



LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

12th Assembly

Public Accounts Committee

Public Hearing Transcript

8.30am, Friday, 7 March 2014

Litchfield Room, Level 3 Parliament House

Members: Ms Lia Finocchiaro, MLA, Chair, Member for Drysdale
Ms Larisa Lee, MLA, Member for Arnhem
Ms Natasha Fyles, MLA, Member for Nightcliff
Ms Nicole Manison, MLA, Member for Wanguri
Mr Gerry Wood, MLA, Member for Nelson

Witnesses: Radical Systems
Mr David Chatterton, Managing Director
Australian Computer Society
Mr George Koulakis MACS CP, Immediate past Branch Chair & current Board Member
Mr Adam Redman, Head of Policy & External Affairs
ICT Industry Association of the Northern Territory
Mr Trevor Oliver, Chairman
Mr David Bradley, Treasurer
Mr Stephen Criddle, General Committee Member
Mr Paul Potter, Senior Project Manager, Dialog Information Technology
Australian Institute of Project Management
Mr Mark Dodt, President
Northern Territory Police, Fire and Emergency Services
Mr John McRoberts APM, Commissioner
Mr Peter Davies, Chief Information Officer

Department of Corporate and Information Services

Ms Kathleen Robinson, Chief Executive

Mr Chris Hosking, Senior Director Commercial & Business Services

Mr Stephen Walker, Director, Frazer Walker Pty Ltd

Department of Treasury and Finance

Mr David Braines-Mead, Deputy Under Treasurer

Ms Tracey Scott, Assistant Under Treasurer

ICS Multimedia

Mr David Ovington, Senior Project Manager

Madam CHAIR: Good morning everyone. We might get things under way. It is a little after 8.30 am. If Mr David Chatterton could come forward. Thank you.

On behalf of the committee, I welcome everyone to this public hearing into the management of ICT projects. I welcome to the table to give evidence to the committee Mr David Chatterton, the managing director of Radical Systems. Welcome.

Mr CHATTERTON: Thank you.

Madam CHAIR: Thank you for coming before the committee. We appreciate you taking the time to speak to the committee and look forward to hearing from you today.

This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If at any time during the hearing you are concerned what you will say should not be made public, you may ask that the committee go into a closed session and take your evidence in private.

Mr Chatterton, could you please state your name and the capacity in which you are appearing?

Mr CHATTERTON: David Chatterton. I am the managing director of Radical Systems.

Madam CHAIR: Would you like to make an opening statement this morning?

Mr CHATTERTON: While I am the managing director of Radical Systems, my submission is really based on my experience with the public service since 1985, in one form or the other as a public servant, or as a consultant outside of it. It is beyond just my role at Radical Systems. I have drawn upon experience of nearly 30 years.

Madam CHAIR: Thank you. We have a series of questions that we will jump around and ask you. I hope you feel comfortable with that.

You recommended getting a working proof of the concept as part of the tender assessment process in your submission to us.

Mr CHATTERTON: Yes.

Madam CHAIR: Could you explain how you would see this working?

Mr CHATTERTON: We are doing it right now in a project I am currently managing. It has proved, I believe, quite useful. One of the things, especially with large scale tenders in my opinion, is because they are largely based on paper based evaluations or the occasional site visit or some reference checks, what we wind up with is a lot of – well, not necessarily vaporware, but certainly a lot of product we have put in front of us as part of a tender evaluation committee is stuff that is really not necessarily guaranteed to work in your environment. It is not proven in your environment and we have been bitten so many times, in my view, where we have gone through and taken things on good faith with an 80% fit, for example - the 80:20 rules comes in all the time - and when we go to implement it we find the fit is anything but 80%.

Our unique way of doing things in the NT sometimes constrains the way vendors can deliver solutions, so they wind up with a lot of change management or change process, that simply drags projects on. I am not going to name specific projects, but I am sure a lot of people around this room will probably agree with that statement.

The proof of concept idea was – and, more importantly, the design finalization phase is to recognise the fact that we do not necessarily get all our requirements right. We do not put enough detail into our tenders for the tenderers to be able to say, ‘Yes, this will meet your requirements’. We do not do enough work on that. We do not do enough work on the design phase of the solution. What I am saying is that we should recognise this and pay for the vendors to come in and come up with a design with you, or finalise the design with you, and not only finalise the design but pay for a working proof of concept, something you can touch and feel. Once you have done that you can then be reasonably well assured – there are no guarantees in life and no guarantees in software because it is complex, but at least you have a much better assurance that you can have something you know, you have tested and that you have done as much due diligence as possible to getting it working.

You will have to pay for that, so the process we undertook in the project right now is to say we will shortlist our tenderers based on the paper based evaluation, the reference checks, etcetera. Once we have shortlisted them we will invite them to a design finalisation and to build a proof of concept. If they fail for whatever reason, we would pay them their money which they would have stated up-front in the tender, then select the next best tenderer based on the evaluation.

What that gives us, is confidence that we have a working solution whereas, at the moment, we have too many projects that we take on faith, on reference checks. On the paper-based evaluation we do not have that confidence. That is what I meant by that.

Madam CHAIR: If I can clarify. If there were three tenderers you would propose how it would work. You would invite them all to then go through that design process with you, and they all ...

Mr CHATTERTON: No. You do not have the time. The complexity in trying to get three tenderers to start working with you is too complex, so we would shortlist. We would invite one. We would invite the first tenderer, with the proviso that if they fail, for whatever reason, you can put the criteria for failure in your tender. You then reject them, pay them their money for the design finalisation, then move on to the next one. You separate the cost for design and the proof of concept so you do not actually waste it and spend too much money on it.

Madam CHAIR: In your experience, or in your view, how would the payment of those services go? Obviously, it is an additional expense at that early stage in the process. How would you see that cost being built into the project?

Mr CHATTERTON: We put that into the tender itself. We say, ‘These are the criteria for the design finalisation and the proof of concept, you tell us how much it is going to cost’. So, they put that as a fixed price component in their tender. We would pay them that fixed price if we rejected them for any reason. That would be a cost of tendering. But, for a complex and large-scale project, it is a worthwhile cost because it is usually less than 5%, or less, of the overall cost of the tender. It is usually worthwhile to be guaranteed - or at least have an assurance - that you have the right solution.

Madam CHAIR: At the point where the tenderer has come forward, they have gone through that design process, in your experience, is it usual that is a quality product and you can move forward with it?

Mr CHATTERTON: As I said, there are no guarantees. There are things that can fail. I am not going to make any claims that it is going to result in a 100% success rate. It is a continuum, and all we can do is improve on that continuum. Right now, our large-scale project failure rate is unacceptably high, in my view, and probably the view of most of the people in this room. All I am doing is providing an idea that might give

you a much better result. Logically, it should, if you think about it. That seems to be borne out by some evidence, at least, in our experience.

Madam CHAIR: Absolutely. I used to be a litigation lawyer, and I used to say to people spend the money up-front getting the contract drawn up by a lawyer - this type of thing - because if you have to come and see me at the end it will cost you a lot more. I will pass on to my colleagues for the next line of questioning.

Mr CHATTERTON: Absolutely.

Ms MANISON: You have noted that bigger is not better, and there are local companies which are waiting for the opportunity to perform. What barriers exist to local companies in the procurement process when it comes to trying to get a job like putting together an AMS system etcetera?

Mr CHATTERTON: Yes. I could mount a soapbox on this, but I will try not to. I worked with NCOM back from early 1990s, so I have been involved since the mainframe era. The point is we used to build software in this town locally. We built GAS, - I am not going to say fully as it was a commercial product but we effectively implemented it locally - MOVERS, IJIS, locally. We had stunning successes, when you look at the fact they have actually lasted 20 years or so. That is pretty good in software terms. There are problems with those products, they are showing their age now, but the fact was we used to build software locally and we built successful software.

Somewhere along the line in the late 1990s, early 2000s, we lost faith in the local industry to build systems – large-scale systems I am talking about - and we decided everything else had to go offshore – that if it was either interstate or overseas it had to be better. Whether it is a cultural cringe or not, I do not understand. What I am saying is we have a reasonably strong, very talented local industry. But, more important than that, because our accumulative experience – (for example) in Radical, with the NT government alone, is probably over 200 years, if you add up the number of people we have. That is a wealth of experience, and we understand the idiosyncrasies of the way agencies work here.

One colleague described the way agencies work as a bunch of warring tribes - and we are. We have 16 000-odd public servants, yet, we have so many disparate systems. That is fine, we do not have a problem with that. But, because we understand it, we are in a better position than an interstate consultant, no matter how good he is, coming in and trying to understand only what he has been told.. We understand how the agencies operate – how the systems, more importantly, operate, and can perform if we are given the chance. One of the things that is always said is the local industry is too small. Maybe individually we are small, but given the chance we could collectively build systems. We work collaboratively with other vendors quite happily on various projects. I think if that was done more systematically on a large scale project where you contract out multiple local vendors, put them together and project manage them, I think we could have a much better chance of success given our local knowledge than you would get by someone coming in cold.

Mr WOOD: How do you compare working with the private industry versus the government?

Mr CHATTERTON: Most of our work is with government - 90% plus - but we have half a dozen or so private clients and I have worked with private clients. The nice thing about private clients is it is a very simple bottom line; it is money. The success of a system is dependent on how much it has cost and whether they will get a return on investment - it is very simple. The maths is simple. The public service does not have that simple equation. How do you measure the success of a grants submission system – does it work successfully or not? It will cost you money because you will give away money. There is no

simple profit motive as there is in the private sector. I think that means when you go to build systems in the private sector they just want a product, they want an end result, there is less politicking. There are less reasons why a project – a lot of projects - where the rug has been pulled because of change in policy or a change in – we have had a fabulous directory project, for example, that was pulled at the change of government last time because of a funding black hole and things like that which do not necessarily occur in the private sector. It is simpler.

Mr WOOD: We could learn from the private sector. Obviously there will be some checks and balances in the use of public money, but are there things we could learn to make it better.

Mr CHATTERTON: Yes, absolutely. While process is important, and I have made a point there are lots of methodologies in project management and running software development projects and they are getting better, and plenty of methodologies that are quite wasteful because they are more process-orientated rather than outcomes focused. We had a tendency in the past to follow a lot of process for the sake of process, and the nice thing about the private sector is they do not care, they just want an outcome.

Having said that, I think project management is a discipline and there are some very strong values in having a process for a project – project management is not about someone with organisation skills being thrown in as a project manager. Sadly, we see that, and business analysts as well, a lot in the public sector. Often the nearest person available becomes the project manager.

Project management is a discipline, a skill, a learned discipline. Having said that, we use project management - and project management methodologies to cater for varying levels of process or diligence in delivering a product. SCRUM, as I mentioned in my submission - is a technique that is used. It is taken from rugby and it is used extensively in the commercial world.

One of the problems we have in the public sector is we do not understand it and, therefore, our tendering process does not allow us, as vendors, to be able to bid on a scrum based methodology which basically says look, 'We do not know how much it will cost at the end of the day, but you can control exactly how much you get. You can tell us when to stop and, more importantly, when we deliver something to you, it will be something of tangible real value, but how much of it you want to build is something you can control.'

All the public sector wants to know - when we are tendering is that we have to put in either a fixed price or a rate and that is about it. It is all about hours and dollars, whereas scrum is about building value or building the product itself at the end of the day.

Mr WOOD: The UK Comptroller and the Auditor-General have said good vendor relations is one of the strongest determinates for success in IT projects. What can be done to improve relationships between agencies and vendors in the Northern Territory?

Mr CHATTERTON: I can only speak about software and IT-type projects. We need to accept there are new ways of building software. There are new ways of actually running software development projects. Our tender process does not seem to cater for that, does not allow for those new methods of an agile-style development, where it is intuitive, fast paced, and is something that builds incremental software.

Our tender process at least, unless I have been blind to it, does not seem to cater for that. Until we can do that, we cannot give you the best of what we can in the way we can build software. We are still hamstrung by having to say 'We will build it for a fixed price or an hourly rate, and we will tell you how much it is going to cost up-front'. Quite often, they get overrun by time or budget, and that is why we are here.

The current way of doing things might be okay for a construction-based project, but it is very difficult trying to shoehorn a software development project into a construction methodology and does not work.

Mr WOOD: Thanks.

Madam CHAIR: You noted the need to truly understand and detail business requirements before going to tender. You have already talked on this. It seems, as you just said, you get into a project and, even with that extensive scoping at the start - if we did the working proof concept and things like that - once you get into the project with IT, it can be this endless minefield of ...

Mr CHATTERTON: Changing requirements. Yes, absolutely

Madam CHAIR: I do not know whether you have any further comments to say how this could be done better. I suppose, at the end of the day, having an open-ended project where you can respond to all of the changes could still result in massive cost blowouts anyway, because all of a sudden ... I do not know if you have any more to add on that.

Mr CHATTERTON: Scrum is interesting, because you deliver an increment. Every increment has to be a fully-working increment., There will be the first few increments, if you like, where it appears there is nothing really happening. Then, you have to start delivering tangible products.

The interesting thing is, because it is tangible, you can decide to stop at a given point. You can see the rate of progress, and you can either halt the project or intervene, if necessary, and still have something of value left behind. Whereas, doing it in the traditional way means you have to literally get almost to the end of the project before you even see anything tangible. That is the real difference.

More importantly, and I have alluded to this fact, in the public service, we lost a lot of IT project skills when we outsourced all project management and business analysis. As a result, we now find that, rather than paying for an analyst they appoint someone who is generally untrained and unskilled to conduct the requirements analysis, write the spec, or even do the project management. The disciplines of business analysis and project management are very strong disciplines. We no longer seem to recognise that. We think anyone who can organise a great conference may make a good project manager. The two skills are not the same, especially with software.

Madam CHAIR: Larisa, did you want to ask question 5?

Ms LEE: (inaudible).

Madam CHAIR: What can be done to improve stakeholder engagement, do you think?

Mr CHATTERTON: Basically, I believe in management by walking around; that is my style, at least. It is by communication – honest, straightforward, clear-cut communication is the way you can build a rapport. One of the strongest things you can do is get a project board that you can build a level of trust and a rapport with. You do not want a board that sits there and endorses everything you do, but you want a board that challenges you, but also supports you.

More importantly, you need a management team that supports you. So, stakeholder engagement is about engagement upwards as well as downwards. I found that formal communications and e-mails are fine, but the reality is, effective project management actually means you are walking around and engaging with people at all levels in the project. Management by surprise is the worst management possible. I try, at least, to avoid management by surprise.

Madam CHAIR: In your experience with project teams in the public service and things like that, is there a high turnover that makes that engagement and that trust building difficult, lack of engagement from the project team, or have you experienced issues like that?

Mr CHATTERTON: Not so much - with project teams it is partly true, but we find that, as contractors, we are far more stable than the public service. With almost every project of any duration stakeholders at the public service end - the business system owners – change during the course of a project. You start off a project based on their requirements and what they perceive as the system they want. Half way through the project they are replaced by someone else who has a completely different view or does not buy into the process, so you have a whole lot of rework to be done. The churn of the public service is a huge factor in the success of any project that extends more than a few weeks.

Ms MANISON: You have been in the Territory a long time around government and the private sector. You have spoken about business analysts and project managers within the Territory government and see there is a lack of expertise in those areas. Do you consider the Territory government should be doing a bit more within the public sector to develop those roles, or do you see it as something where the private sector has the expertise and should be taking the lead?

Mr CHATTERTON: I think a bit of both. They are both disciplines, and the more people who understand the disciplines of software business analysis and project management and the more we understand the language the better we can communicate ideas and speed up the process of engagement. I agree there is the need to do more training in the public service - formal IT-based project management and business analysis staff training so you understand, when I talk about deliverables, what it means.

However, because of the churn of the public service I do not know how successful that will be in the long term. Yes, by all means, the more we understand the language of project management and the language of business analysis the better our projects will be.

Madam CHAIR: Do we have that expertise in the private sector in the Territory?

Mr CHATTERTON: Yes, absolutely though not enough. The problem is we have a lot more software developers - we think of software as throwing a developer at a project. Quite often the public service will ask for developers - 'Don't worry about analysts or a project manager, we will manage that'. The developer goes into a project and is told - quite often by a whiteboard of what the requirements might be. They start to develop things and the project starts meandering because there is never any clear cut analysis, never a systematic or professional based analysis of the problem or the solution they are after. Because they are simply hiring developers, and developers will simply do the best they can.

While a lot of developers are good analysts as well, they normally are not engaged in that role. While they do not get the chance to question and analyse, though they often do, - the fact there are enough successful projects in the place is because they do. I think it needs to be recognised a bit more that the money spent up-front, as Lia said, is worthwhile in doing the analysis.

Mr WOOD: Do you think we should go back to saying, 'DCIS, you do all this. Get a core group of people who are qualified in business management and have the expertise.' One of the issues here was the Department of Infrastructure, I think, was the lead agency in developing one of the projects that failed. Do you think we should go back to saying, 'Look, these projects should be ...

Mr CHATTERTON: Centralised?

Mr WOOD: Centralised, yes. Minor projects perhaps not, but the major projects should go through one department.

Mr CHATTERTON: I think there is value in that. This has been talked about for a number of years - whether the old DCS or DCIS/NCOM model was a better model. I come from that model, so I may be a little biased but it needs to be - I do not know how successful it will be in this day and time and the way the industry is at the moment, but being able to have - for large scale projects where there are certain benchmarks you have to meet - are standardised. Where you would find the pool of people within one agency I do not know. You may have to outsource that, perhaps under a centralised umbrella agency which manages those large scale projects. That is being tried but with mixed success. The problem with agencies that are centralised is you wind up not being able to understand clearly what the end agencies business requirements truly are. Having a DCIS-centralised project management agency with project managers only based at that, and not out at the agency sites, you do not get as much of a clear insight as if you stayed on-site every day working with the agency.

Mr WOOD: Unless you have a department which allowed those people to be on the same board with people who are dealing with that project, so you had the core qualified people, but they also ...

Mr CHATTERTON: It would provide a level of governance at least. Whether extra governance and more eyesight on the process is going to improve things, I think it will to some extent. I do not think it is the only problem, though.

Madam CHAIR: Any other questions?

Mr CHATTERTON: Sorry, the last thing I want to say ...

Madam CHAIR: Yes, go for it.

Mr CHATTERTON: ... is of the vast bulk of the projects we have in the Territory, IT projects are small. The AMS-style project that brought this inquiry about – they are very few. They happen once every few years.

The real success in trying to make changes, if any changes can come out of this inquiry, would be to address the vast bulk of small projects that do go offline. They fail but, because they are small, no one notices. We should be looking to improve the small- to medium-sized project success rate and value.

One of the big problems I find, and I stated earlier, was the procurement process. We have a procurement process that does not allow funding to go across financial years. That leads to so many systemic problems in funding, because people hold out - it is a human condition I think - they do not plan. You can always accuse them of lack of planning, because they hold on to their funding from July/August, to November /December is usually a reasonably dry time in the industry, then, come February/March we all go crazy as we have are told to quote on projects and to build projects before the cut-off of the financial year. It is a disease. It is the fundamental flaw I see in the small-scale projects that have their funding terminated.

If there is one thing that comes out of this inquiry, if you can do something about that, make it a simple administrative process that allows a project than can demonstrate business value to continue across financial years. Let them do that, and it will give everyone a chance to breathe. We won't have to try to madly find resources for three or four months of the year when we get so much work thrown at us that we can barely cope. Then, for the remainder of the year, everyone starts holding on to their purse strings again. It is simply because of that funding cycle. Something needs to be done about that, because software is complex, and the time frames for software development are not predictable like building a house - even though that too is not quite predictable. But, the funding cut-off is a real issue.

Madam CHAIR: Okay. If there are no further questions, thank you very much, Mr Chatterton, for coming in today. It has been extremely interesting listening to what you had to say. Thank you for taking the time to put the proposal together to come and speak with us today. We very much appreciate it, and I am sure a lot of what you said will end up in our report to government. So, thank you very much.

Mr CHATTERTON: Thank you and good luck with your report.

Mr WOOD: Thank you.

The committee suspended

Madam CHAIR: I welcome to the table to give evidence this morning, Mr George Koulakis, immediate and past Branch Chair and current Board Member of the Australian Computer Society, and Mr Adam Redman, head of Policy and External Affairs for the Australian Computer Society.

Thank you both for coming before the committee. We appreciate you taking the time to speak to the committee and look forward to hearing from you this morning. This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If, at any time during the hearing, you are concerned that what you say should not be made public, you may ask that the committee go into a closed session and take your evidence in private. I will ask each witness to state their name for the record and the capacity in which they appear. I will then ask you to make a brief opening statement before proceeding to the committee's questions. Could each of you please state your name and capacity in which you are appearing.

Mr KOULAKIS: Good morning, thank you. My name is George Koulakis, as you said in the introduction, immediate past branch chair and current Board Member of the Australian Computer Society. I am a Darwin boy, born and bred, and lived here all my life. I have worked in the private sector, in government and, now, run my own consulting company specialising in program and project management.

I have had the absolute joy of having to educate five ICT ministers since my engagement with the ACS Board since 2000, and countless advisors. I am here today because, obviously, we provided a submission to this inquiry and we welcome being here today.

Madam CHAIR: Thank you.

Mr REDMAN: Thank you. I am Adam Redman, head of Policy and External Affairs for the ACS. I am an employee of the ACS and my focus really spans government, media and policy issues. It was together with the Northern Territory branch that I supported George in preparing this submission. When we look at the submissions the ACS have done over the past several years, we are quite proud of this one because it seems to encapsulate the core of what the ACS is as a professional society.

We are not a vendor organisation, although we have partnerships with vendors. We are not a union for employees, although we advocate recognition of the profession, and we do not advocate one particular technology or one particular methodology in project management above others. However, from time to time

we will provide thought leadership and provoke discussion on particular technologies as they emerge, such as Cloud and Big Data.

We are a 50-year old organisation with about 22 000 members with various levels of professionalism. Professionalism itself may seem a quaint term in 2014, but I think, and our members think, it is never more important for professionalism in ICT given the explosion of specialisms within ICT and the asymmetry of knowledge ICT now has between suppliers, professionals and users and consumers. An analogy may be that I do not know a lot about my car engine, and when I go to the mechanic I am really at the mercy of that mechanic to be ethical and honest in what they recommend I need to spend. The same is true for ICT, and growing faster than the specialisms of other professions.

Five hundred years ago if you wanted surgery you would go to the barber. Since that time the medical profession has been established, as have law, accounting and older professions. ICT is perhaps the newest profession, but because ICT touches every part of our lives in increasingly important ways, whilst it might be a sector in itself, it is a horizontal across every single sector and increasingly touches everything government does. The value of professionalism is needed more than ever, and that comes through in the tenor of our submission.

We recommend four things coming out of this inquiry. When we read the other submissions which were posted we were pleased to see that seems to be a pretty consistent trend in what everybody is saying – project management, consistency and governance.

Thank you.

Ms FYLES: Your submission highlighted the important of in-house ICT expertise. Does the Territory face unique problems in maintaining appropriate levels of ICT expertise?

Mr KOULAKIS: There are unique challenges in the Northern Territory across any number of sectors, ICT specifically. The Northern Territory Government is the number one purchaser of ICT goods and services. On that basis, we have always advocated that the Territory government has a moral responsibility to work with industry. That is why we have, on countless occasions, raised the issue of an ICT ministerial council to help bridge that gap between private sector and the government.

The Private sector does not know what government is doing with its ICT investment unless government shares that information with the private sector. That means the private sector cannot invest in skills and people to adequately plan and address future tender opportunities. I echo some of the comments made by Mr David Chatterton: it is very difficult to address and bid for work if you do not know it is coming up and to train people to make them available.

At the same time, our people here in the NT are very much focused on professionalism. We are in the situation where a large number of people are training themselves to maintain their skills ~~current~~ because they need to compete against other people. The Northern Territory has some unique challenges with cost of living and so forth. If they can get better money for their skills elsewhere they will go. The great thing about ICT skills is they are portable. The Northern Territory has some unique challenges in that we need to (1) attract good quality people here, and (2) maintain them. We cannot maintain those people here if we do not have good business planning around projects or do not work with the private sector to at least advice where we are going with government's ICT spend. To give you an indication, in 2010 we did some analysis off our own bat - there is not a lot of publicly available information on this stuff - and worked out the Northern Territory government had reduced its ICT spend around whole-of-government contracts from about \$110-115m to about \$90m at the time.

The question I posed to the Chief Minister at the time, Paul Henderson was, 'How much of that money is the NTG putting back into the local industry, into the local profession, to drive skills and innovation so we can support government in its push to better improve services, drive efficiencies and, ultimately, work towards better outcomes for Territorians?'

Ms FYLES: ICT covers a broad range of skills. What specific ICT skills are needed for the position of Chief Information Officer, and how best can we assess this?

Mr REDMAN: Being a professional, you need to have a base skill set, need to sign up to a code of ethics, and various other hallmarks of being a professional. The issues impacting the Northern Territory government for IT skills are not just about skills, but about competencies. I do not think the NT government has a handle on what competencies it has within government in IT.

We recommend you look at a framework called *The Skills Framework for the Information Age* which matches competencies to those IT skills according to five levels. At the highest level is the competency of the CEO, and it encompasses things like stakeholder engagement, business analysts, beyond just pure technical IT body of knowledge.

Ms FYLES: Thank you. That might be some questions when we have the department later on we can delve into their skill sets and what they look for etcetera.

Ms MANISON: Where we have an agency and it has no IT expertise, what are the best options for ensuring a satisfactory level of technical input at all stages of a project? For example, employing a project manager with IT expertise and experience in managing government ITC-enabled projects. I am trying to get a better idea of where they do not have the IT expertise, how can we better go about putting on good project managers with that expertise?

Mr KOULAKIS: Let me echo something David said earlier as well, that is, project management is a discipline. It can be taught, you can acquire it. At the end of the day, project outcomes rely on having a good handle on (1) what you are trying to achieve and (2) that you have undertaken some decent planning ahead of what you are undertaking.

How do agencies acquire those skills and so forth? Private sector can provide those skills quite adequately. The issue in the Territory is, as Mr Chatterton alluded to, is we have a large number of small-to medium-sized projects that may not deliver, necessarily, what they set out to achieve in the first place. There are various factors as to why - poor planning in the beginning and lack of adequate project management to name a couple.

In the case of project management, you cannot develop project management skills, you cannot develop that capability - if you are not doing it consistently. As we have alluded to in our submission, we have heard from our members that there are instances where projects within the same agency are being managed and executed differently because there is no consistency in the approach being used by the agency. If an individual agency in the Northern Territory government does not have adequate resources or expertise in ICT or project management, then I assume they would look to the Department of Corporate Information Services to assist them. I can only assume that this is the case.

The private sector can certainly provide those skills, if needed. If I can put my private sector hat on for a moment, one of the questions I ask my clients - and I work mainly for government agencies - is 'How would you like me to manage this project?', knowing well ~~and truly~~ that they may not have a consistent approach to managing projects. That is a valid question, and it is mainly to cover myself professionally, as a certified professional, as to what the client would like me to do.

I am a certified professional (certified by the ACS). I also have certification in PRINCE2 as a practitioner. I am well-versed in the scrum methodology and so forth, and agile project management. At the end of the day, one methodology will not work across every project, but having an understanding of the underlying discipline of project management is critical to ensuring you make the right decision as to how much of that discipline applies to a specific project. Whether it is a small project or a large project, there are always risks. The risks vary, but there are always risks and there are always issues. That becomes a compounding factor when you have multiagency projects such as the AMS project.

Ms MANISON: Staying on that theme, if we have an agency and they are engaging a third-party consultant and the agency does not really have the greatest IT expertise within it, how would that agency know the third-party consultant they have engaged is up to the job in how they are performing?

Mr KOULAKIS: At the end of the day, that comes back to the level of due diligence the agency undertakes. If it is a tender situation - we are talking hypothetical here - you would expect the tender assessment group, the group that had been established, would go through a proper due diligence exercise and do the reference checks as Mr Chatterton alluded to. It may even elect to change its strategy around that particular project if there is some uncertainty around the product or the solution being offered and say, 'We will need to go into a design finalisation exercise to validate what you are putting forward'. There are opportunities and things that can be done, but from a whole-of-government perspective I would hope there would be an opportunity for agencies who do not have any skills in that area to look to somebody to provide that assistance and know that next time they come to that agency or that body they will get the same advice consistently.

Ms FYLES: You might have already answered, but is there an extent to which expertise is required in-house or can it all be contracted in for specific projects? If an agency does not have that expertise, should they look to the lead agency in government for ICT?

Mr KOULAKIS: If we take the project management discipline as a whole, there is a book of knowledge on project management called PMBOK. There are methodologies around project management and I have indicated PRINCE2.

At the end of the day, as long as there is an understanding and awareness of the discipline and an agreement on which methodology or approach we will use, it can be in-house or external. External project managers, I would argue, are generally better trained and have more experience because they manage a variety of projects. Individual agencies may have individuals who may be subject matter experts, but they are not necessarily good project managers. We have seen that time and time again, and our members have indicated this time and time again.

Our members come from a varied background; they work in government, the private sector, some work in hospitals, some in education settings and so forth. We hear stories from our members where individuals have been told they are now 'the project manager'. They have no formal project management skills, yet are expected to manage a small or medium-sized project, and engage and undertake change management. Knowing and having an appreciation of the roles and responsibilities to deliver an outcome is critical, and we sometimes push that aside in the haste to achieve outcomes. We push things too quickly and while some people might say there are overheads associated with project management, I would like somebody to show me evidence where a project that was managed using a proper project management approach has failed without a clear record of what took place.

That is the other thing; the discipline is there because it builds discipline. If a project is going off the rails you know about it at the right time, not six months later when you have spent \$20m, you know about it right there and then. If everybody is aware of their roles and responsibilities, the project manager is escalating those issues to the relevant stakeholders - the investment board or the steering committee - they know they have an issue on their hands at that particular point in time and can take the appropriate course of action. That may be, and I dare say it, to stop the project.

This is one of the other things we seem to be scared to do in the Northern Territory. If a project is going off the rails, to stop the project. It is a valid decision. Why do we have to keep sinking dollars after dollars into projects to salvage them?

Mr WOOD: Do you ever give advice as to whether something is needed? In other words, can you be over programmed? Governments are asking for a whole heap of information that may never be used, does anyone analyse if we need that amount of information? You can get information overload. With this particular project - the AMS - a lot of departments might need information together, but does anyone ask if that will help? Does it look good because we have it in one program, whereas previously it worked? Are we trying to keep up with the neighbours about how we operate our department?

Mr KOULAKIS: I will answer that question by saying at the end of the day that is really down to the management - not the management of the project, but the analysis that kicks off as part of that project. For example, you will not implement every request made of you. You have to challenge that and a good business analyst does that. A good business analyst questions and asks the right questions at the right time by asking, 'Why are you doing that? Why do you want that report when this report provides similar information? Why are we duplicating this effort? Why not consolidate?' 'Oh, because we have always done it that way'. No, that is not a valid response. It may be in the 1% situation, but that is not a valid response. Generally, you will find it is a change management issue. 'We have done it this way forever, or we always have this information available because it is there.' 'Well, do you use it?'

That is what the business analysts would undertake as part of that exercise: through that exercise identify the need, validate the need, then get that endorsed by the organisation before it gets built.

Mr WOOD: Funny you say validate that need. A few of us just got our laptops upgraded. I call it a downgrade. It is something I need for e-mails, for writing letters, and to Google - that is about it. But, you get a computer where everything is in a different place. Someone thinks that is a good idea. I do not think anything has been improved but, obviously, the company that is providing the software thinks it is fantastic because the

Mr KOULAKIS: The one thing you are guarantee is that technology is ever-changing. It is moving at a faster pace, and that is why it is important to get the right advice at the right time. It goes to the heart of our first recommendation, that is, an ICT ministerial council comprising of senior representatives from industry, the private sector SMEs, professional societies such as ourselves, and probably CDU, to work with government around what it is trying to achieve, the outcomes it is trying to achieve, and question - or maybe even endorse - initiatives that seek to achieve those outcomes. That is an important recommendation ...

Mr WOOD: I am not arguing against improvement.

Mr KOULAKIS: No.

Mr WOOD: I am not arguing against improvements but, for improvements just for improvement sake, without any real benefit, you have to ask what the reason was for it.

Mr KOULAKIS: At the end of the day, you will find, Gerry, that a lot of the technology we have been using is now becoming unsupported and the next version of that is coming up. If you want to be current, you have to move with the times. That is just the market.

Mr WOOD: Yes, and that is exactly what I am saying. You are being driven by the market or by a real need to change. That is what would be a concern for me because, if you are can do something adequately with the existing computer technology ...

Mr KOULAKIS: Sure.

Mr WOOD: There are only so many things a department needs. For instance, it might need information about a patient and wants to keep good records of that. If you build up a bigger bureaucracy to handle more and more information, and the patient dies, it is not much good to them, but you have a fantastic system of information that is costing millions of dollars. Did it help the patient? I am not sure. In the end, that is what governments are about; to improve looking after the people it serves.

Mr KOULAKIS: That is one of the lost arts, that is, benefits realisation. Have achieved the outcome we initially envisaged?

Mr WOOD: What is that term? Benefits ...

Mr KOULAKIS: Benefits realisation. Have we realised the benefits we intended at the time when we initiated this project, when we set out to undertake this particular project.

Mr REDMAN: This is a really important line of questioning about capability and project management capability. Let us assume every employee in the Northern Territory government gets a double PhD from Harvard in project management and are the world experts, and every employee has this expertise. You will still get issues exactly as you described, as scope and meeting the intended outcomes of government as opposed to meeting the outcomes of the perfect project plan.

There will always be what the New South Wales Auditor-General describes as a capability deficiency between the expertise of government and the expertise within technology. That can translate in a clumsy example, I guess, of large multinationals with entire departments and divisions devoted to contract negotiation versus a project team within any kind of government. You will always have that displaced symmetry.

The ACS reckons the way to deal with that is through gateway review methodology - an independent body external to the project that measures the project at milestones made up of gateway accredited professionals. This occurs in every state in Australia, I think, except the Northern Territory. The question we have for the Northern Territory is, why aren't you guys doing this when, in fact, every Auditor-General report we have sighted in submissions from Australia and overseas recommends this exact process. All these things could of being avoided.

The reason I am passionate about this is it is not just about cost overruns ...

Mr WOOD: Inefficiency.

Mr REDMAN: ... and perverse outcomes and unintended consequences, people are dying. A couple of weeks ago a kid in Melbourne, in a horrible story, was killed by his father at a cricket match. Two weeks later, the Victorian police say, 'Because of a computer glitch we didn't arrest that guy'. It could have been prevented. These are fundamental citizen/government issues beyond budgets, beyond project methodologies.

The Northern Territory government, and every government, needs an independent gateway review process. It may be for big projects worth \$30m, or it could be for little projects that have a huge impact. For example, I think in Victoria they mandate \$30m - it could be \$10m - a gateway review process is needed on top of the project management. For some projects like speed cameras - I think a speed camera refresh in Victoria was sub the trigger, but the impact of getting it wrong is significant, so the gateway review process was put on top of that.

A gateway review process is not a huge cost. A gateway reviewer could be paid \$10 000 - a team of four people \$5000 each. We are talking sub-\$50 000 for a gateway review. It is pretty simple and recognised around the world - in the Commonwealth at least - as a great surety to client citizens for outcomes. It was kicked off by Peter Gershon, who did the Gershon review of the Commonwealth government. It is about 10 years old. It is well documented and pretty much every state, except Tasmania and the Northern Territory, adopt this methodology. Why is the Northern Territory government not looking at this seriously?

Mr KOULAKIS: The other aspect of that is the learnings at that checkpoint are fed back into the project. If there is a lapse in the project management discipline being used it is identified. If there is a change in management issue, if there is a realignment of benefits -in other words, the radar has changed, perhaps that is when you make the decision to stop the project.

Mr REDMAN: One of the key things about the gateway is it does not report into the project. It reports into the ultimate sponsor, which may be the minister.

Ms LEE: Relationships with vendors have been successful in ITC projects. What can be done to improve the vendor's relationship in both the procurement and implementation phases?

Mr REDMAN: I think both the ministerial council and the gateway review process dramatically improve vendor relations. This also now leads into improvements in procurement, which industry associations are probably better placed to speak about - things that can be done to improve relations between vendors and government in that process. What I am saying is the relations do not just start when the project commences, they start way before that in the procurement process, and even before that in the advice, strategic direction and formulation of the strategy to government. Vendors have a legitimate and invaluable voice in those preliminary discussions.

Madam CHAIR: You recommend the government adopt a standard project and program methodology. To what extent can standard project methodology, such as PRINCE2, be tailored to suit the needs of individual projects?

Mr KOULAKIS: PRINCE2 is just one of the methodologies available which underpins the project management discipline, and, again, it is based on the project management book of knowledge ~~effectively~~. At the end of the day, it has to be top down driven. We are in a situation at the moment - and if I put my private sector hat back on for a moment - one of the things I have sought to do privately is grow the discipline and skills in the Northern Territory. In 2008 we were looking for a good quality project manager to take on a high profile project worth about \$11m and we could not find anybody. At the time, I changed my working situation and home life and took on that project, but made a conscious decision that we needed to grow skills locally because of this fly-in fly-out mentality, plus it costs individuals and agencies, and government as a whole, a lot of money to send people down south to be trained.

In 2008, is we started running some courses on project management. The point I am trying to make is the people attending the courses I have been facilitating, have been doing that mostly off their own bat - not because their boss is sending them to it but off their own bat - to maintain and develop their skills because they see that criteria now appearing in job positions across the Territory.

In order for that discipline to be effective it needs to be top down driven. The challenge for the Northern Territory government is many of our CEOs, CIOs, CFOs, and steering committees, need to make a conscious effort to adopt the disciplines - whether it is PRINCE2 or another - and execute or use them consistently.

As I said, there are different projects, different sizes, but there is always risk. You do not have to use the full - in the context of PRINCE2 – PRINCE2 methodology for every project, there is a light version. A good project manager will make that determination and work with the client to put in place the right checks and balances based on that approach. The same with the agile approach - whether it is through Scrum or Agile project management - in the broader context - again assumes a level of discipline that has been used.

Mr Chatterton made reference to the fact that, under the Scrum methodology you are delivering a working version. Again, there are checks and balances that are in place through Scrum around making sure the requirements are defined. It may not be to the detail of the traditional waterfall approach to project management where we spend three months writing our requirements, then going out to tender. Agile is about turning things over a lot quicker, but still relies on certain checks and balances being in place in order to work properly. I do not care whether it is PRINCE2 or the AIPM methodology - pick one, use it consistently. That will give the private sector a clear message that we need to invest in skills and get our people certified. The Northern Territory government can then start using certified professional project managers to deliver its projects. I can guarantee you will start to see a change and results.

David mentioned before AMS. The size of AMS comes around once every 10 or so years. We do a lot of projects every day that are small to medium size. That is where you build capability from. Capability comes from following or building a discipline, and then doing it repetitively, and educating your people, feeding your lessons learnt back in, so you can develop that capability further.

Mr WOOD: Can I just ask on that about upgrading our capabilities?

Madam CHAIR: Yes.

Mr WOOD: How does Charles Darwin University fit into this? Do they have the ability, or are doing it now? I am a bit ignorant on that fact. What are they doing to help improve their skills?

Mr KOULAKIS: Yes. Charles Darwin University has project management courses available. As far as I know, they have project management courses available both, at last indication - I need to double check this - available also over summer school as well. They can do that over summer school if people want to do it over the Christmas/New Year break. CDU does have offerings in that space.

Ms FYLES: Would there not be any advantage in choosing methodology best suited to each project, rather than the one you have recommended?

Mr KOULAKIS: No, I did not recommend one. As I have said they key is to do it consistently. I will share the case of Queensland government. Queensland government went out and said to its agencies, 'We are serious about driving improvements in projects and making sure things come in on time and on budget. We do not care which methodology you adopt, but you need to show a level of maturity and understanding in project management.'

You guys define which one. It is a discipline. There are consistencies and overlaps in all of those. I would not suggest that you select - each project is different. Depending on the size of the project and the outcome you are trying to achieve, yes, software development projects are different to infrastructure projects. For example, the Department of Infrastructure uses the traditional AIPM waterfall approach to project management, is my understanding. In software development you have a choice, depending on the scale of the project and the outcome you are trying to achieve. Scrum might be applicable, PRINCE2 might be applicable.

Ms MANISON: Going back to your recommendation that government looks to establish a ministerial ICT council. You have gone over the makeup of that council and what you would recommend. To further clarify, what would you see as the exact functions of this council, and anything else you would like to add in reference to the council?

Mr REDMAN: Inform the minister on strategy development - so whole-of-government, whole-of-Territory strategy development. Ensure those strategies are achievable, deliver intended outcomes, and recognise emerging technologies as well. So, it is an informative advisory body to the minister. The council could also set the accountability of establishing gateway methodologies. But, achieve that independence – it is outside the project team, outside the government, and outside the vendor of the technology that is being implemented.

Mr WOOD: There is also ...

Mr REDMAN: Typically, they meet quarterly. Their membership is reviewed annually or biannually, and the membership - as George described, where they apply in New South Wales, Victoria, Queensland and other states cuts across business, research, education and the profession as well as industry. It may be the Chamber of Commerce, it might be a large vendor, it would be the industry association, the profession, someone from CDU would be appropriate in that space as well.

Mr KOULAKIS: It also acts as an opportunity for education organisations such as CDU to work with the private sector, and government, to identify future needs and skill sets that may be required and/or put in place broader policies around engaging students. One of the key concerns we have at the moment within the profession is in the Northern Territory we are not providing an avenue for young people to come into the profession. The average age of the ICT professional - looking around the room - is well over 40 and over 45 to be honest, although I am 42.

Madam CHAIR: We are all pretty young on this side, George.

Mr KOULAKIS: The point I am trying to make ...

Madam CHAIR: Give or take.

Mr KOULAKIS: ... we are not providing an avenue to bring people in. In regards to the ITC Council, we see a lot of tenders requiring that in order to put a resource up for a project, that resource must have a minimum of five years' experience. I joined the profession as a graduate and was bid into my first job free for three months while I learnt about the job and got enough runs on the board, and my company was charging full rate for me. Some companies charge 50% for the first two or three months. Whatever the case may be its negotiable, but the point is we recruited through the a graduate intake.

At the moment, with tenders asking for a minimum of five years' experience for all resources, this gives no opportunity for our members to - we have a lot of students who are members as well - to get a start in the profession. Companies will not take on people unless they can bid them into work, because margins

are so tight and there is competition, the world is flat now, and we have southerners bidding for our local work and so forth.

The ICT Council can help advise government around those possible policy initiatives and changes. That is a simple policy initiative to say unless you can demonstrate you need somebody who is an expert at what they are doing and must have five years, why not bring somebody else in and give the opportunity for the industry to grow and develop our local resources?

That is the role of the industry council. It is a double-edged sword. One is to work with government around its strategy and procurement, but also to work with professional societies such as ourselves and CDU to think about the future.

Mr REDMAN: One of the benefits of a ministerial council is to provide advice on where technology begins and ends. The gateway review methodology, as applied in Victoria, did not apply to the Nike smart card project because that was seen as an infrastructure project not a technology project. I do not know what it is about smartcards and transport, you could write books on it. The ministerial council would be the body where they say, 'Minister, this is a technology issue as well as an infrastructure issue'.

Mr WOOD: In some of the projects the committee has looked at vendors have contracted to provide something they have proved unable to deliver. To what extent should purchasers be able to rely on vendors' assurances regarding their capacity to deliver a solution, and what safeguards can be put in place to ensure the vendor has all the information they need to make an accurate assessment of whether or not they can deliver?

Mr KOULAKIS: That is a double-edged sword here. On one hand there is a fear to cancel work. If you have signed a contract then all of a sudden, 'I have to proceed and salvage the best outcome I can'. I go back to what David commented on about perhaps needing to have these people demonstrate their wares before we sign a contract or build, as part of that contract, a period in there where we have the opportunity to review - say yes or no and then put it away.

We are very scared to fail, for some reason. Cancelling or ceasing a project is seen as failure. A lot of learnings have come out of failure. Medicine, for example, where a lot of people have died inadvertently. The lessons learnt have gone back into the disciple - where I talked about capability. Lessons learnt need to be fed back in so we can develop a better approach next time so we do not make the same mistakes. Again, Gerry, it comes back to due diligence.

Madam CHAIR: Great.

Madam CHAIR: Great. Unless there are any questions, or if you would like to say anything ...

Mr WOOD: Just quickly. You said in your report you have dealt with the New South Wales Auditor-General, and he had some concerns about how projects had failed. One of those was conflicts of interest. Is that something you have seen in the Territory, or is it something that is common?

Mr REDMAN: I do not think it is common, but in any commercial arrangement people are conflicted on both sides by their agenda. That is natural and probably a pretty good thing in some cases. You do not expect the vendor to want to lose money on something, and you do not expect the customer to want to get less value than they have been told.

This will always be an issue. As George said, as a probity or diligence, you have to have that project methodology nailed, but you have to have an external review of what is happening to get around that.

Hence, our recommendation for gateways. Where you have a gateway, you have an independent regulator, if you like, looking at it and asking if there is a conflict.

Mr WOOD: You could call that a technological EPA.

Mr REDMAN: Yes, exactly. I do not know how to answer that question. It is probably better suited to our colleagues in industry.

Madam CHAIR: Did you have any final comments you wanted to make?

Mr REDMAN: We think the NT government has really improved. We are really pleased with the August report from the Auditor-General. We thought some really good progress has been made because the focus on government has been refreshed. So, we congratulate the NT government on that. However, we urge the government to consider the ministerial council, the gateway, and really getting a handle on what skills, capabilities, and competencies you have internally and, in recognising pretty much all the submissions here, the need for a consistent approach to project management methodology. We are not saying it has to be one, it has to be yellow, it has to be green, as long as it is consistently applied.

Thank you for the opportunity to appear.

Mr KOULAKIS: The only thing I would like to comment and finish on is there is this perception that ICT is a cost burden across government in the Northern Territory. It is not. ICT is a strategic services enabler and the sooner our CEOs and CIOs understand that, the better and sooner we can deliver real outcomes for both government and Territorians. It is not about a box on a desk, it is about how you use that box and what you do with it.

Getting back to your laptop comment, Gerry, you use e-mail, browser, and so forth. Agencies deliver services through their applications. It might be a case management application, an e-mail application, whatever the case may be. But, that is a strategic differentiator. We deliver our services through those and we can do that a lot better once we make that jump.

Mr WOOD: What I was getting at is I only need what I need, not paying for peripheral things that really are irrelevant that I would probably use once in a blue moon. So ...

Mr KOULAKIS: Horses for courses.

Mr WOOD: That is right, yes. Just making sure when we spend money, we spend it on what we need, not what the market might say we need.

Mr KOULAKIS: I have to say I have had the challenge and opportunity to educate - one, two, three, four, five – I am up to my sixth ICT minister at the moment. We have seen some significant improvements, as Adam said, over the last period. It is evident in simple things like online MVR registration facility. You can check your registration via an app - a small thing. You can pay online, but there are challenges there.

If we focus on the outcome we are trying to achieve, rather than the technology itself, the technology will always be there, the technology will always change. What is the outcome that we are trying to achieve - that is important. How do we do that? We need to talk to the right people.

Madam CHAIR: Wonderful. Thank you very much, Mr Redman and Mr Koulakis. We have really enjoyed listening to you this morning. We again thank you for putting in such a detailed submission. We know that takes a lot of time and energy, and we are extremely grateful for it. So, thank you very much. You can get on with your day now. You are excused, thank you.

The committee suspended

Madam CHAIR: On behalf of the committee I would like to welcome Mr Trevor Oliver, Chairman of the ICT Industry Association of the Northern Territory; Mr David Bradley, the Treasurer, ICT Industry Association of the Northern Territory; Mr Stephen Criddle, General Committee Member, ICT Industry Association of the Northern Territory; and Mr Paul Potter, Senior Project Manager Dialog Information Technology. Thank you very much for coming before the committee.

I might point out at this point my colleague, Natasha Fyles, mentioned the girl power on the PAC this morning following the earlier comments there is a lot of man power on that side of the room. Thank you for coming and we look forward to hearing from you

This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for the use of the committee and may be put on the committee's website. If at any time during the hearing you are concerned what you will say should not be made public you may ask that the committee go into a closed session and take your evidence in private.

I will ask each witness to state their name for the record and the capacity in which they appear. I will then ask you to make a brief opening statement before proceeding to the committee's questions. Could each of you please state your name and the capacity in which you appear.

Mr OLIVER: Trevor Oliver, Chairman of the NT ICT Industry Association.

Mr CRIDDLE: Stephen Criddle, General Committee Member, ICT Industry Association.

Mr BRADLEY: David Bradley, Treasurer of the ICT Industry Association.

Mr POTTER: Paul Potter, and I was involved with the draft of the submission.

Madam CHAIR: Mr Oliver, will you be making an opening statement this morning?

Mr OLIVER: Yes, I have one here for you.

Good morning all, and thank you for the opportunity to present today. On behalf of the members of the NT ICT Industry Association, I would like to recap our submission.

The Association is made up of 47 information technology and telecommunications companies operating in the Territory. It is important to us, in fact vital, that IT projects deliver the benefits they were intended to deliver and within the time lines and costs. Why? Because failure of IT projects tarnishes our profession and stifles further IT projects. The IT projects covered by this review have put a real dampener on any new projects within the NT government.

We have prepared our submission using information that is in the public domain. Although some members have various degrees of information into the projects under review, we have not based our submission on this information. Instead, our submission is focused on future projects and initiatives of the NT government based upon the experience of our members.

Our submission highlights recommendations over six areas that encompass the delivery of projects. They are: project management, governance, business process engineering, solutional technology selection, project resourcing and project methodology. The main takeaways from our submission we would like to emphasise are: use local companies, and, more importantly, the local expertise within these companies where possible. If the NT government determines the NT industry does not have the skills to run a project of this calibre, then these project skills should be developed locally. In some cases specialist skills will be required. We know technology becomes specialised and, in that case, they will need to be brought in. However, project management skills should be developed and nurtured, and the NT government should be looking at programs where project management skills are developed both internally in government and within local industry.

When the NT government undertakes a project that introduces new technologies, as against an upgrade project where we are using existing technology product selection becomes a critical component of the project. A key criteria for product selection should be where the local industry can implement and maintain the technology and, if not, this, obviously, increases the cost of ownership. Thought must be given to how the local industry can gain these skills required so these costs can be minimised. This will require government executives engaging with industry more extensively.

Lastly, project governance. It is obvious the project governance around these projects failed. The executives who sit on project governance committees need to take this activity seriously and be appropriately qualified, which gets back to some of the questions on the previous submission around the gateways. If the decision needs to be made to temporarily stop or abandon the project, then they should not be afraid to use this power to do this when required.

We understand the NT government is working on an across-government ICT governance regime, and we welcome this. We would expect this would address the underlying reasons that these projects in question failed. We are disappointed that, to date, the NT government has not utilised the experience of the NT ICT industry to contribute to the formulation of this policy. We, as an industry group, however, are keen to assist the government where we can.

Madam CHAIR: Thank you very much. Gerry, do you want to start from that end of the table and we will come around?

Mr WOOD: Thank you for that. Your submission states ...

Madam CHAIR: Gerry, your microphone.

Mr WOOD: Sorry.

Your submission states that it is the experience of your members that project governance is usually established in principle, but rarely effectively applied to NT government projects. Can you please elaborate on this experience, and what governance systems would produce better project outcomes?

I will do the Chair's job. Could you just give your name for the *Hansard*. Thanks.

Mr POTTER: Sorry. Paul Potter. Governance is often put as a tokenism, and there are a couple of issues around it. First, regarding the people who are assigned to the governance role, is their competency actually fulfilling role? Then, it is the exercise of that.

A lot has been spoken already this morning about effective project management. That is of critical importance, but what is necessary over the top of that is a governance structure to ensure the project continues to meet the business needs and be efficient. So, your governance structure that needs to be

sitting over the top of that needs to be a mixture of the users and the suppliers, and people who know what they are doing, understand what it is the business is looking for, and are able to identify issues at the level they should be involved at and, then, get involved for a point until something is resolved, or be able to escalate.

Often, a governance structure tends to be a tokenism. The committee meets every second Tuesday and they get a brief and the project is all going very well, thank you, and everybody is happy, and they can all go. That is considered successful because the meeting does not take long and everybody is happy at the end of it. Governance really needs to be an active part of the project, but just at a standoff type of level.

Mr WOOD: You just summarised exactly what we have seen in one of our major failing – or one of the projects that failed. ‘We had the meeting and things look like they are going all right, and we will meet next week’, or next month or something. Do you think in that governance model there also has to be someone who says, ‘That is enough, That is where it finishes’, which you mentioned before.

Mr POTTER: Without a doubt. The governance body must have a leader in itself as well. That person must be charged with the responsibility to make the decisions. Obviously, everybody on the governance body needs to have the authority to perform their role effectively. But, yes, there does need to be a decision and, if that decision is stop the project, they need to have the authority to make that decision.

Ms MANISON: Okay. Still on the theme of governance. You note that governance roles should be prepared to closely investigate selected aspects of a project, especially if they start to receive indicators of issues or risks materialising. It is pretty clear why you have made this observation. What exactly do you think the roles of a governance body should be?

Mr POTTER: The role of the governance body, ultimately, is to ensure the successful execution of the project and manage the three component parts, which are scope, budget and quality. The ultimate role is to ensure that happens. They have a lot of ways of exercising that role, and a large part of the mechanics of it is vested through the project management organisation, be that a single project manager or a project management office. They rely a lot on the project manager; however, they should not rely solely on the project manager. That is why we stated they need to identify if there is an issue and to expand on that if it is within their area they should be responsible for. They delve deeply when they need to, back up to the appropriate overview level across the whole project.

Mr OLIVER: To add to that, one of the issues through some of these projects is some of the risks were not identified. This means the governance committee was not dragging those issues out of the project managers. That is where the experience comes for the people sitting on these governance committees or steering groups. They need to have enough experience and knowledge to be able to draw those issues. Secondly, they need to have the gumption to do it as well and not be worried about, ‘The end of the meeting is coming up’.

Ms FYLES: Your submission calls for active governance practices and developing a culture where governance appointments take ownership of their role. Do you have any mechanisms you could suggest for ensuring a culture of active governance practices in which members take ownership of their role?

Mr POTTER: This is a two-sided thing. This is a responsibility within government and also a responsibility for vendors. It is in the interests of vendors as well to ensure there is proper governance over the project. One of the most effective ways to do it is by exercising effective governance and having it been seen to be effective. You can then take a successful model and apply it to other projects. That usually is restricted to an agency because there is not too much cross-agency communication, but you have the

capability of something like this industry association which, from the vendor's side, is exercising governance. It is talking across the various vendors and ensuring lessons learnt from ineffective governance are applied to improve the governance across agencies that would not necessarily happen within government because they do not necessarily have that cross communication.

Madam CHAIR: You say in your report there needs to be sufficient supply representation at that high project governance level. In your experience are there deficiencies which can be strengthened? Would part of your governance model be that would be much more interlinked between the supplier and the project team, or are there any tips on how, in the perfect world, that would work?

Mr POTTER: I think simply mandate the governance body must include both user and supplier. The level of representation will depend on the complexity of the project, the amount of business areas the users are involved with, but, essentially, from the users and suppliers and then somebody who is over the top of that as the overall sponsor of the project and the key decision-maker if a decision needs to be made between - if there is any level of conflict between user and supplier, which may from time to time occur because of those conflicting priorities.

Mr BRADLEY: Some of the methodologies, such as PRINCE2 for example, also clearly define roles and responsibilities in governance groups. Previous speakers have spoken about NT government adopting one or more methodologies. That will lay out, quite clearly, the roles and responsibilities and would ensure those responsibilities are taken seriously.

Ms LEE: In some of the projects the committee has looked at, vendors have contracted to provide something they have proved to be unable to deliver. To what extent should buyers be able to rely on vendors' assurances regarding their capacity to deliver a solution, and what safeguards can be put in place to ensure the vendors have all the information they need to make an accurate assessment of whether or not they can deliver?

Mr BRADLEY: It is a responsibility of the buyer to make sure they have provided as much information as possible so they get the best selection of competitive quotes. The onus is also on the supplier if they need extra information to ask those questions. That already exists, so I do not see a problem with that.

Application of appropriate governance will stop or pause projects that are not going the way they should be, or the way the supplier has said they would. A buyer or the NT government should not just accept the project is running now and we keep it going. If it is not going to plan then the governance group needs to get involved and stop it, or ensure corrective action happens.

Mr OLIVER: Can I just add to that? With the projects in question, the vendors would all have shown clear capability of being able to deliver the sort of solutions internationally, somewhere in the world. A key aspect needs to be whether they can deliver it in the Territory. It is a fairly unique environment. It is very difficult to get senior, highly-skilled people here for long durations. When you are talking about a large project, you are talking about people here for about two to three years. Consistency of people through projects is a key risk to any project. This is one of the major failings of these projects; they did not look at what the local capability to deliver was. 'Oh, there is not any, what are we going to do about it?'

This is where we come back to building, nurturing a project management capability in the Territory, not just within government, but outside.

Madam CHAIR: That is right.

Mr WOOD: Do you think, not only is there a responsibility for the government to make sure it has all the information up-front for the tenderer to put in an education tender, is there also a role for the private industry to make sure it has an opportunity to question the government about what it is exactly trying to achieve? Some of the projects might have failed because there is an argument that the government said, 'That is the project, this is what we want', and the company said, 'That is fine, we can do it', but no one really got into the nitty gritty and spoke to that person at the front desk and said, 'What exactly do you need out of this?'

I got the feeling that one of the reasons for the big failure was that simply people tendered for something that then started to change mid-way through its life, because not all the information was there. Is there a role for the private side, the tenderers, to ask questions as well, and not just go in and say, 'It is not our fault'?

Mr OLIVER: Yes, a key part of any project, from a vendor's perspective, is do not expect the customer to deliver your project for you. If you have quoted on a project this size, make sure you keep it this size and, if not, raise the flags. That gets back to the government's committee saying, 'They are raising all these flags'.

Whether these flags were being raised during this project, I do not know. From my learnings with government, yes, a key part of any project is to keep the scope narrowed and, if it is going to drift - and quite regularly they do drift - raise the flag and get that issue sorted out about extra money, extra time line, or whether they actually need it. If they do not need it, take it off the agenda.

Madam CHAIR: Building on what Gerry said about radical systems. At the moment, if the government tender goes out and the people at the top think, 'Yes, we need this new system', then the vendor tenders for it and delivers -what? Delivers the script, essentially, because that is what you have been contracted and paid for. Obviously, you are the IT expert and professional and you can see that is not going to deliver the outcomes. I think that is what Gerry was getting to. I suppose there is no legal obligation, but is there a role where the vendor says, 'I know you want me to build you X, but that will not give you the outcome you are after', or is it at present everyone is following the script and trying to deliver the product the government wanted for the price it wanted and that is causing problems as well?

Mr BRADLEY: I think by and large most of the vendors represented in the Territory have been here for a long time. If you look at the people who manage the companies, they have been here for a long time, and their intention is to be here for a lot longer. They are committed to the Territory. By and large, no vendor wants to deliver something that will not work. The majority of vendors are interested in a good outcome and if they see they are being asked to produce something that is not right, they would generally take that up with the client and see what they can do to find an outcome that is what the client needs.

Mr OLIVER: That gets back to when you are evaluating the vendor, evaluate their local capability not their international capability.

MR POTTER: It is also the point of involvement. We discussed, quite a bit, business process reengineering and how important it is to go through that process correctly from the start. Do your process analysis and work out what it is your business needs. Part of that business process re-engineering should be at what point do you get advisors on board, or potential vendors on board, to contribute to your planning process? There is a tendency for a project to be released as - a tender goes out for the project and deliver the whole project. Perhaps there is scope for consideration of partial work on the way through so you get vendor involvement in the early stages of it to actually to say, 'This is feasible, this is not feasible, here are your options for consideration'.

You are not locking yourself into that particular vendor for the overall project; you are only getting in there for the analysis phase. You then have a more rounded proposal together and can go out to the open market with greater surety it can be delivered, and you probably greater surety that the language being used can be understood by the vendors as well as by the business. I think a part of the risk and the difficulty we stated about not getting what you want is, as far as the vendor is concerned they delivered exactly what was asked for, but the language was different so you need a common language, and the best way to do that is cooperative work in the early stages of the analysis.

Madam CHAIR: You talk about that in your submission and it being a cultural change. How do you see the public service moving to adopt this type of strategy?

MR POTTER: Small projects that work, do not take too long, and are incrementally billed. Do not try to change the world in a day; start off incrementally and build from there.

Madam CHAIR: Probably something we have not thought a great deal about is small projects. We look at large scale things, and it is interesting today's theme has come from bad things happen to the big stuff and we can fix that, but the small stuff needs equal amounts of attention, so that is interesting.

Mr BRADLEY: It could be you break the big things down into small components and treat them as separate, individual projects. It then becomes obvious, if one is failing, you might choose not to proceed with the other projects that might come out of that, or you might do things differently.

Mr WOOD: It might be that we have to look at the small projects because David, in the opening address, mentioned a number of small projects had failed. Even though we might break them down, we want to make sure the system is working for the small projects as well. That may be something we need to investigate.

Madam CHAIR: If we are having \$50 000 cost breakouts on \$150 000 small projects that adds up too.

Ms FYLES: Several submissions have noted the importance of using standard methodologies, with PRINCE2 appearing to be the number one favourite, and we have heard about that this morning. However, your submission suggests it is more important to choose a methodology that best fits the project. Is this because there is not sufficient flexibility in standard methodologies? What was the reasoning behind that recommendation?

MR POTTER: No. Methodologies have a basis for themselves. PRINCE2 has been spoken about quite a bit, as well as PMBOK. PMBOK is the project management body of knowledge from which PRINCE2 evolved. PRINCE2 was developed by the UK government for large-scale projects. That is appropriate for projects that tend to be developing something new or to build on something that is already there.

There is ITIL which is the IT infrastructure library, which is a different methodology. That methodology is based on maintenance of operations. If you have a project that is treating more of an operational task, that is a better methodology for it.

Much has been spoken this morning also about Agile methodologies and Scrum has been mentioned. Scrum is a development approach for a particular aspect of Agile methodology. That is quite appropriate for building something new. Within Agile, there is something called Kanban which is another approach which is designed for operational processes as well.

Really, the major differences are whether you are building something new, or the project is involved in a more operational style. That will be a big decision for which set of methodologies you reduce it down to. Then, within the methodologies, you then choose what is appropriate and what is inappropriate. No single

methodology is absolute, and that is the whole idea of the methodology. It is not a set of absolute steps that must be taken every time. Each methodology recognises the projects are different in their scale and complexity, so methodologies usually have a complete for building a space shuttle, then cut-down versions as you are going through the lower end and the small projects. It is not one size fits all.

Ms FYLES: Is that something that, possibly, the department, DCIS, could do better? We have not had the opportunity to question them, and I have a number of questions for later on today. Do they try to use that? From my understanding they have PRINCE2 and the Thomsett methodologies. Do they try to make that fit for these projects, or should they look at them case by case, more than have one methodology? Sorry if I seem a bit vague ...

Mr POTTER: No, no.

Ms FYLES: ... obviously, I am asking the question of you, because I will not be able to speak to you once I have spoken to them.

Mr POTTER: I understand exactly what the question is you are asking. In cases of a couple of different agencies I am aware of, they have chosen a particular methodology. There is merit in doing that because at least they have a methodology and something they can adapt to. It is better than not having a methodology and not having any consistency in the approach.

What I am suggesting is it is not one size fits all, and there needs to be a little flexibility in that. The difficulty agencies face is there is a cost to doing that, because you cannot just have everybody go and do PRINCE2 Practitioner, then everybody is running PRINCE2 methodologies. You need to have people who are skilled in other methodologies if you want them to use and apply them. The other negative towards that is the governance structures, and how you govern a project under different methodologies alters as well.

Your higher-level supervisors are going to need to be cross-skilled if you are going to make the best use and the best methodology for the particular project. There is advantages in what they doing by saying, 'Let us select a particular methodology and run through it', and they are largely cost effort and competencies.

Madam CHAIR: Unless there are any other questions from the committee, did anyone want to make any final comment?

Mr OLIVER: No.

Mr WOOD: No, thank you.

Madam CHAIR: That is all good?

Mr OLIVER: Not without re-reading the opening.

Madam CHAIR: Yes, great.

Mr POTTER: If I could just make one comment about resourcing?

Madam CHAIR: Yes.

Mr POTTER: There is a tendency - and you can understand why as well - for agencies to say 'We will do this in-house', but not look at whether or not they have the capabilities to do it and the competencies in-house to do that effectively. It needs a maturity to go: 'Whilst it would be nice to do this in-house, we do not have the competencies. We need to either upskill our people before we can do this task, or we need to get people in who can do it, or we use a combination as well.'

This is where the local industry can particularly contribute to that, where you build up relationships, and the knowledge we can take into a project helps upskilling in the agency as well. As you build longer-term relationships with lots of small projects, then that assists as well in having a consistency approach across the agencies.

Madam CHAIR: Absolutely.

Mr OLIVER: To follow up on that point, there is a shortage of tenders that come out in that \$100 000 to \$10m IT project area. Two of three projects came out which were very large, and they went out to a vendor to deliver a full solution. However, there are very few tenders – I cannot think of the last one – between the \$100 000 to \$10m which deliver this solution in a box. That is the opportunity for a local business to develop their skills and for government to work with us to build our skills. They probably look at it and say, 'There is no capability in the industry, we will do it in house', which is where Paul is coming from.

Madam CHAIR: Thank you all very much for taking time out of your busy day to speak to us. We have heard your contribution and will be compiling that into our report.

I will call a 10 minute break just so we can refresh. We will then speak to the Institute of Project Management.

The committee suspended.

Madam CHAIR: Welcome back everyone after the break. We are joined now by Mark Dodt, who is the Northern Territory President of the Australian Institute of Project Management. Mr Dodt, thank you very much for coming. We appreciate you taking the time to speak to the committee this morning and we very much look forward to hearing from you.

This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If, at any time during the hearing, you are concerned that what you will say should not be made public you may ask the committee to go into a closed session and we can take your evidence in private.

Mr Dodt could you please state your name and the capacity in which you are appearing today.

Mr DODT: My name is Mark Dodt. I am the acting President of the Northern Territory chapter of the Australian Institute of Project Management. I need to make the Chair aware also of my other obligations here. I am also an employee of the Department of Infrastructure.

Madam CHAIR: Okay.

Mr DODT: Over the years I have been employed in the Northern Territory public service, I have been involved in the development and, basically, the making live of ICT projects. Today, I intend to talk about only AIPM and leave my work half aside.

Madam CHAIR: No, that is absolutely fine. Did you want to make an opening statement about this inquiry to start with, or did you want us to just proceed with the questions?

Mr DODT: I think we should proceed with the questions.

Madam CHAIR: Go with the questioning? No problems at all.

Madam CHAIR: No, that is fine. Did you want to make an opening statement about this inquiry or did you want to proceed with questions?

In the AIPM's submission, it noted ICT project failure can sometimes be attributed to poor sponsoring competencies and almost a studied lack of interest in a large proportion of organisations in developing a responsible and accountable level of sponsor competency. Can you explain what the institute meant by this comment and what we can do in the future to ensure this does not continue to happen?

Mr DODT: Effectively for a majority of projects, projects are set up with an appointed project manager. The project manager is the sole responsible person for that project, but behind that project manager is a group of sponsors. They could be direct supervisors or they could be clients. Over a period of time the AIPM has noted these sponsor groups quite often have the habit of handballing, or relying on the project manager as the sole responsibility for it, instead of taking up responsibility or taking on the shared responsibility of providing information, funding, appropriate time frames and direction to the project manager on an ongoing basis.

When you go further into projects as they become live, the sponsors tend to take a back seat. They are informed by the project manager, but do not take an active part or role in sponsoring the project along and that is where things fail.

Madam CHAIR: How do you think we can change that culture or move that on so there is better buy-in and connectivity between them?

Mr DODT: Sponsors need to be educated. They need to be aware of what their roles and responsibilities are, whether that is through a terms of reference to the sponsorship group or a project steering group. The role of a sponsor needs to be made clear to that sponsor, and how far their obligations go towards that project need to be made clear.

Madam CHAIR: In your institute's experience there is that lack of understanding of how critical a sponsor's role is?

Mr DODT: Correct, yes.

Madam CHAIR: Okay, no problem. Larisa, did you want to ask 19?

Ms LEE: In your submission you note that many organisations lack a structured project management framework. Could you explain what you mean by that? What should agencies do to address this issue?

Mr DODT: A project framework effectively is - in AIPM's term there is a methodology you go about delivering a project. Now, those methodologies differ depending on which country you come from and what countries have adopted. For Australia, we lean towards the project management book of knowledge called PMBOK. PMBOK basically outlines five sections of delivery, and in those sections of delivery there are roles and responsibilities going through. On top of that is a governance structure which, in short form, is a project steering group which holds the sponsors, a project control group which is the technical staff and the project manager, then a working group which gets down to the nitty gritty then, apart from that, you have

other committees and groups that come in to filter in information and deliver the work services to that project.

Many projects tend to get to the point of having a control group, and then, effectively, the control group does the lot. As projects go on there is no control of scope creep, time creep and, of course, cost creep. That is because effectively there is no steering happening at the top, so it is a governance issue.

Ms FYLES: You point to inadequate effort in developing project requirements or failure to adequately stage requirements in a development phase. Do you have any recommendations to fix this problem?

Mr DODT: The first recommendation would be when projects go out the door they have a fixed scope. Projects may go out at the start and, depending on legislation, those scopes may not be fixed at the start, but at some point there needs to be a whole point where the scope is finally fixed. At that point in time there is an agreement to enter into a contract to deliver that fixed scope.

Moving on, any change to that fixed scope is a variation and needs to go through a governance structure for approval.

Ms MANISON: Project requirements can be aimed at supporting business processes rather than business outcomes. How important is it for ICT projects to look at re-engineering business processes rather than supporting existing processes?

Mr DODT: It is critical. There is a trend to not engaging business analysts; they are in short supply. Business analysts have the ability of translating for us what a system can do versus what business wants to do. Many systems that come off the shelf have a generic background from whoever was the original client, and it is on-sold. Whatever that original client did is, effectively, what you are on-selling to your next client. Your next client has to decide whether their business practices fit that mould, or they have to change their business practices - or change the program. Without having a business analyst at the start, you do not have that information flow to the decision-makers.

Ms MANISON: How can agencies get the balance right between redesigning their business processes to suit an ICT solution, and customising solutions to suit their processes? I think you have just touched on it a bit with the business analyst.

Mr DODT: Effectively, it is a value-for-money scorecard, if you like. From a point of view of me coming to you with a project, the options are in-house development versus out-of-house development, or buying in off the shelf. There should be some form of comparison done on, basically, a value-for-money outcome.

On top of that, there also needs to be, clearly, what the business changes required are so sponsors are aware of what is going to be affecting them - not after the fact, but before the fact.

Ms FYLES: A lack of project management skills in government agencies has been identified, repeatedly, as a contributing factor to the problems these projects have encountered. Do you have any suggested strategies agencies could be using to increase their project management capacity?

Mr DODT: First, the adoption of a government structure which takes on accredited project managers and systems, so it is not just down to the individual project managers, it is a system that organisation takes up. Across the board - government agencies and private organisations - you need to be able to have an effective a structure in place that adopts a standardised methodology, learns against that standardised methodology, and adopts the changes that need to come from those learnings.

To have that happening, you need to have some form of structure or framework in place which, for a majority of organisations - government and non-government - is external. AIPM is one, there are many others. That framework needs to be able to be measured and improved upon.

Mr WOOD: I will go off our written questions. From the point of view of having good project managers - and I do not want you to get too much into your other job, but you are in charge of the Institute of Project Management, so you probably have some idea – how well is the Territory served by having good project managers? It is something that has come up with other speakers, that without having that business capability, we are struggling a bit with these big projects.

Mr DODT: We are improving; the Territory is improving. Over the past 10 years we have had an influx of what we call mega projects and of qualified project managers come in. Industry and government has also recognised the value of having qualified project managers. The likes of the Northern Territory government have adopted project management as a skill set, and is actively training staff in project management.

They have adopted frameworks. The Department of Infrastructure now has a project management organisation status, which is accredited with AIPM. So, we are growing. The Territory is growing in abilities and capacities in project management, but it is for the long haul and not an immediate fix. You need to develop those skills up and enhance those skills.

Madam CHAIR: Absolutely. We always say in government there is a high turnover of staff and difficulty with succession planning and things like that. I was wondering if you had any input into how we can better learn from past projects - mistakes and positives - so in future IT projects are not repeating history?

Mr DODT: With the adoption of a framework - and it does not matter which framework you adopt - there is a lessons learnt component. That lessons learnt component requires broadcasting. Whether that is broadcasting through AIPM's events or through internal systems - Intranet sites etcetera - being able to allow a library of knowledge through any organisation is critical to learning from previous mistakes, otherwise we continue to make the same mistakes on a generational path. It is consistent within project management that project managers make mistakes; they will make mistakes and that is the way they learn. How other people learn from those mistakes is what makes project management evolve.

Madam CHAIR: Currently, with government projects, are the lessons learnt shared more broadly across the industry, or are they taken away by the project managers and fed into a network?

Mr DODT: In the case of the Department of Infrastructure they are shared through a system. Within the project management space we have members from several departments who have presented over the last few years to share that experience and knowledge outside their own organisations.

Madam CHAIR: Okay. Are there any other questions? Do you have any other areas you want to touch on or any other gems for us to learn from? We are very eager to ...

Mr DODT: This report was submitted by Brett Walker, my predecessor, who is far more eloquent in writing than me. Effectively, the comment Brett was making is there needs to be recognition of prior learning and ongoing learning. It is critical for any project management system. Project managers need to learn from other people so they do not make the same mistakes or we will inherently fall into the same pitfalls over a generational change. There needs to be - it does not matter which organisation - a commitment to training and ongoing commitment to project management. It is not a quick fix, it is a lifestyle. You need to provide resources so these people can get qualifications and certified if they so choose. Certified project managers allow them to share knowledge not only in their organisations, but externally,

and project managers, as a whole, get to learn far more. Shared knowledge also means increased knowledge, improvement of frameworks, improvement of certification, improvement of systems and that flows on to the private sector, which has its own systems that are worked around this framework they are selling on. In future, ongoing selling of products - the products will come back with those learnings enveloped into that development.

The suggestion of contracting to qualified and certified suppliers is an AIPM branding thing. At the end of the day, for us if you employ someone who is qualified you are employing a knowledge base. Finally, the mantra of project management: encouraging and promoting success. It may be small success, and it is not on the basis of success of, 'This project was absolutely fantastic'. It is based on the processes the project management team put in to place to make that project successful or to pull it out of the hole it was in in the first place. So, acknowledging the processes that were put in and the learnings that came through.

Madam CHAIR: Very good. Thank you very much, Mr Dodt, for taking time out of your busy schedule. Thank you very much to the Institute, and your predecessor, for putting together the submission. It is extremely valuable for us and will help to inform our report. You are now released so you can go on with your day. We hope to see you again soon.

Mr DODT: Thank you very much.

Madam CHAIR: We will have a 15 minute break until the NTPFES guests are coming. Thank you

The committee suspended.

MADAM CHAIR: We might get the next session going. We have Mr John McRoberts, Commissioner of Police and Chief Executive of NT Police, Fire and Emergency Services, and Mr Peter Davies, Chief Information Officer NT Police, Fire and Emergency Services. Thank you both for coming before the committee this morning. We appreciate you taking the time to speak to the committee and look forward to hearing from you today.

This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If at any time during the hearing you are concerned what you will say should not be made public you may ask that the committee go into closed session and we can take your evidence in private.

I will ask each witness to state their name for the record and the capacity in which they appear. I will then ask you to make a brief opening statement before proceeding to the committee's question. Could each of you please state your name and the capacity in which you are appearing.

Commissioner McROBERTS: Madam Chair, my name is John McRoberts, Commissioner of Police and the Chief Executive Officer of the Northern Territory Fire and Emergency Services. Good morning to all members.

Mr DAVIES: Good morning, my name is Peter Davies, and I am the Chief Information Officer of NT Police, Fire and Emergency Services.

Madam CHAIR: Thank you. Will either of you be making an opening statement this morning?

Commissioner McROBERTS: Madam Chair, I do not think there is a need. We are happy to go direct to questions.

Madam CHAIR: No problems at all; we have plenty. Thank you for making a submission to our inquiry. It is very helpful when agencies get involved, and it helps us inform the direction we take and what recommendations we can make to ensure ICT projects into the future are better delivered.

I will ask a broad question to start with. What significant ICT projects do Police currently have under way?

Commissioner McROBERTS: If I start, and my colleague, the Chief Information Officer, who knows more about the projects than I do for very good reason - probably the most significant issue for us right now is the replacement of PROMIS, the Police Real Time Online Management Information System, which is a very sophisticated and significant database for police to collate, store and retrieve information. It is, essentially, the engine room of police information.

There are, of course, important projects that we are directly involved in with other government agencies because we rely heavily on information from the Department of the Attorney-General and Justice, being IJIS, the Integrated Justice Information System, and the Department of Transport MOVERS system, which is the Motor Vehicle and Drivers Licence database. They are integral and inextricably linked to PROMIS and day-to-day police operations, without which our business would become almost impossible to do.

In addition to that, we have a suite of other very sophisticated software systems that enable us to go about day-to-day business. They can vary from forensic services to various proprietary brand software products that we use to monitor and track business. We have a sophisticated data warehouse which Peter can talk more about, which enables us to monitor performance across the agency. We are a performance driven organisation in which we track and monitor everything, particularly how we deal with Budget Paper 3 outputs so we can satisfy government, the parliament and, of course, the community that the police force provides the best possible value for money. That also is a really important way for us to be able to monitor performance and outputs so we can respond to community needs. It gives us an opportunity, real time, to see where things are occurring that residents would expect police to deal with.

We are also very pleased to tell the committee that we are as innovative as we possibly can be. We have recently let a tender for the roll-out (shown later as two separate words – should be consistent) of iPads - tablet devices to every frontline police officer in the Northern Territory. We will be the first police jurisdiction in the country to achieve this by the end of the financial year. We have done that not because providing iPads is a nice thing to do, but we have established that we can achieve very significant efficiency dividends and keep police officers where the community expects and needs them, and that is on the front line (shown later as one word – should be consistent).

Anything we can do real time in the field rather than police officers going back to a base, back to a mother ship to do their business is a good thing. It also does other things. It enables us to conduct checks, real time, which have a variety of benefits. One is we can deal with issues immediately, so if a vehicle is stolen we see very quickly it is stolen, if a driver has his or her motor licence suspended we can identify that, and it really is an opportunity for us to get better at what we do.

Peter might share with you shortly some of the intricacies, but we are now looking at how we can use various types of applications on the Apple system to do things that, to date, have not been achieved. One that I will mention is an application to issue an infringement notice. Rather than take some time roadside to write an infringement, which is effectively old technology, Peter and his team will start, in a couple of weeks, the trial of an infringement app.

That is probably about as much as I can share with you as to what projects we have on the go at the moment. It is fair to say modern and contemporary policing relies very heavily on information technology. Let us face it; information to police is about as important as flour is to a baker, so we need to be able to capture information, but it is not only about capturing it. It is about being able to use it to deliver the services, the core functions, that are expected of a particular agency.

Ms FYLES: Can I ask a question, Commissioner? You mentioned it is the first jurisdiction in Australia to roll out the iPads. Is that correct?

Commissioner McROBERTS: No, Ma'am. I say that when we roll them out to every frontline officer by the end of this financial year, we expect we will be the first jurisdiction to issue them to every single frontline officer. We are trying very hard at the moment to beat another police force to the finishing line. I am confident our Chief Information Officer and his team will do it. They have been told very clearly that I expect to win this race. That will be a very good thing.

Madam CHAIR: No pressure.

Ms FYLES: So, they are being trialled – I am sorry you will tell me more, Peter, in a second – in the Territory and elsewhere in Australia and the world?

Commissioner McROBERTS: They are already on trial. We are already issuing them, they are already out there being used. We have demonstrated them; we have put them through proof of concept. But, Ma'am, you may find it more interesting to hear from Peter. I am the Commissioner of Police, but he is the guy that makes all these things tick in the engine room.

Mr DAVIES: It is best to regard the iPad roll-out as a series of projects. At the end of the day, the iPad is simply a platform, a means of communication. Once that is in place, the world is your oyster in what you want from it. My vision, and the Commissioner's vision, is a paperless office, effectively, where there is no need to go back to the police station unless you need to do obvious things like interview someone.

When a police officer arrives on the scene, they can take photographs and record conversations into data - all on an iPad.

Madam CHAIR: Sorry Peter, your microphone might be off. Is there a red light on? Yes, there you go.

Mr DAVIES: This one? Sorry.

Madam CHAIR: That is all right.

Mr WOOD: That is IT.

Mr DAVIES: I make the point because I am a technical IT person. My experience is in Defence as a project manager and program manager. I want to draw your attention to one thing. The electronic infringements the Commissioner spoke about is a high-risk project, as there are a lot of processes involved.

When I originally went to him with the projected cost of the project, because of the risks involved, it was very high, and he said 'No'. We went back out to look at how we might explore this further to reduce the

risks, and our technical people have identified five key risk areas they have been working on, which we managed to solve a lot more quickly and easily than we anticipated.

That shows you the need to have a very clear and level head and understand that project management is all about understanding risk and, if you cannot mitigate the risk, what you have to do at that point. If you just press on without really understanding the risk, then you are in for a world of hurt.

Madam CHAIR: Obviously, as the Commissioner said, it is extremely high risk for you guys. If one of these things does not work, or you have some blow-out or problem in that, for people's lives or property, it is real time consequences.

We have heard today that project management is key on ICT projects. You guys, obviously, have to keep an extremely tight rein on these types of things, I imagine more so than other agencies. How does police ensure project management and IT skills for managing your IT projects are there? How do you know you have those resources and then deliver them?

Commissioner McROBERTS: Madam Chair, will you indulge me to share with you a picture. I would like to set the scene about exciting projects. It is not mine, it is plagiarised, but it may help you understand that you can ask for things, but you do not necessarily get what you ask for, or what you ask for does not necessarily deliver what you want it to deliver.

Madam CHAIR: Absolutely.

Commissioner McROBERTS: Peter will talk specifically about project management, but the real issue for us is being sure that when the executive or, indeed, the front line, have an idea for a project that it meets our needs, we clearly understand what our needs are and, most importantly, there has to be buy-in from the people who will use it. There is little value in me or the executive deciding we want something if the front line (two separate words used earlier and later – changed for consistency) users of that system do not find it useful, user-friendly, or that the time frame within which the project will be delivered – and in some cases that might spread out to five years – will mean by the time you deliver on the project, if you in fact ever deliver, the technology is either null and void or the business has changed.

Mr DAVIES: In relation to our projects, we are on a never-ending journey to put in place the right organisational arrangements and to standardise what we do as far as possible. My aim is when someone goes onto a project board they know exactly what to expect and the words they use have the same meanings.

Previous witnesses at this inquiry have spoken about techos speaking a certain language and business speaking another language. There is also a project management speak. At the end of the day, what is the board's responsibility, what they should be asking for, demanding and what sort of health checks should be put in place? All this is made much easier if you have standard methodologies and practices. In that regard, I salute the work being done by DCIS to centralise all the stuff in the government's regime. If you are not speaking the same language and the expectations are different from the word go, in the case of the board, what does it do? It is very difficult to understand what that is. That allows you to develop a body of knowledge over time.

The second thing we have put in place is there is a senior police commander who represents the user in all our projects. He owns the business case. It is his responsibility to make sure the requirements reflect the needs of front line police. It is my job, as a service provider, to deliver the projects against his requirements. Automatically we are involving the organisation in the projects. They are not IT projects.

Many of these projects are about change. The IT is sometimes interesting and difficult, but it is not the core of the project; it is giving the user something they really want to use.

If I go back to the electronic infringements project, in two weeks' time we will do an office trial with front line police to make sure what we are delivering lines up with their requirement and is practical and useful. Everyone has a vision in an office of what it will be like, but what is it really going to be like down the front end? I am very keen to make sure we get that right and, once we get through that stage gate and resolve any issues that might arise, we will be looking to do a trial in the public arena before we look at how we roll it out across the Territory.

Once again, it is a staged, managed process where we are willing to stop if we have to. Unfortunately, for a lot of projects there is a tendency to get a momentum of their own and they cannot stop. Every time you try to say it is not quite right you get steamrolled with a thousand other things. We are trying to manage our projects in a staged way so if something is not right it is stopped. We recognise the fact that the project manager has an emotional attachment to the project and is often not the best person to say, 'Hey, stop'.

The Auditor-General did some good work with us recently with PROMIS and opened our eyes up to a whole bunch of things we had not noticed. In the same respect, we have the same issue with our projects.

One of the things in our submission was the need for independent review. If you know what products the project manager is using it does not take very long to see how well they are using them, but several different methodologies complicate the whole game a lot. An independent review is a healthy thing. It should not be seen as something the project manager should reject or a threat. It is there to make sure we understand the risks we are working through.

Commissioner McROBERTS: We have a robust approach governance framework within Police, Fire and Emergency Services. We do not have a scattergun approach or a - you cannot get a project up without going through the governance framework I am referring to. If you find that interesting, Peter can explain to you how a project might start as a seed and the process it follows to pick the fruit. We are extremely diligent in making sure we continue to work on a project that will deliver on time, on budget.

Madam CHAIR: Yes, as long as it is not too long.

Mr DAVIES: It will not take too long. We live in a Microsoft or Apple world where people are used to seeing an app and downloading it straightaway. What the customer does not realise is someone spends an awful lot of time and money getting that environment right.

We have a process that initially you put in a project idea. It gets commented on by the IT and whoever else needs to comment on it, with the aim that if it is not going to get anywhere, it gets thrown out straightaway and we are not wasting time ...

Madam CHAIR: Can I just ask at that point, because I am curious, how many external contractors you have in helping with this, or whether it is a lot of internal experience? When you talk about IT had a look at it, say whether it is PFES IT guys, or whether you guys are bringing – I was curious who your project managers are, or how you do it from that?

Mr DAVIES: Under government policy, most of the developers and the business analysts within our department are contractors. We are about to go to tender in July to renew that contract. It has its pros and cons from that perspective.

Most of the projects we do internally are really quite small, nothing of the size of the AMS project. This process probably would not be suited to the AMS project.

Anyway, once the project idea comes through, it will then go to our Technology and Information Governance Committee, of which I am Chair. Then, it will be issued a priority. If it is a low priority, it is very likely it is not going to go ahead, but at least everyone knows from the get-go exactly what is going to happen.

From there, as part of that, people will be told what the project management's arrangements to be put in place are going to be. For a small, simple project, you do not need a heavy overhead on schedules and work breakdown structures and things like that, but for more complex, more difficult, or high-risk projects, you do. That will be agreed at the governance committee. We are working hard on teaching people as project managers of that sort of framework.

From there, a business case has to be approved that will go back through the Technology and Information Governance Committee to the executive over \$20 000. So, relatively low-level projects end up in front of the Commissioner and the Senior Executives of the organisation, where I am grilled about the pros and cons of it all.

I have to say that business process is taken up by the business owner which, in most cases, is the Commander I spoke to previously, because the business owns the business case. I simply deliver against that.

Ms FYLES: Sorry, can I interrupt you? It goes to a committee group. Can you just explain who might be on that?

Mr DAVIES: Every senior Assistant Commissioner we have, the head of the Northern Territory Emergency Service, the 2IC of the fire brigade, and Katherine van Gorp who heads up our corporate reporting area. She also does our risk and audit area as well, so she is included. It is a very high-level group.

Mr WOOD: Can I just ask about the project to bring out iPads for the police? That is a project, so does that have a beginning and an end? Does it have a gateway - we have been talking about gateways. Does it have somebody to independently check it on the way?

Mr DAVIES: The project to roll out the hardware is a very simple project, at the end of the day, and it has a board which supervises that. There has been a review of the business case in the stages I have discussed, and there will be a review by me of the tender assessments before we accept and go through that. But, as such, there is not an independent review from a board on that because it is quite a simple project. It is just 1300 iPads and when you go to open tender it is quite simple. Indeed, much of the iPad roll-out and the applications that come from it, are quite simple developments.

For instance, we are going to be despatching police cars by iPads very shortly, but that is an off-the-shelf product made by a vendor. We already have I/CAD and Intergraph which we already use within the department. The issues there are more about developing the policies and procedures. I am working with the project manager to look at what project management governance we will put around the policies and procedures.

Mr WOOD: You are giving out iPads now. Is that a trial and you get feedback, or it is on its way?

Mr DAVIES: No, we trialled them last year. We got feedback on size and a whole bunch of other issues.

Mr WOOD: Are they waterproof?

Mr DAVIES: They are very robust. One of the reasons we liked the iPad is that, of the 50 or so we issued, we only managed to break one, and I think a car drove over it. So, that is a key consideration, particularly when you go to remote sites. The last thing you want to be doing is mucking around with hardware.

I have to say it is a fast-moving area of technology, and whether or not we use iPads next time around is completely open.

Ms FYLES: Your submission recommends 30% to 50% contingency funding for ICT projects. How does this contingency funding operate? Are there barriers to providing adequate contingency funding to projects?

Mr DAVIES: On a big project, particularly a developmental project, the risk is you do not know what you are getting into. You have to get a long way into the project before you really understand. You have to understand lots of things, not just the technology but how it will change business processes. Therefore, how do you deal with that risk? You would have schedule contingency and financial contingency, and my experience is 30% to 50% of finance contingency is probably quite reasonable. I like to look at the risk logs and spread the contingency against each risk. If you identify a risk somewhere you are either going to put a schedule risk contingency against it or a financial contingency against it. That way you get some idea of whether or not you have enough contingency. You will find in these projects people pay lots of money in the initial stages where they think they have lots of contingency to deal with relatively small problems, but the bigger problems lurking further into the project have not yet materialised at that stage and when there are not enough funds for those. By spreading your contingency against your risk log, you are effectively getting a much better view of what risk you are running and your capacity to deal with them.

Ms FYLES: That is a simple breakdown of the risks and a dollar figure next to it?

Mr DAVIES: Yes, you might put a dollar figure against it. If it is a particularly important or difficult contingency you might spend money against that risk - do a study, develop - as we have done with the electronic infringements, spend some money for a developer to look at that particular part of the project to see whether or not we can come up with solution. You can spend the money, and it might be money which, at the end of the day results in nothing, but has reduced the risk down to more manageable terms.

Madam CHAIR: Going back to how projects evolve under PFES, if it is over \$20 000 it goes through that rigorous process of assistant commissioners, your corporate services person and up to the executive.

Mr DAVIES: We have business as usual with very small projects, which might be minor changes. They go through a request process straight into my branch, but above \$20 000 is probably wrong. I think it is \$25 000, or in that ball park - it is the delegation. At the end of the day, my committee will make a recommendation to the Executive pointing out the pros and cons, but the business case has to be signed off by the executive.

Madam CHAIR: You have that consistency every time and it never is passed off to, 'Julie is a bit dead in the next few months, she can ...'

Mr DAVIES: The only way we can speed it up is to ask for out of session approval. That still means it has to go to each of the Executive, and if they have a question I certainly know about it.

Madam CHAIR: Okay, great.

Commissioner McROBERTS: It also gives us the capacity to redefine our priorities depending on the environment we are operating in. Accepting some of these projects might be one, two or three years, something might change in our landscape which means a project needs to be parked while something more important takes the priority. The executive needs visibility over that, particularly so we can explain to the minister any variation in budget.

Madam CHAIR: You have got me thinking about succession planning, which is sometimes an issue with agencies. Almost everyone today has said a high turnover in public service means projects get lost along the way. Peter, if you go outside and get hit by the bus crossing Bennett Street, what happens? You guys would obviously have plans for that.

Mr DAVIES: This is an interesting issue. Part of my role is teaching people, so I have spent a lot of time teaching John Weippert in my case - he is on the technology side - a lot more about project management. That is very important and where standard procedures become important too. Once people get used to - when they come in the room on a board or whatever role they are performing, these are the documents they should be seeing, this is what should be on the documents and these are the questions they should be asking and then it becomes much easier. When you have different methodologies or no methodology, you end up with quite a confusing and complicated situation.

Madam CHAIR: I imagine, under your governance frameworks as well, everything is documented and appropriately registered.

Mr DAVIES: Better and better. It is a journey; there is a lot of teaching. For instance, this month the Executive will get a program view of our projects and the health of all the projects. They will get that every three months so they can not only look at the start of a project, but what is ongoing, and also change priorities as necessary.

Madam CHAIR: Bringing everyone on the journey with you. That is excellent. Very good.

Ms MANISON: I will go back a bit to the staged gateways you spoke about, Mr Davies. Your submission recommended that gateway reviews are there to ensure major projects stay on track. We have heard a lot about staged gateways in the inquiries we have been held so far in the questions we have asked. Can you talk us through a bit about where the staged gateways are in your current major ICT projects?

Mr DAVIES: We do not currently have a project of the scale of the AMS project that would warrant the overheads you are talking about. The PROMIS project is very much in its infancy. We have just appointed the project board and are discussing how we are going to set it up and move it forward. It is not apparent.

In my former guise in Defence, I used to run project review boards for what is called Electronics Systems Division. Defence had a lot of trouble with its software projects, so it brought all the trickier ones into one division. On a weekly basis, we would bring a project before the executive and go through a performer, checking the health of the project. It was quite a grilling. It is about learning what the problems of the project are, how we can help the project. If you have a standardised methodology, it becomes quite a simple process to tell very quickly whether or not they have a hope.

Regarding gateways, it is very easy in hindsight to look back. For instance, major reconsideration of the project could have occurred when it went out to tender with a value of \$7m, and the tender came in at \$14m. At that point, either the project officer does not understand the market, or the market does not understand what the project officer is trying to do. Stop the project! Easy to say that, but I am sure there are many other pressures to keep rolling on.

When I say a staged gateway, the important issue is it is a gateway. You will not get through unless you get the following boxes ticked. That is the strength you have to have in your government system, that says, 'I am terribly sorry, I do not care what other issues are there, you are not getting through'. Once people get used to that, then you are far better prepared.

Commissioner McROBERTS: If I can share with you, Madam Chair, anecdotally - and thankfully it did not happen in Australia. The FBI, which is in a similar business to us, spent five years of development and \$170m of taxpayers' money in the early 2000's for the development of the Virtual Case File technology, something probably similar to PROMIS.

It was being delivered by a third party provider and, over the years, it failed in the most spectacular way, such that it has never been delivered to date and \$170m of taxpayers' money has, effectively, disappeared into the ether.

Madam CHAIR: I like in your submission that it says it is an important part that poor performance has consequences for both the contractor and the project managers. We are talking about public money and, sometimes, we can lose sight of that. People seem to think that governments have money, and it is a tree you can keep picking money off. But, at the end of the day, it comes from the taxpayers who work hard to generate that money. What incentives for performance does your agency use for contractors and project managers? How do you capture the lessons learned from previous projects?

Mr DAVIES: We are very much in infancy in this area. I put that in because, in Defence, in my time, we used to rate every contractor every six months.

Madam CHAIR: And they would know about it, would they?

Mr DAVIES: They would rate the project office every six months. Defence is a different environment because it is far more stable, but the reality was I had one project I had to go and resurrect. It was similar to the AMS project in some respects. The only way of getting the contractor to the table in a meaningful way was their knowledge that if they did not help become part of the solution, they would never get another project with Defence and, for a major contractor, that is a big issue.

Unfortunately, in the NT, we are a relatively small player. Nevertheless, by centralising a lot of the stuff that DCIS is suggesting, we should get a stable of project managers who have been through these projects a number of times. Because, let us face it, as I have just indicated, we are not currently running a project the size of the AMS. So, even if we did one now successfully over the next three years, we probably would not do another one again for another five years. DCIS can pick them up on a regular basis and the lessons will be learnt and experience gained, and they have the ability then to export that to the rest of government. There are ways through standardising process, by centralising some functions, where you can then start to have consequences.

I also think a lot of projects should stop but they do not. Good performance is not the project. Bad performance is not the project failed; bad performance is you did not stop it when you should have. That is an important issue. I think we should be rating our contractors. I know they change from time to time, but their reputations are on the line and we should be telling them where we are not happy and vice versa.

Madam CHAIR: Absolutely.

Commissioner McROBERTS: There needs to be an appetite in government to pursue suppliers or providers when they do not deliver on contracts. The private sector takes action against contractors who fail to deliver, and it is important the same rules apply when contracting to government.

Madam CHAIR: I absolutely agree. I am curious about centralisation of these services with DCIS. Everyone has said it is a step in the right direction, which is great. In some projects we have seen a failure of stakeholder engagement, 'The Department of Infrastructure are looking over that. I am Health, and they will just give me the product I want and everything will be fine.' Is Police concerned that with the centralisation they will lose influence buy in or somehow be disconnected to projects in the future?

Mr DAVIES: There is a risk with that, but by standardising the functions on the board and expectations of the board you start to overcome those issues. If I know I am personally responsible for my contribution to that project and if it goes wrong it will be reviewed and it is quite clear and unambiguous, people might think twice about not turning up to a meeting, for instance.

Madam CHAIR: Yes.

Mr DAVIES: Stakeholder engagement is a skill in itself and this is the problem; there are so many different skills you have to bring to bear on a big project like this. I think I described it as complex technical projects in a complex social environment – that no one person has all those skills and that is why it is important the board is made up of a mixture of people who bring those skills to the table, but they are aware of how they exert them.

I have read a lot of documentation and I did not hear what the board was demanding from the project in governance, how things – I heard a lot – read a lot about what the project gave to the board, and I think this two-way flow is very important to promote.

Madam CHAIR: Absolutely. Are there any questions for Mr Davies or the Commissioner? Are there any last pearls of wisdom you would like to leave us?

Mr DAVIES: It is a very complex business and there is no panacea. We have only been doing it for 50-odd years. We will continue to have problems. Everywhere else has problems, so do not think too harshly of the project team.

Madam CHAIR: Yes, thank you. Thank you so much for coming today. We really value your time, input and everything you have said today. Thank you, enjoy the rest of the day, and be careful when you are crossing Bennett Street.

We will break for lunch until 1 pm, when we will have the Department of Corporate and Information Services in attendance. Thank you.

The committee suspended.

Madam CHAIR: On behalf of the committee I welcome everyone to this public hearing into the management of ICT projects. I welcome to the table to give evidence to the committee Ms Kathleen Robinson, Chief Executive of the Department of Corporate and Information Services, Mr Chris Hosking, Senior Director Commercial and Business Services Department of Corporate and Information Services, and Mr Stephen Walker Director, Frazer Walker Pty Ltd.

Thank you for coming before the committee. We appreciate you taking the time to speak to the committee and look forward to hearing from you today. This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the assembly's website. A transcript will be made for the use of the committee and may be put on the committee's website.

If at any time during the hearing you are concerned what you will say should not be made public you may ask that the committee go into a closed session and take your evidence in private. I will ask each witness to state their name for the record and the capacity in which they appear, and then I will ask if you would like to make a brief opening statement before the committee starts with its questions.

Could each of you please state your name and the capacity in which you are appearing.

Ms ROBINSON: Kathleen Robinson, Chief Executive, Department of Corporate and Information Services.

Mr HOSKING: Chris Hosking, Senior Director Commercial and Business Services, Department of Corporate and Information Services.

Mr WALKER: Stephen Walker, Director, Frazer Walker Pty Ltd.

Madam CHAIR: Ms Robinson, will you be making an opening statement?

Ms ROBINSON: Yes, I will.

Madam CHAIR: Great.

Ms ROBINSON: Thank you, Madam Chair. When we last appeared before this committee in December, I spoke of work that was being undertaken to develop a stronger, more robust governance framework for management of ICT across government.

Given that the focus of today's hearing is on the management of ICT projects, it is now a timely opportunity to update the committee on the progress achieved in that area.

It is recognised the all-of-government ICT governance arrangements in place for over 10 years have reached a point where they are no longer effective. The previous arrangements did not include a specific technology review of major ICT investment decisions or oversee the implementation of major ICT projects or initiatives, particularly the high-risk, high-complex projects.

The arrangements in place previously also lacked a strong legislative and policy basis. They did not include specific decision-making and controls other than the standard requirements of the *Financial Management Act*. Given the government's ICT environment has become increasingly more sophisticated, and our dependency on ICT to deliver services to the community and manage government processes has continued to increase, there is a need to address the framework.

A more robust contemporary governance approach is required. A new approach with appropriate checks and balances will ensure better oversight of major ICT investment decisions and management of ICT initiatives at the all-of-government level.

DCIS has worked closely with agencies and with the independent experts, Frazer Walker, to review the ICT governance and develop an approach to improve management of ICT across the NT government. We have developed a comprehensive and contemporary framework called the NT Government ICT Governance Framework, which has recently been approved by government.

The new framework operates under a more robust committee structure with membership at least at the deputy chief executive level for a number of the committees. The framework also includes an element to review the funding proposals, so getting involved right at the beginning of an ICT investment decision process, overseeing the implementation of those projects deemed as major projects, and it also includes placing a much stronger emphasis on the development of ICT policy and standards for application across government.

This framework will be underpinned by a series of the Treasurer's Directions under the *Financial Management Act* which will provide an explicit legislative basis for some of the control requirements we want within the framework. That will enable decision-making and management to be done within those parameters. We are working with the Department of Treasury and Finance on the development of those Treasurer's Directions.

The new framework will improve the alignment of ICT investments with government direction. It will strengthen the oversight of the high risk, high value investments and will put the parameters in place to enable us to more effectively manage ICT across government.

It is a clear and effective response to the deficiencies in ICT management that have been identified through the work of this committee, the Auditor-General and through other reviews.

That is my opening statement. Thank you, Madam Chair.

Madam CHAIR: Thank you, Ms Robinson. A lot of the people appearing before the hearing today commented it was great to see DCIS is taking back control of ICT projects. They are really excited and looking forward to how that will happen. I said I would feed that back to you and your staff if they are listening. You are doing a very good job by the sounds of it. Whilst this hearing is focused on how we can improve for the future, we wanted to touch base briefly on the AMS just to have an update on how the remediation process is going.

Ms ROBINSON: When we last spoke in December, we mentioned we would be finalising our stagegate review process and taking that through to government for a decision, particularly relating to the future of AMS. The review has been finalised and the information has been provided to government for the decision. We are waiting the outcome of that decision at this point.

Mr WOOD: Are we allowed to know what has been recommended?

Ms ROBINSON: I am not able to say until government decides on it.

Mr WOOD: Okay.

Ms ROBINSON: It is not too far away, and then we will be in a position to talk about it a lot more. I think government really is looking at which direction it wants to go at this point.

Ms MANISON: Turning to your review of ICT governance, what were the key issues that were identified by the review?

Ms ROBINSON: The key issues primarily came in, I guess, three areas. One was the explicit focus on investment decisions, getting a lot more of a whole-of-government view from a broader range of people right at the beginning before things go to market, and decisions are taken and we head down a path we may find difficult to get out of later. It is getting a lot more focus at the very beginning.

Having then got projects approved and on the drawing board to be progressed, it is then having an oversight role, having an independent referee, if you like, looking at it, monitoring it, making sure that it is all going according to plan. That will help us detect anything that is starting to go not according to plan much earlier than otherwise would have been the case.

The third aspect is getting the legislative arrangements in place with the Treasurer's Directions and things like that. That is giving the agencies much more guidance around how this needs to be done. It gives them some framework and support in how to go about it, and it gives a set of rules, if you like, where everyone knows what is required more clearly.

Mr WOOD: Can I just ask a question on that? We have spoken about gateways ...

Ms ROBINSON: Sure.

Mr WOOD: ... and some people spoke about staged gateways. Not only is it looking at it right at the beginning ...

Ms ROBINSON: Yes.

Mr WOOD: ... to see whether you make a decision, but there are stages where you can say, 'No, that is it, we are pulling out'.

Ms ROBINSON: Yes, and that is explicitly in the framework as well. That means that is part of the oversight process. The oversight process the committee will do will include regular reporting, it might include conversations with agency Chief Executives and CIOs and people like that. But, it will also include formal stage gate reviews - which will be agreed at the beginning of the projects - at certain milestones that are set. Those stage gate reviews would be controlled through the ICT Governance Board.

Mr WOOD: So they will be independent?

Ms ROBINSON: They will be independent, yes.

Mr WOOD: That is what was spoken about before too.

Ms ROBINSON: Yes. Who is the appropriate party to undertake each of those would be worked out at the time through the board. The difference there, too, is those stage gate reviews would report back through the board, not directly within the agency. We would see that working in close cooperation with the agency. It would not be an adversarial process by any means, but it would have an independence to it.

Madam CHAIR: We, obviously, spoke to industry or representative bodies this morning. With the development of this new framework, was there much consultation with industry or the peak bodies to help form the framework or ...

Ms ROBINSON: There was some consultation, but I am not across the details. I do not know whether you want to ask one of the other people here. I can do that if you like.

Madam CHAIR: Yes.

Ms ROBINSON: Stephen.

Mr WALKER: Okay. In the work I did, I was asked to consult extensively within and with the agencies. Much of the focus of what we did was talking to the agencies about what they felt they needed in place to assist them with their governance processes. The model is not taking over from them; it is just supporting what they have in place. As part of that, we talked to them about what the market feedback and things like that.

The other thing we did was use Frazer Walker's extensive experience over the last 10 years in work we have done with other clients. We also modelled the solutions being used by a number of states - Queensland, New South Wales, Tasmania - and also used one of the Commonwealth corporations, the ABC, as models for that.

The feeling was that was going to give us a broad enough representation in providing the Northern Territory government with an independent view of what best practice for the Northern Territory should be. There were not extensive consultations, from my point of view, with external associations.

Ms MANISON: Ms Robinson, is DCIS looking to consult and chat further with the industry about the new governance framework? One thing we have heard a lot about today has been the need to engage with government a lot more to find out what is coming up, what is on the horizon, so they can better plan their workforce and get them together. They were keen to feed into the process as well to give government feedback. Would that be something you would be looking to engage with further?

Ms ROBINSON: Absolutely. I am more than happy to do that, and that is definitely on our radar to do. We are in the early stages of trying to implement the framework now, so we have the decision and are looking at how to put that into practice. Talking with industries through the ICT Industry Association and others is something we definitely will be doing a lot more of through that process to get it up and running.

We also have a ministerial advisory council that will be featuring as part of the framework, which will include a range of experts within industry - we presume locally and nationally. The members of that council have yet to be determined, and will be determined by the Minister for Corporate and Information Services. We will be starting a process with him next week to work through the membership. That will be another element to it. We talk quite regularly with the industry, and players in the industry, through our normal business and we will expand that to some dedicated arrangements specifically targeting this framework.

Madam CHAIR: The ministerial council was mentioned a lot this morning, so you would have made a lot of people very happy by saying that.

Ms FYLES: How much did the consultancy cost?

Ms ROBINSON: I do not have that information. I can find out and get back to you. I do not have it with me right now.

Mr WALKER: It was a result of an open tender.

Ms ROBINSON: Yes.

Ms FYLES: I am just interested.

Ms ROBINSON: I do not have it with me.

Madam CHAIR: Will the new framework apply to projects other than high value or high risk? I think you said high value high risk projects. Is it just for that category?

Ms ROBINSON: It is just for that category primarily. The rules built through the Treasurer's directions will be good practice rules for all projects, but the focus of the Board particularly will be on those high risk high value projects.

Madam CHAIR: Lots of information received today was the big ones, like AMS, come along every 10 or so years. There are lots and lots of small projects and we also need to make sure they are running as smoothly and as best as they can. It is interesting. If you roll-out best practice across the whole of government it should trickle down, hopefully.

Ms ROBINSON: This will be, to some extent, an iterative process. As the board gets together and decides the detail of its criteria about which projects it wants to look at or not, we can move those if we need to. We have identified some high level criteria around projects which affect multiple agencies, projects that have a high degree of complexity or sensitivity around them, projects that are risky in implementation success and things like that. High risk would not necessarily be limited to something like AMS. A lot of other things would be caught in that mix as well.

Madam CHAIR: I will just pass on one of the comments made by the Information and Communications Technology Industry Association. I think one of the gentlemen said everyone looks at the top end and tries to fix that and work backwards. However, starting with the smaller projects and building a base and changing a culture from the small can also be highly effective. I thought I would pass that on as food for thought.

Ms ROBINSON: Yes, and part of that will be addressed through the ICT policies and standards we promulgate, through CIO forums we run, through general day-to-day communication around the different processes available. Agencies also have their own corporate governance requirements which, in most cases, would include an information management committee that would be monitoring within their agency as well. We are more than happy to have conversations with everyone around different ways of addressing that.

Ms FYLES: Is there a single application across DCIS for tracking progress and status of ICT projects?

Ms ROBINSON: Not at this point. It will be developed through the board, but again will focus on those high level projects not on every ICT project across the government.

Ms FYLES: Is a standard project management methodology used for projects?

Ms ROBINSON: There are a number of different project management methodologies, and the agencies evaluate the methodology that suits their purposes best and make their business decisions based on the types of projects they have, how significant they are and which methodology works best for their type of organisation.

Ms FYLES: Are there procedures and policies around that project management methodology?

Ms ROBINSON: As in whole-of-government procedures and policies?

Ms FYLES: Or even within your agency?

Ms ROBINSON: We have arrangements within our own agency for DCIS projects. Through the Treasurer's Directions we are working on, and through the information that will promulgate through the board, we will be putting out a lot more information on that to agencies in the future.

Ms FLYES: Currently there are no policies?

Ms ROBINSON: Not right across government for project management.

Ms FLYES: Does DCIS have policies?

Ms ROBINSON: Yes, we do.

Madam CHAIR: As part of the framework, will a mechanism be built into the framework - Mr Walker this might be a question for you - where the monitoring of the performance of contractors and project managers is kept in check?

Mr WALKER: Most of the projects I was looking at are projects that exist within individual agencies rather than whole-of-government level, with the expectation that was going to continue happening within the agencies rather than something that was going to be managed at the whole-of-government level.

Madam CHAIR: Ms Robinson, just for background. We were just talking before to one of the gentlemen before from Police who used to work at Defence. They used to regularly every six months review their contractors, and the contractors would have to review the project manager. There was always that check and balance. We are talking a lot in this inquiry about stakeholder engagement and whether agencies had enough buy-in to projects and that type of thing. Is there any scope to enhance or increase how we hold contractors or project managers to account?

Ms ROBINSON: Yes, there is. In any of your ICT projects where you have engaged with a vendor, you would have a contract. That goes back to part of the work the board would do with the agencies right at the beginning around tender processes and things like that, to make sure we have contracts that cover the requirements we would have for the NT government. We would expect the agencies would manage those through the course of the project. That would be one of the things that is monitored through stage gate reviews and status reporting of the project back to the board.

Madam CHAIR: People were talking about having the courage to stick to the gate, keep the gate closed, do not walk through it until things are done. They felt a sense of confidence that, with DCIS carrying the flag, then its own corporate knowledge would grow, the project managers within your agency would have a lot more experience because they are dealing with many more projects coming through, and that all looked like it was tracking in the right direction.

Do you feel the framework will give DCIS the courage and the confidence to be strong in its position on how projects are going, what the consequences are, and where we need to go for the future?

Ms ROBINSON: Yes, particularly involving the governance board, which will include a number of the other large agencies and the central policy agencies as well which means there is a broader perspective on it than just our agency. It means we can really keep that whole-of-government focus. Some of the decisions may, at the time, look like difficult decisions but might turn out to be the right ones now. Closing a project is a much more difficult decision than keeping it going. Those things can be taken then and you will have enough depth across that group to consider it fully.

There is also going to be an ICT leadership group formed underneath that which will include quite a number of Chief Information Officers from agencies. That is much more of a technical group, much more ICT specific skills. We will involve those people through that process to really provide some technical analysis as required.

Mr WOOD: Earlier, we heard from the Australian Computer Society. They put in a submission and one of the recommendations was that the NT government appoint a ministerial ICT council comprising senior representatives from industry, the SME sector, and professional societies, and that the ministerial ICT

council oversees gateway reviews for IT projects and establishes the gateway review methodology across government for IT project issuance. Do you think it would be beneficial to have a ministerial ICT council?

Ms ROBINSON: We are part of the way towards that recommendation. There is going to be a ministerial ICT council, but the framework has been approved in the way it is the governance board that will make those decisions. The council is able to put advice to the minister directly and/or to the board on each of those aspects. They can provide information on stage gate review methodology approaches. We will be looking to get that advice feeding in, in deciding how it is done.

Mr WOOD: Would that have representatives, as he said here, from industry, SME - I am not too sure what SME stands for ...

Ms ROBINSON: It is small to medium enterprise.

Mr WOOD: Thank you very much - and professional societies. Would that ...

Ms ROBINSON: Yes, that is what we would be looking to.

Mr WOOD: The other thing is the Australian Computer Society representative said quite a bit about having skilled business managers, and said this is a really important area. It is a qualification, you might say, on its own. He saw that as one of the weak links in some of these projects. Does DCIS have people with those sorts of qualifications? I presume you do, but I am ...

Ms ROBINSON: Yes, we do.

Mr WOOD: ... but I ask the question, and are you trying to promote that within departments – to have specialist people who can run projects?

Ms ROBINSON: The answer is yes. We certainly have a big focus on skills and qualifications within DCIS, and I believe most of the agencies are similar, particularly in their CIO-type roles and their specialised IT areas - the agencies that have large IT roles.

Mr WOOD: Do you have any input into Charles Darwin University in relation to the people you need so they are providing the courses required to replace people as they leave?

Ms ROBINSON: Yes, we do. It is relatively ad hoc at the moment, but we have met with the people at Charles Darwin University a few times and will continue to do that. We have some Charles Darwin University students working with us on some projects as we speak.

Ms FYLES: One of the reoccurring themes this morning was around the gateway review process and project managing rather than – ICT project skills and project management skills are very different. Do you have an organisation chart handy we could view?

Ms ROBINSON: No.

Ms FYLES: It would be interesting to see - getting those skills working together seems to be the recurring theme, but how that happens within your agency, then whole-of-government, and what skills and qualifications those people require.

Ms ROBINSON: Where an entity runs a significant number of projects, one of the contemporary ways of doing it is to run what is called a program management office. This is a dedicated unit focused on managing projects and it works with the business units and systems areas to drive a project from inception to completion. We have a PMO, as it is called in DCIS, and that office runs all our significant projects across the agency. They provide the dedicated methodology and work from A to B, and we have project managers who follow those project management disciplines to help us get through each of the things from

the inception of an idea and something we want to do. It is prioritised all the way through to completion and post implementation review.

Madam CHAIR: Some of the industry reps who were here today were talking about how strong and deep our IT knowledge is in the Territory. Many of these companies have been here a long time, or at least individuals have, and they feel, as a collective, they have really welded their roots into the Territory and are not going anywhere. They have a vested interest in delivering quality products and projects and things like that. Of course, local business wants to be securing local work, and that is across all industries. It was interesting how much emphasis - everyone places so much emphasis on the importance of the local knowledge. We have seen problems with our off-the-shelf purchases and some other things, but I probably did not appreciate just how unique the Territory's system is. It came out extremely loud and clear today that we need ...

Ms ROBINSON: One of the things we find puts us in a unique position when we deal with - particularly on ICT projects - is the fact we run genuine across government systems where we deal with 34 agencies and many different organisations and we have to keep them as discrete units but also have to have a system that works across all of them. That creates a different set of dynamics in building systems, and it is surprisingly uncommon, when you start looking interstate and other places around how they do it, and it is one of the issues we have with system and project ideas that are put to us from other companies.

We use the local market quite extensively, and it is our strong preference to use local expertise wherever it is available for exactly the reasons you said and it builds the knowledge here. We have a panel contract and we access people from those local IT places wherever we possibly can.

Madam CHAIR: They were saying perhaps, instead of having the huge projects, in the future we can look at breaking them down into packages or even the small businesses working in collaboration with each other, which apparently they do quite willingly. It seems there is lots of scope and appetite there - when we talk about the knowledge, the knowledge loss we have with turnover and succession planning and things like that, there is probably a great opportunity to bring the private sector along on our journey to achieve government's objectives.

Ms ROBINSON: We would agree with that.

Ms FYLES: Does the department have a sourcing strategy for these contracts?

Ms ROBINSON: Yes, we do. We have a sourcing strategy across all of our ICT contracts which includes what we do around our project management as well.

Madam CHAIR: Is the framework available publicly or are we able to have a copy?

Mr HOSKING: I have a copy here I can table.

Madam CHAIR: You have one? Great. Do you want to table it? Thank you.

Mr WOOD: Do You do other projects besides IT, or is that your main work?

Ms ROBINSON: ICT is definitely our main area. We do some others. We work in property leasing areas, payroll - a whole raft of other areas. Items come up from time to time in those areas where we would look at them. Properties is probably the main other area we would get involved in projects that are not ICT projects.

Mr WOOD: I was just asking that to see whether you regard ICT as a specialist area when it comes to contracts, compared to, say, you are building a road or something. Are the risks much higher because the unknowns are still sometimes out there and you do not find them until you get closer?

Ms ROBINSON: As we have been looking at this, and been thinking about that question, there are probably two main differences between the ICT projects and something like a construction or an engineering project that add a layer of challenges.

The first one is you are working in something that is virtual. At the end of the day it is code - it is ones and zeros and it is all sitting behind. You are trying to build something which is not as easy to see as building a road, a bridge, or something like that. It is harder to see where things are not happening exactly as they should be. You have to do build and then test, and do all sorts of things like that, so that adds a layer of challenge and of complexity to it.

The other thing is it is a much more recent discipline. Humans have been building for centuries and we are very good at it in large areas. So, the discipline has been built up, the expertise is there, the knowledge is there, we know exactly how to go about it.

In ICT, it has been around since about the 1960s all up but, as you can see, it grows exponentially, there is more focus, and each decade much more effort is put into it. Our reliance on ICT is much higher - those projects are getting much more prominent. Human beings have had a lot shorter period to get that level of discipline and knowledge in that area.

Ms FYLES: It might be something that is in your policy, but can you talk us through - for our understanding because we are, obviously, trying to get a grasp on this to make some recommendations - when you have an ICT project, unlike a construction project which you can see the tangibles and, if they are not met, it is quite easy. How do you work through the detail of each step?

Ms ROBINSON: Okay. The details of each step of an ICT project?

Ms FYLES: Broken down into steps like a description, business case, methodology. All that is broken down for each project?

Ms ROBINSON: Yes, it is. I am not the person to give you the exact step-by-step breakdown. However, we have steering committees. Each individual project has its own steering committee, then we have some broader governance groups that look across them. Each project, working to a methodology, has a series of defined steps. Other steps would be added in, to the extent they were needed for any particular project.

We work on a proper project planning methodology with GANTT charts and everything like that. In that respect, it is very similar to what would happen in a construction project. The steps might be different but the methodology and the approach is all mapped out in elapsed times – you step through where you cannot start this one until that is done, and it is all worked through. The steering committees go through those charts.

Ms FYLES: Are those steering committees made up - I guess it would depend on the project - of representatives only within DCIS or from other government agencies?

Ms ROBINSON: It really depends on the project. In some areas, they are representatives within DCIS, but in quite a number of ours they include representatives from agencies. We have a number of projects where we bring agency people on to the steering committee. I have one we are looking at around the Intranet site now, where we have people from two or three agencies.

We also make quite extensive use of what we call agency reference groups, where we bring the business practitioners within agencies in and talk to them and work through with them, as we are building, particularly things where we are doing something that is quite new and where we might be prototyping and things like that. A good example would be our electronic invoice management system, where we had a large and active agency reference group – finance staff from a number of agencies – and we worked with them a lot.

If you look at our system, there are heaps of features in the system which are a direct result of the input of those agency staff.

Ms FYLES: Those agency staff linked in with your steering committee?

Ms ROBINSON: Yes.

Ms FYLES: How does it go back – Responsibility seems to be a recurring theme. The steering committees are great, but there is no responsibility tied to job positions. How does that link?

Ms ROBINSON: We have project sponsors to take responsibility against each of our projects and a project lead. The steering committee informs that, monitors it and works across it, but there is always a business owner of the system or the project manager responsible until that point then the business owner takes it over from there. We have a formal handover process to make sure they know exactly what they are taking over.

We retain that in-house with some quite well understood responsibilities, and the steering committees play an active role in monitoring it. We do not try to put accountability on the steering committees; we put it on the project manager and the business system owner.

Ms FYLES: Would those people have ICT qualifications?

Ms ROBINSON: Not all would have ICT qualifications. Our project managers do, and our business system owners have a mixture of ICT qualifications and experience. We have people from business units there, from agencies in some cases, who would not necessarily have the ICT background but bring business knowledge around, 'What is the business problem we are trying to solve? What service are we trying to deliver?' They will be focused on it from that point of view – looking at users and what they will get out of it, what stakeholders want, what types of reports and information they ultimately want from the system we are introducing. It is about getting a mix.

Ms FYLES: Would those steering groups and projects sometimes be outsourced to ICT – would people try to build databases?

Ms ROBINSON: We involve ICT companies in the building and getting in some of the technical resources we need. Occasionally we will hire project managers from those companies, or business analysts when we need those skills, programmers if something requires that. In some cases we will go out for a particular product and buy it from a vendor company.

Madam CHAIR: Staying on the same theme of stakeholders, we have seen with other ICT projects we have looked at there has been a failure to get stakeholder engagement and some agencies have assumed other agencies will take all the risk and there has been a lack of engagement through lack of understanding of the significance of it. In the new framework what incentives are there for stakeholders to stay connected to projects and have that ownership, especially – I asked this of Police – is there a fear DCIS will be the head boss and everyone will be left out? I am sure that is not the case. Is there something to ensure collaboration is there?

Ms ROBINSON: Yes, there is. I cannot point you to a specific section or point. It is really how we run it. By running it through a governance board with a number of other agencies, they will not allow DCIS telling everyone what to do. I would not do that because we are not the font of all knowledge. We need other people on there to bring their expertise and information ...

Madam CHAIR: It is more having passengers going for the ride. How do we stop that and get those people to be part of it?

Ms ROBINSON: That requires active management and focus on a very regular basis. It is my intention to do this in a collegiate way which takes us all along the journey, not in a big stick way. That, ultimately, is not workable.

Ms MANISON: Going back to stakeholder engagement - and leadership is critical in management of ICT projects going forward. With the new governance framework, you have a flow chart which looks at the reporting structure. In accountability and management of a big project like the AMS one, under your governance framework, how would that reporting work from the bottom up in? Where does it go for approvals, checks and balances and that type of thing?

Ms ROBINSON: Looking at that in a number of ways, the framework makes it very clear in two or three places - it will say the same in the Treasurer's Directions - the accountability for delivering on a project rests with the agency chief executive. The agency the project belongs to retains accountability for the delivery of that, and that is to allow this not to dilute that mechanism.

If you looked at say a new AMS, a new project coming up or something like that, you would involve the board at the very beginning. When the idea was put forward, before government signed off on providing any funding for it, you would expect the agency and the board to have a number of conversations, work through all the processes, what the different options are, how the business cases is developing, have a good look at the business case and go through it, and before a submission is put to government they would work through it. At the time a submission is put to government the board would review that submission and would comment to government on that submission. If that was accepted and was brought forward, then you would start the process as a pre-planning process where a whole pile of plans would be built to start a project and the board would see those plans. That would include looking at procurement plans and things like that around how it will be done, how it will be resourced, what the time lines will be, those dreaded GANTT charts I mentioned before and that type of stuff.

From then on, the agency would go away and start work on the project in the way it was intending to. The board would have a regular review and a status report would come back. They might ask the project lead to come in and explain how it is all travelling - what is going on with it. The milestones at which the stage gate reviews would be done would be identified right at the beginning. As each one of those milestones was coming up then the stage gate review arrangements would be set in place.

Ms MANISON: Would those stage gates be ultimately signed off by the chief executive, or does it go up to ministerial level?

Ms ROBINSON: It goes to the board. If the result was it was all going fine, the board would need to report to the Minister for Corporate and Information Services, so that might be a report the board is looking at these projects and they are tracking according to plan. If there was a stage gate review and anomalies were being picked up, or things were identified, you would want a process of working through that with the chief executive of the agency and the board would then report back through to the minister if there was a significant issue.

Madam CHAIR: This is probably to Mr Walker, how will we measure the success of the framework? How do we know it is way better than it used to be or way worse than it used to be?

Ms ROBINSON: It is quite a tricky question and we have given some thought to that.

Mr WALKER: We have talked about this a lot and one of the issues for any governance process is that it is very difficult to demonstrate value and benefits. When everything is working well it is all invisible and under the line. We know in projects things do not work well all the time and we need to be looking at the success rate of the individual projects being governed by that process and looking at the performance of those projects, not just to go in on cost and time, but that they are also realising the benefits those projects were meant to realise. That is where the ultimate measurement fits - the board's ability to review and monitor the benefits of the project, or the lack of benefits of the project, which are really the key indicators of success.

If a project board stops the project you might say that was success from the point of view of the governance model, but it would not necessarily be viewed a success from the project point of view. It is a difficult one.

Ms ROBINSON: It is tricky because in some respects success might be measured by the lack of disasters, but you could not presume just because the board is in place is the only reason there have not been no disasters. It could be they are perfectly well-done projects anyway. It is a challenge to measure it in some ways.

Madam CHAIR: I guess you are conscious of it and it is part of your formula?

Ms ROBINSON: We have been thinking about it. We will be putting that sort of discussion to the board to decide how it wants to think around those measurements.

Madam CHAIR: I suppose success could be terminating a project at the right point. I think there is no shame in that, yes.

Ms FYLES: Can I ask a question? This document is the whole-of-government ICT strategy? Would that be fair to say.

Ms ROBINSON: No, it is the framework. We will do a separate document which will be the ICT strategy which is looking at the ICT strategic direction aligned with government's direction. That will be a much more of what they call – more like a technology document.

Mr WOOD: I ask you a question that might start right at the beginning. Do you have a role to play in testing whether the changes you are intending to bring in are actually beneficial? In other words, with AMS, the old idea was there was a belief that by putting everything together, things will be more efficient. There is a lot of money going to be spent to make it efficient. If you were to do a cost benefit analysis, would it have been better to leave it where it was in the first place?

Ms ROBINSON: There is an element of that in the framework around what is called benefits realisation. Part of it is identifying those benefits at the very beginning. When I talked about the investment decision point, it is also testing them to see how valid they are and how well they would stack up under scrutiny. Then, the benefits realisation comes at the end; it is part of the formal review process of the project when you look at it and determine whether it actually delivered the benefits.

In some cases, that has to be assessed on an ongoing basis. You are not going to know that exactly on day one. You will know some element of it, then you will keep monitoring as the system stays useful.

Mr WOOD: I have heard that term twice today – benefit realisation. I shall, hopefully, remember it.

Ms ROBINSON: It just means you have identified what you said you were going to get out of the project in the first place, and whether you actually delivered it.

AMS identified that it was going to close some legacy systems and was going to save some money. You would need to check that at the end. Did that happen? We know with AMS it did not happen. However, in other projects you would do that. Part of the exercise then becomes identifying those benefits in a way you can check back against them, then doing the formal checking process at the end.

Mr WOOD: I was also looking at the economics. If you are going to have a project for the next five years and it costs you \$250m to implement this project, when you look back and say, 'The benefit was about \$100m. Why did we not leave it where it was in the first place?' Does that come into it at all?

Ms ROBINSON: Yes.

Mr WOOD: I know one of the other documents here talked about optimism bias, I think it was. Some department would tell you a good story as to why they wanted something – that is what I presume they are saying. I think it came from the New South Wales Attorney-General's report, so I presume that is where someone tells you a good story of why you need it, but it might cost a lot of money.

Ms ROBINSON: It has a passionate interest in solving a problem a particular way. That is a key part of why that governance board is there, because they will take a more dispassionate view with people who will come at it from a number of different angles. The Department of Treasury and Finance is a core member of that board, and they would be paying strong attention to those sorts of numbers you were talking about before.

Ms FYLES: Something that has come up time and time again is the staff turnover, and turnover of positions we see in our projects. How vulnerable is this new framework to the staff turnover?

Ms ROBINSON: No more or less than anything else. Staff do turn over in ICT, as they do in every other area. We experience quite significant staff pressures in HR and Finance, as well as in IT. It is always a balancing act. You get an element of agencies taking staff to and from each other on a very regular basis. That happens in a number of our areas. It happens in Finance and HR, every bit as much as in ICT. It is something that needs to be managed.

Continuity through a project is ideal, and people will try whatever they can to make that happen. You have to deal with the swings and roundabouts as they come to you, in a lot of ways.

Ms FYLES: Is it something that can be possibly addressed through this framework?

Ms ROBINSON: By putting more rigour around it and more guidelines, and establishing it in a way that people know exactly where they are going and what the time frames and the monitoring process are, by having focus on documentation and things like, it would make it easier if there was a change in staff to be able to move from one person to another. However, you are never going to really get away from that as an issue.

Ms MANISON: There were some comments this morning in relation to a lack of project management and business analyst-type expertise across government agencies ...

Ms ROBINSON: Yes.

Ms MANISON: ... particularly dealing with ICT projects. Given DCIS generally takes the lead on these things are you working with HR, OCPE to look at ongoing strategies going forward to further develop those types of skills within the public sector and attract and retain people who are keen to pursue those paths?

Ms ROBINSON: We are not working specifically with OCPE on it, but we are working within our agency on it and talking with people around other agencies on that aspect. Some of those skills require a level of qualifications and things that are not so common in government. We access people with those skills through the local IT companies I mentioned. In some cases it is better to secure them from the market than to have them all in-house, and in other cases we are doing what we can to develop staff. Where people have strong potential in project management and an interest in it we would bring them in and run them through the training programs - give access to the project management methodology training and things like that so people can broaden their skills. We partner them with other more senior project managers on projects so they learn and get skills development that way. Whether that is a person from the private or public sector we work it through.

I have one piece of information in answer to your question on the cost of the consultancy. It was \$86 000 including GST.

Madam CHAIR: Thank you. All the projects we looked at as a committee have struggled with gaining sufficient understanding of what their needs were before entering into the contract. Some of the industry representatives said today there needs to be, to some extent, a front loading of work done at the start. Again, that is having the same language, having someone come in and work up and assess what is needed so you can go to tender on the product as such. What can be done to enable agencies to better understand their needs and communicate those to vendors? I do not know if the department has in mind this type of front loading or changes to procurement, but there seems to be a deficiency in the speak - there is jargon. What is the department doing in that respect?

Ms ROBINSON: Partly that comes to what I mentioned earlier about the focus at the investment stage. I do not mean that to be an agency goes away, works up a proposal, we wait until then and look at it and say, 'That's not going to work'. I mean that to be very much a collaborative process where we would work with them - we are doing this with a couple of agencies now on things they are looking at - so we will work with them on their ideas on what works, how they will put it together and on what they want to do. We might review drafts of their business case. We would participate with them and try to help them get along the journey. If we need to put some of our resources or people into working with them we do.

We do it in an ad hoc way at present. This structure will enable that to happen in a more rigorous way and we can then flow that information down into the other projects that would not necessarily come to the board.

Ms FYLES: Is there a standard project management methodology for projects?

Ms ROBINSON: There is a number, is my understanding, and people will become very passionate about one or another. I liken it to a Holden or Ford type view in some ways. If you have a project management methodology that is sound and steps you through all of the steps to get you from A to B, if it works for your organisation and suits the type of projects and complexity of the projects you are doing, then that is the one you should work to. It is more important that you have the methodology and stick to it than one being superior to the other.

Madam CHAIR: When DCIS are working on a project - I do not know how you plan it all out, but say you did not have that resource or expertise within the department, across government or whatever, you contract that in. You recognise the need for a business analyst or whatever to come in and fill that gap.

Ms ROBINSON: We do that on a very regular basis and we look to the local IT businesses to secure those resources.

Mr WOOD: It might be a nuts and bolts question, but do you charge the department for the work? There is an IT project for the department of Parks and Wildlife, and if you are doing that you charge them for the work?

Ms ROBINSON: No, at present we are just doing it as good citizens and helpful people.

Mr WOOD: Well, I am overcome.

Ms ROBINSON: No, we are not charging explicitly for that work to any of our customers or clients at this point.

Mr WOOD: As much as I have always wondered why one department charges another, I know the Department of Transport or Infrastructure used to charge. Did it have an advantage if you charge Parks and Wildlife so the people who were on the board from Parks and Wildlife might realise if they want to make sure their money is not wasted, they have real input into those meetings, instead of not going along as passengers, as Lia said?

Ms ROBINSON: Yes, we do not ever have a problem with that. When we are helping an agency on something - and we tend to be doing that a bit more now than we used to - the reason they want us to help them is because they need it and they have a very strong interest in getting their particular project developed, built, however they want to do it, whatever stage it is up to. We are getting involved a lot earlier now, which is good. There is never any question of lack of interest or enthusiasm. It is more around whether we are all heading in exactly the same direction, we have all communicated our ideas, and we are all thinking on a whole-of-government level rather than focusing on a particular agency.

I do not have a problem with any of that. DCIS does nominally charge for its services just because of the nature of it as a shared services entity. Our costs are reflected back in agency budgets at a nominal level. That project management office is part of running DCIS, and part of our corporate overheads in that context. The costs eventually do end up back in agency budgets, but we do not fuss over individual areas where we would go and meet with the particular agency and help them on something.

Mr WOOD: I was not picking on Parks, by the way.

Ms ROBINSON: No.

Ms FYLES: Does it sit within DCIS to renew all of the government's IT contracts?

Ms ROBINSON: Yes, it does. There are a couple of agencies - I believe Department of Education has some specifically around its schools and things like that. However, the vast majority of the IT contracts are in DCIS.

I should say that if an agency contracts with a contractor, a vendor, to purchase a particular product or to build a system or do something like that, that does not come through DCIS. I am talking about the main contracts for hardware and infrastructure and all of that.

Ms FYLES: Out of interest, how many is it - five, 10, 15?

Ms ROBINSON: Twenty-odd - over 20.

Ms MANISON: Sorry, going back to that point. For example prior to you getting the AMS system, the Department of Infrastructure would have had the contracts with the AMS system and the Department of Health would have had their contract with their grants management system ...

Ms ROBINSON: That is correct.

Ms MANISON: ... they are working on. What oversight would you have to that to external agencies and their contracts?

Ms ROBINSON: Under the previous arrangements nil. Under this new framework, if they meet those criteria - and those type of contracts would - they would come in as reporting through the board.

Ms MANISON: Okay.

Mr WOOD: What did you do when you did not have the contracts? Sorry ...

Ms FYLES: Do you review them before they are renewed?

Ms ROBINSON: Yes, we do.

Ms FYLES: Is there a process policy procedure around that?

Ms ROBINSON: We go through quite an extensive process. We have been doing that for the last six months or so and we are still doing it now. We go through a process of talking to our contractors about their ideas for taking the next contract round - what has gone good, bad, what are some different things about how we could improve that in the next round of contracts. We ask the players out in the industry that might not be our contractors, but have ideas around how they think we should be providing the services. That is particularly because they are generally focused on how they can get access to that for future contract rounds as well.

We speak to our agencies. We always make sure we go and talk to them because, ultimately, all of the contracts we are running and the ICT contracts are all about providing tools and infrastructure so agencies can do their business. If there is something that is suiting us but making it really hard for agencies, then it is not effective. We test it with them and have a lot of discussions with the agencies around their needs and how effective it has been in working for them and what changes they would like.

We then bring all of that into the melting pot and think about what can actually work in contract conditions, what we can manage with our resourcing, how it all comes together, and we will come up with a view around how we think the contract should be put together before we go to market. We are running then pre-tender briefings where we talk to the industry about what we are planning, what we are doing, and how we will structure our tenders and what we are looking for out of our contracts before we go to market.

Ms FYLES: Is there a specific strategy or does it sit within a team within DCIS?

Ms ROBINSON: It sits within a team within DCIS, but there is a strategy and we have quite significant governance layers over that around ICT in particular, but also all our procurement. DCIS is a large procuring agency so we have governance committees on those.

Madam CHAIR: We always think about how we can capture the lessons of the past, how we can learn and move forward and stop making them. Under the new framework, do you anticipate - with the centralisation of DCIS and things like that - everyone is learning and moving forward with them?

Ms ROBINSON: That is a key requirement we have in DCIS. We run what we call post-implementation reviews, or PIRs, across our projects and really put a focus on how we can learn lessons from each one. That is at a procurement stage and at the end of our projects in a number of places. It is specifically built into the framework to have a post-implementation review at the end of each of those projects.

It would be rare to find a project you could not learn something from and some way of building that into making improvements going forward.

Ms FYLES: Excuse me if this has already been discussed, but I guess agencies are making sure they have the IT skills? With projects and ICT projects you guys have that expertise, but are there any policies around that or is it just providing guidance?

Ms ROBINSON: There are policies. There are a series of policies around how we manage our ICT and we will be doing more of that and more in the nature of guidance under the banner of this new framework. The Treasurer's Directions will help. They will set some high level principles and more guidance will be built under that.

It occurs to me that once we get some of this done we can potentially do more information sharing with the agencies around how we do things and if they are interested in using our templates or copying some of the things we do. They might have better ways of doing things so I am more than happy to hear how they do their detailed methodologies as well. It is just as easy for us to learn from them, but we could potentially do more in that space.

Ms FYLES: Yes, we seem to just have this recurring theme around agencies and their necessary project and IT management skills.

Ms ROBINSON: The framework will address a lot of that.

Madam CHAIR: Could you explain generally what a Chief Information Officer is, how it works and why an agency might need one?

Mr HOSKING: Generally, a Chief Information Officer will be at executive level; the most senior person in that agency with a focus on ICT. They may or may not have a direct reporting line to the chief executive, but they will have a senior reporting line. Their role will be to work with the business executives across the department to ensure the technology delivered in the department, whether it be through outsource contracts or business system projects, is meeting the business needs.

For instance, the CIO of the Health department will be accountable for making sure the IT activities within that department are helping deliver health outcomes in hospitals, clinics, or however they are delivering health services. It is a single point of accountability that operates laterally across all the different service silos within an agency, a bit the way a chief financial officer is responsible for the financials of an organisation. It is a similar sort of model.

Ms FYLES: I suppose because it is so new.

Mr HOSKING: It is fashionable, yes.

Ms FYLES: Finance management has been in as long as history, but ICT is relatively new.

Mr HOSKING: We used to call CFOs financial controllers once upon a time. The CIO was the IT director and CIO is the contemporary term at the moment, but it really means the most senior IT person in the agency who can work with the other members of the executive teams to make sure - as Kathleen

pointed out earlier, we are so reliant on technology to deliver our business these days, whoever is in that role has to be able to deliver that and make it work.

We had a network outage a couple of weeks ago. You saw what happens when we lose access to our technology for a few hours - everything grinds to a halt.

Ms FYLES: Could I ask something about the Windows 7 roll-out. Did you guys roll that out? Gerry you will like this. This morning Gerry did not need a new system ...

Madam CHAIR: I made sure I was away for those two days.

Ms FYLES: How is that going to date?

Ms ROBINSON: The Windows 7 roll-out is progressing quite well. It got off to a slower start than we would have liked. I get reports on it monthly, and the last report showed we are around the 70% mark done. We are tracking to get well over 90% done by the time frame in April. We will not get 100% of devices ready because a lot of them are devices that have very important systems on them and those systems need to be in a version that is not Windows 7. We are working on some other solutions to enable those systems to keep working and not cause issues with Windows 7. I will not get into it because I cannot explain it effectively but it is around virtual environments and things like that.

Ms MANISON: To go back to the ICT governance board and the ministerial ICT advisory council, will there be any formal reporting from those bodies or is it just through the individual agencies that would report their annual reports?

Ms ROBINSON: No, we would retain records of meetings and things like that for each of those groups and would report back to the minister.

Ms MANISON: Would that be published on websites or would it be internal documentation?

Ms ROBINSON: I have not really thought through that yet. I think we would run that through those two groups to work it through, and with the minister. I was probably thinking internal documentation, particularly with the board because it will be focused on internal projects, but with the council it may be something worth thinking about having it externally available.

Mr WOOD: The Auditor-General might ask for it.

Ms ROBINSON: The Auditor-General is entitled to see whatever he wants.

Mr WOOD: We ask the Auditor-General and that is it.

Madam CHAIR: He sits in here all day listening to what is going on.

If there are no further questions, I thank the three of you very much for coming. You have had lots of questions fired at you over the last hour and must be pretty tired. It must be nearly knock off. Thank you very much, it is really important and thank you for putting it together. We look forward to seeing the framework roll-out and best of luck to your departments.

The committee suspended.

Madam CHAIR: This is a public hearing into the management of ICT projects. I welcome to the table to give evidence Mr David Braines-Mead, Deputy Under Treasurer from the Department of Treasury and Finance, and Ms Tracey Scott, Assistant Under Treasurer from the Department of Treasury and Finance. Thank you both for coming before the committee this afternoon. We appreciate you taking the time to speak to the committee and look forward to hearing from you today.

This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If at any time during the hearing you are concerned what you will say should not be made public you may ask that the committee go into a closed session and we can take your evidence in private. I will ask each witness to state their name for the record and the capacity in which they appear. I will then ask you to make a brief opening statement before proceeding to the committee's questions. Could each of you please state your name and capacity in which you are appearing.

Mr BRAINES-MEAD: David Braines-Mead, Deputy Under Treasurer, Department of Treasury and Finance.

Ms SCOTT: Tracey Scott, Assistant Under Treasurer, Department of Treasury and Finance.

Madam CHAIR: Would either of you like to make an opening statement?

Mr BRAINES-MEAD: Yes, I will just make a very brief one, if I may.

Madam CHAIR: That is fine.

Mr BRAINES-MEAD: Madam Chair, thank you for the opportunity to appear before the committee today in regard to Treasury's role in the addressing of options for improving ICT procurement and management across government. When I last appeared before the committee late in 2013, I noted in regard to future ICT projects, Treasury had recognised the importance of ensuring that governance arrangements are strengthened, and was assisting DCIS at that time in developing a new ICT governance framework. As the committee is now aware, this framework has been developed and approved by government.

As part of the framework, the key element will be the strengthening of the legislative arrangements. In this regard, Treasury will be developing a series of Treasurer's Directions with the assistance of the Department of Corporate and Information Services under the *Financial Management Act* that will provide and enhance legislative basis and guidance to agencies on ICT decision-making and management. In addition, Treasury will have central agency representation on the newly-formed ICT governance board under the framework.

That concludes my opening remarks. I am happy to take question of the committee.

Madam CHAIR: Great. Thank you. Can you outline Treasury's involvement in the development of the new governance framework?

Mr BRAINES-MEAD: Yes, sure. Treasury had discussions with DCIS and assisted them in putting together the framework, in particular, recognising that as a key element was enhancing the legislative arrangements and providing additional guidance to agencies under that framework.

It is one of the key areas under the new framework that was identified, and part of sort of lessons learnt that, whilst the Treasurer's Directions has predominantly, historically, been focused on financial aspects, the governance arrangements is something that, in recent times has become more to the fore, similar to what we did with national agreements providing a greater legislative basis and enhanced guidance to agencies to ensure that improving management and governance across government in this regard. That is Treasury's role in developing the framework. Treasury, over the next few months - we are hoping by the middle of this year – will have the Treasurer's Directions formally in place under this framework.

Madam CHAIR: Okay, great.

Ms FYLES: Something came up this morning that is not on our list of questions, but intrigued me. A few of the stakeholders who spoke to us explained they felt that sometimes these projects sat there for a period of the financial year, then, later in the financial year there was a quick rush to get things done. I thought that government and departments always had the ability to roll over. Say you had funded a particular project and it was obvious that project could not get completed reasonably, there was a possibility of rolling those funds over. Am I wrong or ...

Mr BRAINES-MEAD: No, there is a carryover process. There is a formal process to roll over funding from one year to the next. Obviously, there is criteria agencies have to go through to get that approved; it is not an automatic roll-over. However, there is opportunity, particularly if it has been identified that it is an ongoing project that might necessarily span over one financial year. Obviously, particularly if it has been a government decision to implement a particular new ICT project or whatever, it is something that government would want to continue. So, yes.

Ms FYLES: Thank you, I just wanted to clarify that.

Mr WOOD: It was our impression this morning that some projects had actually failed because of that. Have you heard of IT projects that – we are talking about small ones.

Mr BRAINES-MEAD: No. Again, it comes back to if it is relatively small, then it is something that agencies would probably have identified from within existing resources, rather than requesting additional funding. It might not be something that would come to the attention of Treasury per se unless a request came forward.

Ms FYLES: That is something this new governance framework could make quite clear to agencies ...

Mr BRAINES-MEAD: Yes.

Ms FYLES: ... and ensure support. That might be what we are being told.

Mr BRAINES-MEAD: Yes. I am not aware of any project that has fallen over because there has been a knock-back of funding at the end of a financial year.

Madam CHAIR: I did not get that impression. I thought he meant it puts a lot of pressure to complete a project before June, so they are squeezed. It would be nice, they were saying, to work on it over the span of a year rather than come out of Christmas and then ...

Mr BRAINES-MEAD: Yes, but as I say there are full mechanisms in place that if agencies identify that - not just in ICT, but in any project - there is a change in timing, then there are formal mechanisms they can go through to change that timing in a budgetary sense.

Ms FYLES: One of the risks identified with ICT projects seems to be the under-resourcing to cut costs. Perhaps it is because it is not something we see so much. DCIS spoke about putting together packages and things. What role does Treasury have in funding major projects? Does Treasury have any role in the testing of the adequacy of the planning capacity, or are you just interested in minimising expenditure of requests you receive?

Mr BRAINES-MEAD: Treasury, would only historically be involved if it was a large project that required additional funding from government - a submission that would go up to government through Cabinet. Obviously Treasury, as with any funding submission, would go through, identify, ask questions – ‘Has a cost benefit analysis been done?’ go through all the usual checks and balances that we would do with any other ask for additional funding from government. Treasury would then provide a comment up to government through the Treasurer as to whether the submission, including the potential cost and benefits, was reasonable.

Ms MANISON: A number of jurisdictions have a gateway review system where major projects are subject to external review at key phases to determine whether the next stage will be funded. Is a gateway review system around the funding to be introduced in the Territory? What would Treasury’s role be in that type of situation if it was to be?

Mr BRAINES-MEAD: Certainly. Under the new framework – I think it has been identified before – there will be a number of stage gate reviews as part of that, so in effect gateways, where – one thing which has been identified that has potentially been lacking in the past with ICT projects is prefeasibility and cost benefit analysis. The framework firstly makes sure all of those checks and balances are put in place before a project even is ticked off. Then, as the project is implemented, it will be anticipated like has happened with the AMS system more recently - there would be stage gate reviews put in place to ensure the project was on track, was delivering not only on a cost estimation but also on a project and outcomes basis, and would deliver the business case that was provided in the first place. Under the framework it is anticipated there will be a number of stage gate reviews along the process.

Mr WOOD: The DCIS submission notes a classic mistake made by organisations is to run an ICT project from a business unit using business as usual resources which undertake the project in addition to normal duties. This mistake appears to have been a problem for the Asset Management System, and we have received evidence indicating the staffing cap in place at the time contributed to this occurring. How do the new ICT governance arrangements help agencies manage the tension between the need to get by on existing resources while, at the same time, providing projects with sufficient dedicated resources to ensure their success?

Mr BRAINES-MEAD: I guess, as with not just ICT, but any proposal that goes forward to government requesting additional resources, part of the overall assessment will be to see whether there is the capacity within the agency to deliver the project or whether there is a need to enhance those resources, whether that be internally, through redirection or through bringing in external expertise. If there is a cost involved it needs to be identified up-front as part of the cost of the project.

When a project is costed and all the costs and benefits are undertaken, it is not just the cost of developing and buying the software and the hardware etcetera, it needs to encompass all those potential resources. If agencies do not have those resources available from within, then that is what needs to be identified up-front.

Madam CHAIR: One of the lessons from the AMS projects, at least in our view, is unless you are going to resource properly, you should probably not even bother doing it at all. Does Treasury agree with that position? I am wondering what the implications are to Treasury in its role in funding projects. Everything we have heard today involves front loading the process, spending the money up-front, making sure you have the correct products and things like that. Does Treasury agree with that type of thing, or ...

Mr BRAINES-MEAD: Sure. It is one of the big gaps that has been identified, but I guess it is the same with any project. Even with bricks and mortar projects, if you do not do the design, the planning, make sure you have land tenure issues sorted etcetera, then you are going to have problems further down the track. It is the same principle here. I guess that is what this framework is trying to achieve: try to provide that additional guidance and to make sure all of those checks and balances are put in place up-front to make sure if you do not get the planning right and put in place and cover off on all those aspects, then you are going to end up with some issues further down the line. It may well be you might need to put some additional resourcing and some additional effort up-front, even before you get a tick-off to go ahead.

If I can use an analogy. To some extent it is almost like going down a PPP project with a capital spend where you need to engage and identify a whole range of issues up-front, more so than if you did a normal design and construct.

Ms FYLES: The committee this morning was told by a couple of the representations that projects should be given 30% to 50% contingency as this gives a better guide to likely costs, and helps avoid inappropriate cost cutting. What are your thoughts on that? How does Treasury handle contingency for ICT projects? Is it any different from other projects? Would increasing contingencies for projects create problems for Treasury?

Mr BRAINES-MEAD: I have to say that it is the first time I have heard of a 30% to 50% contingency. It is higher than the contingency for a bricks and mortar project ...

Madam CHAIR: Maybe that letter is still in the post. Monday you will see it.

Mr WOOD: After AMS, it is probably about right. Maybe it is higher than 50%.

Mr BRAINES-MEAD: That is part of getting the business case done up-front so you do not have to have 30% to 50% contingency.

I am not an ICT expert. I do not know if 30% to 50% is the industry standard or not. From a Treasury point of view, that seems extraordinarily high. Before something of that magnitude was factored in, Treasury would need to get an understanding as to what made up that level of contingency, and why it was to that level. We would need to be convinced. As I said, I am not an IT expert ...

Ms FYLES: Neither are we, it was what we were told.

Mr BRAINES-MEAD: ... I do not know if 30% to 50% is a norm. That is the first I have heard of it being that high.

Ms FYLES: Not enough to know.

Mr BRAINES-MEAD: You know Treasury.

Madam CHAIR: To summarise your role, it really is only in bigger projects; you are not involved in things the department is doing out of its own budget?

Mr BRAINES-MEAD: No.

Madam CHAIR: You will sit on the governance, there will be a permanent seat for Treasury there ...

Mr BRAINES-MEAD: Absolutely.

Madam CHAIR: ... and there are mechanisms in place to provide additional funding to front-load funding, to have contingency funding? It is just the processes that have to be followed and ...

Mr BRAINES-MEAD: Yes, lots more checks and balances, and process has to be followed.

Madam CHAIR: You guys do not have any decision-making power as such?

Ms SCOTT: No.

Madam CHAIR: Treasury cannot turn around and say, 'There is no way we are putting \$2m into the proper scoping of this project', it just forms part of the bigger picture?

Mr BRAINES-MEAD: Yes.

Madam CHAIR: At the end of the day, you want to hear the final number and ...

Mr BRAINES-MEAD: Yes. We would, obviously, have input and our viewpoint but, as with anything, Treasury is not the one that ultimately makes any decision on resourcing. That would be something the board would, overall, make a decision on and put up through the minister, then ultimately up to government.

Madam CHAIR: Thank you both very much for coming. We know you have been waiting a long time to get on and you have had your day in the sunshine now. Colleagues back at work were watching enthusiastically, I am sure. Thank you very much; we appreciate it, as always.

Mr BRAINES-MEAD: Thank you.

The committee suspended

Madam CHAIR: On behalf of the committee I welcome everyone to this public hearing into the management of ICT projects. I welcome to the video link Mr David Ovington, Senior Project Manager at ICS Multimedia. You are David, yes?

Mr OVINGTON: Yes.

Madam CHAIR: Thank you for coming before the committee, we really appreciate it. We know you have a very busy schedule and are pleased you are able to speak to the committee today. This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and is being webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on our website. If at any time during the hearing you are concerned what you will say should not be made public you may ask that the committee go into a closed session and we will take your evidence in private.

This inquiry is looking into how agencies can improve their management of ICT projects. While the committee is seeking to learn from what has happened in previous projects, it is not seeking to apportion blame. We are seeking to identify the causes of problems and what can be done to better manage them in the future. We are not seeking to determine moral or legal liability for any damage that may have resulted.

At the same time, the committee is aware its public examination of the causes of project difficulties can affect the reputations of those involved. It has, therefore, sought to give those companies and individuals referred to an opportunity to respond to the matters raised. ICS has taken up that opportunity and made a submission to the committee outlining its perspective on the grants management system project. That submission was this morning authorised for publication and forms part of the public record of this inquiry. Our focus for today's hearing remains how to ensure better management of ICT projects in the future.

Mr Ovington, could you please state your name and the capacity in which you are appearing.

Mr OVINGTON: My name is David Ovington, Senior Project Manager at ICS.

Madam CHAIR: Would you like to make an opening statement before we start questions?

Mr OVINGTON: Only to say good afternoon and thank you for the opportunity to provide evidence to the committee. ICS has provided a written submission so this afternoon I am happy to use the time to take your questions.

Madam CHAIR: No problems at all, thank you. To summarise your submission, what went wrong with the grants management system is the Department of Health's analysis of their requirements on which ICS was meant to rely was inadequate. This required a significant change to the project as this analysis needed to be redone as a first step. However, the department did not change its expectations in light of this problem and continued to impose time line and pressures that did not take this fundamental change into account. Poor communication, often more concerned with blame rather than solutions, between the department, Fujitsu, and ICS, compounded this problem and resulted in the termination of ICS's involvement prematurely. Is that a fair summary of the key issues?

Mr OVINGTON: Honestly, yes.

Madam CHAIR: If ICS had continued on the project, when do you think the system would have gone live?

Mr OVINGTON: There would have been a go live in – you will have to excuse me again. It has been so many years now. There would have been a go live late in 2012, and the project would have been entirely completed at the start of 2013.

Madam CHAIR: 2013, was that?

Mr OVINGTON: The first half of 2013 it would have been entirely complete, yes.

Madam CHAIR: Why did ICS initially agree to rely on the department's inputs into the project? Why were the inadequacy of that input not identified before entering into the contract?

Mr OVINGTON: There was an exercise being done by the department to perform, to do this analysis for the business processes covered by the project, which we were informed through the time of the tendering process was happening in parallel with the tendering process. By the time the project commenced, then the business analysis outputs would be complete and available as a starting point for the project.

Madam CHAIR: To what extent is the onus on the tenderer to be clear on the details of a project before contracting to produce outcomes according to a time frame?

Mr OVINGTON: I am sorry, I did not quite hear the question.

Madam CHAIR: Sorry. Do you need me to speak slower?

Mr OVINGTON: I ask if you can repeat that.

Madam CHAIR: Yes. To what extent is the onus on the tenderer to be clear on the details of a project before contracting to produce outcomes according to a time frame?

Mr OVINGTON: Clearly, it is a shared obligation. Always when responding to tenders, ICS will seek to highlight any areas of uncertainty and point out the implications of any uncertainty that exists. It is an obligation on the organisation issuing the tender to ensure all information provided in the tender can be relied upon. Any tendering organisation will generally make an assumption that the tender documents suggest that some documents will be available, then it would be a reasonable expectation that those documents will be available.

Madam CHAIR: Did the problems with the grants management system primarily arise from the tendering and contracting process, or was it from the management of the contract?

Mr OVINGTON: You will have heard this in evidence over and over, I expect. It is very reasonable to assume that any ICT project - any project – will encounter some unexpected occurrences, some problems. The success or the failure of the project, or the degree to which a project succeeds, depends on the approach to management for those problems once they are encountered.

I suggest that perhaps within the grants management system, the approach that was taken to it and the reaction towards problems when they were encountered was the problem.

Madam CHAIR: Thank you. What can agencies do to avoid such problems in the future?

Mr OVINGTON: In our submission, the points that were key were around ensuring the appropriate expertise and personnel were in place, and trying to do what you can in the alignment of forces, if you like, to ensure when problems are encountered, the approaches taken is to identify solutions and to see problems as humps in the road, to make sure they do not become road blocks. A positive solutions focused-approach to problems will, most times, give a more positive result. Going back to what I suggested about ensuring appropriate personnel are in place. Then there are two areas of expertise, I suppose.

On the project management side, it would be worthwhile ensuring, both on the government side and the vendor's side, there be a clearly identified, appropriately experienced and appropriately accredited project manager who is skilled and accredited in project management and has good experience of ICT projects. It is also clear, and has been a recurring theme through the evidence provided, that the lead project sponsor (inaudible) your project lead on the government side within the business have experience of ICT projects and access to independent advice from someone who has experiences in ICT projects. It can often be the case that your highest risk ICT project are taking place in areas of the business which have not had huge exposure to ICT systems. In that case it is unreasonable to expect the managers who have the good expertise in the operations of the business - it is unreasonable to expect they might also have experience in ICT projects. In those cases, if mechanisms were in place so they can have access to advice independent of the vendor - someone who has expertise in ICT projects - then you would see benefit in that.

Mr WOOD: David, on the issue of having appropriate personnel, do you feel the Department of Health did not have appropriate personnel or properly qualified project managers?

Mr OVINGTON: When representing the business perspective, the department was somewhat over-reliant on the advice of the primary contractor.

Mr WOOD: I missed the end of that sentence.

Mr OVINGTON: They did not have independent advice so were unable to critically assess the information provided to them by the primary contractor.

Mr WOOD: Thanks.

Ms FYLES: You have already touched on this. The United Kingdom Comptroller and the Auditor-General said constructive relationships with suppliers was one of the strongest drivers for success, but it found more difficult to create open relationships and a sense of common purpose and shared risk with public sector clients. What do you see as the key challenges when building relationships with public sector clients?

Mr OVINGTON: I think there are two things. It is the case that if you were to speak in generality, then a private sector organisation can be more focused on opportunity and considered risk taking in order to achieve that opportunity, and is less focused on avoiding blame. A public sector organisation, and the culture in the public sector, can be necessarily more risk averse but more focused on avoiding blame rather than achieving positive outcomes. That is one of the challenges which causes (inaudible), and we see many examples where that is not a problem at all because we are dealing with exceptional individuals in the public sector organisations we are delivering into. We have, for example, a very successful ongoing relationship with the Department of Sport, Recreation and Racing and with Arts NT, where we have very good engagement with the business users who are very focused on delivering their services to the people of the Northern Territory and engaging with us in a way which assists them to do that.

Ms FYLES: What can government agencies do to address these challenges? You have spoken about some strong relationships, what are the keys?

Mr OVINGTON: Where you can identify – as much as possible you want to – it is important to be able to align the forces that drive people's actions. Okay? Because it is people, at the end of the day, in these relationships, if people's objectives are aligned as much as possible then, naturally, the relationships and the engagement will flow in the right direction.

It is equally important that you can identify and acknowledge where there are competing forces and do what you can in the contracting and procurement structure, and then the project management structure, to recognise and accommodate those differences, then the problems are solved.

Ms MANISON: Your submission notes the competitive ICT market can create disincentives for the open communication needed for effective project outcomes. It would seem with the grants management system the subcontracting arrangements exacerbated the communication problems. Why was ICS contracted to Fujitsu? Could ICS have contracted directly to the Department of Health for the development of the system, rather than acting as a contractor?

Mr OVINGTON: Good question. At the time of the tender situation, it was ICS's decision that the right mechanisms for us was to partner with Fujitsu at that time as a subcontractor through Fujitsu. One of the factors involved in that was the local content provisions of procurement policies in the Northern Territory. They are commendable policies. The outcomes they aim to achieve are very commendable, but they do influence the way that organisations will respond to tender situations.

Our engagement, as a vendor, with the end users is much more positive in those situations where we have a direct contracting arrangement. The Department of Sport and Recreation and those other agencies which are currently using the Grants-Tracker, where we have a direct contracted arrangement, the relationship there is much more positive. When problems arise, they are resolved much more quickly with much lower risk at lower cost.

Ms MANISON: Would you say that subcontracting arrangements should be avoided if possible in these types of projects?

Mr OVINGTON: Subcontracting arrangements should be carefully considered. The procuring organisation should be able to exercise a degree of control - certainly have a degree of knowledge - over what subcontracting is taking place, and look to have some contracted mechanisms to ensure a healthy level of communication with subcontractors can occur, if that is required.

In the case of the grants management system, it is not as if ICS was a carpenter subcontracting to a builder. It is more the case that we were a key part of the proposed delivered solution and not a replaceable part of that delivered solution. In that case, it would have served the Department of Health well to have been able to maintain a direct communication channel through to us.

Mr WOOD: Can I just ask one other question? David, have you had any other problems with government departments in the rest of Australia on similar projects?

Mr OVINGTON: We have not had an outcome similar to the outcome we had with the Department of Health in the Northern Territory.

Mr WOOD: Have you had similar contracts to the one that you were trying to build in the Northern Territory?

Mr OVINGTON: We have had. We have delivered projects of similar and greater complexity, and we have delivered many projects in the grants management arena, including ones which involve grants of a service agreement type of the kind that is key to NT Health. We have not sub-contracted in Australia outside the NT.

Mr WOOD: Would this project have been one of the largest, or is it a middle-sized or small project, from your point of view?

Mr OVINGTON: It is on the smaller side of middle-sized in duration, volume of data and financial value.

Mr WOOD: Thank you.

Madam CHAIR: You talked about people having the proper project management capability so what, in ICS's view, form of accreditation should be required of project managers?

Mr OVINGTON: You have heard from the Australian Institute of Project Management today and their accreditation is what - when I am hiring project managers we look either for an AIPM accreditation or for the Project Management Institute, a more globally-recognised accreditation. Both those really just reflect that somebody has relevant training and experience to a certain level and gives you confidence they will be able to practice (inaudible).

Madam CHAIR: We talked a lot today about the different methodologies for projects. Does ICS believe there should be a preferred methodology rolled out across the board for all projects, or that the best methodology for each particular project should be selected?

Mr OVINGTON: Again, I largely concur with the evidence you heard prior to now, which is the key thing is to choose a methodology and stick to it. I was listening earlier today and there is a point around the one-size-fits-all nature of methodologies. My experience is an appropriate methodology allows for a consistent methodology to be used across different size projects, the key point being the methodology sets out the various things you might do and the various things you must do. For a particular project, if you are choosing because of its risk profile, its size or whatever reason, if you are choosing not to do certain

activities you are doing that in a conscious and justifiable way, but perhaps you are saying, 'We won't have this stage, we will not have this particular part of the methodology because it is not necessary for these reasons', then that is far preferable to not using part of a methodology because you were not aware it existed.

Madam CHAIR: To what extent was the application of methodologies a contributing factor to the problems experienced with the grants management system?

Mr OVERTON: They certainly contributed. A key part of any project management methodology is how you deal with the unexpected, how you respond to problems, how you manage change to the plan you had at the start. Some key characteristics of the problems encountered were in the earlier parts of the project change was not allowed for in the face of the reality of events. In some ways a well-documented and understood change process would perhaps have helped.

Madam CHAIR: Are there any final comments you would like to leave us with? The committee has no further questions for you this afternoon.

Mr OVERTON: No. I thank the committee for its time this afternoon.

Madam CHAIR: Thank you very much. Are you on the other side of the world? Singapore is it?

Mr OVERTON: No, not quite, enjoying a nice 20°C degree day in Hobart today.

Madam CHAIR: Oh, okay, you are on the other side of the world then. Very good. Thank you very much, David, we really appreciate your time. We thank ICS for going to the effort of putting in the submission. It is all important, it all helps inform our views and our report writing. Thank you very much. We really appreciate your time today.

Mr OVERTON: Thank you.

Madam CHAIR: Thank you. Goodbye.