conversely cloud computing could make those multiple options visible to multiple agencies. The requirements for interoperability and standards based on approaches for key solutions and applications across government agencies could be simplified and applied consistency. Identity management approaches to support online delivery of government services might also be easier. Finally, harmonisation of policies across agencies would be a further advantage of a whole-of-government approach.

Mr BART BASSETT: To follow on from an earlier answer you gave, where you used the term "speed dating" for the SMEs. It is interesting because earlier this afternoon we have some SMEs present to us and their concern is about how they can be seen and promote their products and be taken seriously. Can you briefly explain what you are doing in that regard? When you talk about speed dating, how is that being done and who is using it?

Ms CAMPBELL: I will point to an example which is not New South Wales but New Zealand. The New Zealand ICT Association is running quarterly forums where government senior officers—CIOs, for example—are invited to participate with a range of SMEs. The SMEs have the opportunity to present to the CIOs on a single occasion their capability. They have very tight time boundaries around the engagement with the CIO and it is a two-way exchange of information. The CIO can explain current challenges. SMEs can explain current capability.

Mr BART BASSETT: Various submissions received by the Committee talk about the development of a services catalogue currently commenced. How do you think this will help improve project management and service delivery? What does your organisation think about the benchmarking costs and making this information available to all government agencies?

Ms CAMPBELL: I will take your question in two parts. In relation to the service catalogue, I think it could potentially improve project management and service delivery by identifying the specific services available from various vendors and help to identify particular or peculiar, as it were, capabilities and experience of vendors. It could also provide the New South Wales Government with a standardised set of definitions for services so that they are in fact comparing apples with apples. By that I mean improving the efficiency of the selection processes and certainly the execution of capability. In terms of your benchmarking question, can I clarify what you are referring to specifically? Is it benchmarking to specific service costs? Is that what you are saying?

Mr BART BASSETT: Benchmarking the costs in regard to industry. What you are talking about is someone being able to look at this and fairly compare the costs of purchasing that service.

Ms CAMPBELL: In respect of benchmarking costs, a couple of different observations. The first is that I would be concerned about the costs being transparent to industry because there is certainly a danger that the

benchmark precipitates something like a race to the bottom in terms of pricing, which has the risk of creating unrealistic expectations of the market and delivering an outcome where quality is compromised. There is also the danger that they limit the flexibility for negotiation with vendors. There is also the prospect that, depending on the service definition, the cost as simply expressed may not take into account the complexity of execution or specific terms and conditions in a contractual framework.

I am quite hesitant about advocating benchmarking. What I would say though is that I am very keen on targets being set. Benchmarks are usually retrospective or historical. You can say how much six apples cost yesterday but what you really want to know is what six apples would cost tomorrow or the day after and what needs to change to achieve the price that you want to achieve or the total executional cost that you want to achieve. I would be a strong advocate for setting targets and understanding strategies that need to be executed to achieve those targets. I would be less keen on benchmarking.

CHAIR: Ms Campbell, thank you. You have been excellent in answering the Committee's questions. I think we have exhausted them. Do you have any other comments or questions or any matters that you particularly wanted to highlight, either from your submission or as a consequence of further thoughts on any of the dialogue to date?

Ms CAMPBELL: Thank you for the opportunity. I have nothing further at this time but the AIIA is keen to manage our engagement in this process. If there are any further questions we are happy to take them and to respond in an appropriate way, informed as always by our members' contributions.

CHAIR: We appreciate that. We may send you some additional questions in writing, if that is necessary, and note that you are happy for that to be part of the record of your evidence.

(The witness withdrew)

(Evidence continued in camera)

(The Committee adjourned at 4.45 p.m.)