ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

Inquiry into Improving Access to Victorian Public Sector Information and Data

Brisbane - 12 August 2008

Members

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Witnesses

Dr Peter Crossman, Assistant Under Treasurer and Government Statistician of Queensland, Queensland Treasury;

Mr Tim Barker, Assistant Government Statistician, Office of Economic and Statistical Research, Queensland Treasury; and

Mr Neale Hooper, Principal Project Manager, Office of Economic and Statistical Research, Queensland Treasury.

The CHAIR—Welcome. I will introduce the committee. I am Christine Campbell, chair of the committee. With me are David Davis, deputy chair; Peter Crisp, member for Mildura; Evan Thornley, a member of our Upper House; Marsha Thomson; and Brian Tee. As you are fully aware, this is an all-party parliamentary committee. The hearing today is on the Inquiry into Improving Access to Victorian Public Sector Information and Data. All evidence taken at this hearing will be recorded by Hansard. It is subject to parliamentary privilege. Comments you make outside the hearing are not afforded such privilege. Could each of our witnesses please provide the committee your name, your business address and whether you are attending in a private capacity or representing an organisation.

Dr CROSSMAN—I am Peter Crossman. I am an Assistant Under Treasurer and Government Statistician of Queensland, Queensland Treasury, 33 Charlotte Street, Brisbane. I am frankly not sure whether I am here in a private capacity or an official capacity, but I will certainly give you an official view.

Mr HOOPER—My name is Neale Hooper. As to my exact title or the position I hold, I am shown there as Principal Project Manager. I am also legally qualified and sometimes referred to as Principal Lawyer. I am in the Office of Economic and Statistical Research, the same office that is headed by Peter Crossman. It is within Queensland Treasury and the address is level 8, 33 Charlotte Street, Brisbane. I am here in an official capacity.

Mr BARKER—My name is Tim Barker. I am the Assistant Government Statistician in OESR in Queensland Treasury. The address is 33 Charlotte Street, Brisbane. I am here in an official capacity.

The CHAIR—Thank you. Your evidence will become public in due course, once *Hansard* has been okayed by you. We are running behind time. That does not mean your time will be cut down, so that is good from your perspective. You have about an hour, till 12.30 pm. You want to show some overheads?

Ms THOMSON—Can I ask a question first?

Dr CROSSMAN—Yes.

Ms THOMSON—What is the role of the Government Statistician in Queensland?

Dr CROSSMAN—The Government Statistician is a statutory appointment by Governor in Council. There is statistical legislation in Queensland and there has been since the 19th century. Queensland is unique among the Australian states by having taken back the powers of the Government Statistician from the Australian Bureau of Statistics to operate our own legislation in terms of my responsibilities and rights in collecting data from within Queensland and maintaining the Office of the Government Statistician, which is a virtual office within the Treasury Department's Office of Economic and Statistical Research. But I also hold the appointment as an Assistant Under Treasurer—that is, an assistant director-general of the Department of Treasury.

Ms THOMSON—What kind of data do you actually collect so separately from the ABS?

Dr CROSSMAN—Under my legislation I may collect survey data, or census data for that matter, from a list of prescribed areas of activity in Queensland which actually encompasses most areas you could think of—for example agriculture, mining, manufacturing et cetera. I can serve a form on anyone within the domestic territory of Queensland, and they are obliged under the legislation to furnish me with answers to that form. I protect the information. It is very similar in fact to the statutory protection which is afforded by the Australian Bureau of Statistics to their statistical respondents as well.

The CHAIR—Thank you.

A PowerPoint presentation was then given—

Dr CROSSMAN—Madam Chair and members of the committee, may I congratulate you on your terms of reference and on your energy and activity in actually dealing with this issue. I believe it is a very important one, as you will see from what I am going to say, for the economy and society of Australia to address these significant issues. So I offer my congratulations to your inquiry.

I should preface all of my remarks and those of my colleagues from Treasury by saying that what we might say today should not necessarily be construed as Queensland Government policy. These are matters under considerable discussion within the Queensland Government, and we have discussed these with our colleagues and other jurisdictions including the Commonwealth at length over the past several years. These matters effectively are being debated a great deal within the bureaucracy, but this is one of the first times there has been a public hearing at which to air what I think are very significant issues.

I am going to talk about the rationale of our approach to this, which gives you a bit of context. Then my colleagues are going to talk in more detail about the Government Information Licensing Framework, which we have been working on with our colleagues from the Queensland University of Technology for some time. Please do not ask me a technical question on the legalities of GILF. I am going to have to defer that immediately to my legal colleagues. I am a mere humble economist and statistician, as you will see. I try to keep things simple. So this is a presentation within a presentation.

I am going to give you a perspective of why a Treasury official is very seriously interested in these issues and a justification for it. It is a very high-level one. It comes down to economic growth being crucial to our progress in society. Productivity has been talked about a lot in recent times. It is an easy disaggregation to make, to disaggregate our growth into various components including labour productivity. Drivers of growth in per capita state income would include labour productivity and labour utilisation. Labour utilisation itself can be decomposed into reductions in unemployment; working harder—that is, intensity; and more people offering themselves up to work. Do not labour on this, but it is important to see that those are the components of economic growth. Let us have a look at how sizeable they might be.

Here is a chart for Queensland about how important these things are relatively. We have on the left gross state income. We have a terms-of-trade effect, which is measured there. If you take the terms-of-trade effect off the growth in gross state income you get the gross state product—that is, the amount that is produced in per capita terms as a growth rate. You can decompose gross state product—that is what most people think of as economic growth—into labour productivity and labour utilisation. It is easy to see from that chart—and this applies to all states; your own state will have very similar results—that labour productivity is overwhelmingly important in underpinning economic growth. So if we want future prosperity we have to really concentrate on the policy drivers for productivity. That explains why everyone is talking about it at the moment.

Having pointed that out, let us ask the question: what is labour productivity? It is output per unit of labour input, yes. It has two sources. It is important to then decompose that into those two sources. That has not been done up until now. To do this on a state basis as opposed to a national basis you have to have estimates of capital stock. I do not want to get too technical at this point, but Queensland Treasury has had a research project on this for the last several years. We have produced estimates of the capital stock of all of the states and territories, and we have with Treasury at the moment results of all of that where we have decomposed labour productivity for all of the states and territories into multifactor productivity and capital deepening.

Basically, multifactor productivity is working smarter; capital deepening is using capital better. That is the difference between the two. What I am talking about here is multifactor productivity: working smarter, doing things more innovatively—and ‘innovation’ is the key word in all of this. The problem with productivity, though, is that it is a treadmill. You cannot just do it this year and forget about it. You have to do next year and the year after that ad infinitum. You have to do it every year. You have to keep on grinding away at this. This

comes down to a process of continuous change or innovation. In a sense, innovation is the same as productivity. It is a change to get something better. Both of them are change concepts. Both of them imply a better result. You are producing more from less for productivity. You are doing things differently to produce more or doing things in a superior way with innovation.

An essential precondition to good change is good information. If you do not know where you are, if you do not know where you are going, if you do not know how things work, if you do not have good information, it is very difficult to change. In fact, it is even more difficult to change in the right way. So you get a rationale, then, for better information. Statistics where I come from are an important type of information. We have a market, if you like. It is not a real market, but we have supply of statistics and demand for statistics.

We have enormous gaps. We have had workshops headed by the secretary of the Australian Treasury exploring the main data gaps for policy work in Australia, for example. This is a key issue for all of our jurisdictions. We need to know about priorities.

But what about supply? Well, we have an issue here. We collect a lot of data from surveys and censuses and so on. We can all do that. I do that. The ABS does that. But we have an enormous amount, a great multiple of information, which is held in administrative collections that we do not use all that well. We do to some extent. The Australian Institute of Health and Welfare, for example, collects an enormous amount of administrative data from the Australian states and territories and from the Commonwealth. Similarly, the Productivity Commission collects an awful lot of information from each of the states and territories on service delivery. They all rely mainly upon administrative collections, but there is a huge volume of administrative collections, and actually not all of them are well managed. There is a lot of inertia, lags, confusion and lack of integration. It is a pretty sorry mess just about everywhere. Individually there are great pockets of gold, but it is diffused and it is not organised particularly well. We have an imperfect understanding of what is out there.

Data custodians sometimes know in isolation what they have got. People in the next workstation pod sometimes do not know what their colleagues have got. Many potential users do not know and cannot know therefore what is actually available to use for change—for innovative change, for re-design of policy, for better decisions and so on. There are imperfect incentives to inform and change. Where are the incentives on the data custodian buried in the middle of a huge department at a comparatively middle or junior level to share this information?

There are many restrictions on sharing information. Some restrictions are genuine, others unnecessary. Some restrictions are ones which we perhaps should address by removing. One of these is fear and confusion as well. There can be no innovation, I would argue, when there are no incentives to change and too many rigidities. You do not know where you are going and you cannot change anyway. The solution is to provide incentives and remove restrictions.

How do we provide incentives with administrative data? Well, use and value of data is the primary incentive. There are a lot of users out there who would dearly love to know about this stuff and then negotiate to get their hands on it. Recognition of this is rapidly increasing. Performance measurement is emerging as a key issue for all of us. In Indigenous reform, again, information is critical to success in that area. COAG, the new SPP arrangements, depend on performance measures against targets. Everywhere there is pressure to use this data more effectively. You cannot use them if you do not know where they are and you cannot use them if they are locked up for no good reason.

In relation to removing restrictions, the first thing we have to do is to get the legalities right, because frankly you have a lot of middle ranking officers who would fear releasing data because they do not believe that they have any legal certainty to be able to release it. That is the first issue you have got to address.

Let us get some certainty into this. Let us remove the restriction of people hiding the stuff

because they are frightened. We should clarify ownership and roles and responsibilities. We have a simple approach here. We argue if it is data that is generated by the government, the Crown owns the data. You will have accountable officers, the directors-general in departments, who have a statutory responsibility in many cases for the administration and management of those data and you have a data custodian who is the person who is most directly concerned with the actual collection, storage and dissemination of the data, but they do not own it. The Crown owns it. This gets around a lot of the preciousness, I think, of departments saying, 'We own this data and you can't see them.' I am sorry, but if it is government or public sector data it is actually owned by the Crown.

As well as problems within government, I would suggest we have problems across governments as well. The Commonwealth and Victoria, I would argue, are the same as us in Queensland. Basically all of your information is owned by the Crown, all of the Commonwealth's information is owned by the Crown and I think we have to be big people about working out and negotiating sharing arrangements across the jurisdictions.

If you look at water, for example, some of the attitudes to hoarding of water data are quite problematic. I believe that we have to negotiate, and we can do this through the licensing arrangements, sensible ways of actually ensuring that we coordinate and share this information. We have to add transparency. Note that on restrictions some are valid and should not be overturned. That would include privacy protection, which I think is paramount.

In statistics we would argue that the integrity of the statistical system relies on identifiable statistics not ever being released to full, plain public view. If you know that I am going to collect your data and I am going to publish it so that your responses are identifiable, next time I come to you then you are actually going to refuse to answer or, frankly, tell me an untruth. Neither of those, from a statistical point of view, are a good result for me. So if only for the integrity of all of our information sets we have got to do that. If it is administrative data, again you will be supplying data to the health department, why? To help your health. You are not supplying it so that your neighbours can see what your condition is. So privacy is very important to this.

There are a few other good restrictions—that is, valid restrictions—and these will include things like national security and, in some cases, criminal process and so on. Clearly there are issues there which need to be protected as well. Quite often people invent restrictions: you cannot have this for what is, when you look into it, a fairly specious reason simply because they are unable to feel that they have legal certainty to be able to share the data—it is going to come back and bite them.

So we should make information about the administrative data sets clear to all potential users. Notice that I have said we should not necessarily make the data available to all potential users. That has to then pass the restrictions test. But on the other hand, people should know what you have got; that you do have data relating to a particular thing. This is a very important principle. Custodians, for example, cannot know the potential uses. These are unforecastable. You have to let the users know what exists, what the quality is like, what the access arrangements are.

And before we go to the expense of the procedure of going out and doing a survey or a census or something like that, we should very much look to see what is already there. I think in most cases you would be surprised at what is already there in the administrative collections of departments. It is not just other public servants who can use this. There is a community out there who would like to use this, whether it is households making their own investment decisions, say for a house—which neighbourhood to buy into and so on—or whether it is a business wanting to make a location decision about where to put their next franchise or something like that. There are a lot of people in the community who would benefit from looking at a lot of non-identifiable data sets held by government. Now, that will come back to innovation and productivity because remember that 85 per cent of our economy is in the private sector. That is where all the stuff is happening. Mind you, our stuff is important too. We have major policy and decision-making challenges ahead of us so we need all the

information that we can get.

In relation to transparency you have got to minimise the costs of doing this—that is, search costs. This is the treasury officer in me speaking very strongly here. It has to be done efficiently and effectively. We need to create pressure for improvements in quality and quantity. I think users will be actually quite important in this regard. Leave it to the users to say, 'Hey, make the decisions.' If we match this with that we get a much better product here—we get innovation. It is unforecastable. We have to maximise that potential use for innovation.

What can be done in practical terms? Well, we all want this, don't we? I have got a lot of cliches here that describe this: the low hanging fruit, et cetera, et cetera. What can we do? This is what we can do. We can do three things. Firstly, we can deal with metadata registration—that is, you register the metadata. Not necessarily the data, but the data about the data. I might be a data custodian of information relating to child safety. Now, I should be able to actually say to you, 'I will tell you the metadata. I have records here, unit records, relating to all children aged between zero and five in certain localities with certain characteristics. I have those data and if you can get around the restrictions you can actually get access to those data. I have published either way a statistical report, which has non-identifiable data about incidents of violence relating to children in that category. There is no identifiable data there. I have licensed this for public view under Creative Commons.' That is what you can do.

Secondly, licensing, I have referred to that. That gives you legal certainty over what you can release and cannot. Thirdly, and this is an important policy issue, do not do daft things. Do not commoditise data, for example, do not centralise data. Centralising data just gives you lots of overheads and risky transfers for no real benefit. Decentralise it, keep it at the level of the data custodian, but you need a mechanism where the data custodian actually tells everyone in the world what their metadata is and then relies upon legally valid licensing to disseminate whatever they want to.

I could talk about metadata registries until the cows come home. I think everyone is beginning to switch on to this. I believe the Australian Bureau of Statistics finally has begun to move its National Data Network Project towards metadata registration, which is good. We are certainly working on this here and working out how we can actually do this. I think other agencies around the world are beginning to do this as well.

Remember, being transparent with your metadata does not necessarily mean that people can get your data. That is a really important point. If you are a looking for a practical example, library catalogues are a very good example of a metadata registry. Just think of the library catalogue: you cannot necessarily get your hands on the stacks, but you can find out that the book exists.

Keep it simple. Do not centralise it. Make it a core responsibility. Stick it on the web site. You can use your web contact management system to do that. It is easy. The technology is already there. You do not actually need a technological solution. It is already there. Just use what you have got. Keep it simple. This allocates the risks, probably keeps the costs down, minimises errors and gives you a single point of truth, which is very important. There are lots of stories, which I will not repeat, of important strategic data sets, and the Queensland Government has about 30 copies of it floating around the system. We just need one, which everyone can get and make sure they have got the correct one at that point. This obviates that difficulty.

In terms of licensing, metadata registries must contain metadata but not necessarily data to clarify the access conditions. So in the metadata you say what the licensing arrangements would be for these data sets. Quite often, as I have said before, the data is currently restricted because custodians do not have a simple, legally valid access to licensing advice or means. Creative Commons helps this. It solves the problem, we believe. Some data will still require more detailed licensing. So at the moment my brains trust are working on restrictive licensing. That is an important path. They have estimated that about 85 per cent of

government data should be simply licensed with Creative Commons. The other 15 per cent is rather more difficult, and we are working on restrictive template licences for that.

GILF—in a moment Tim will talk to you about GILF—went to cabinet as an information paper this year. There is information on GILF around the traps. It is getting significant interest in other jurisdictions in Australia. It is based on Creative Commons and we believe it provides legal certainty.

I come back to productivity. All of this started with productivity, and that is where it all ends for me. It starts and ends there. Clearing the information market helps multifactor productivity—the working is smarter, and better information allows smarter decisions and policies. Capital deepening is also important. When we talk about capital stock—and as I have said, we have measured that for the states and territories—I am talking about physical capital stuff you drop on your toe. What we have not got are the intangible assets here, the information assets. They are not actually counted as yet. Despite that, let us not forget that in this information there is a wealth of capital that needs to be used.

Let me just point out that the information is capital and workers. Just as they need physical capital, they need this information capital as well. Do not get confused. It is not ICT. ICT hardware and software is pretty well understood to be capital. We have measured that as best we can. We are talking here about content, and that is largely forgotten in that stock of assets. Proof—here we are talking about that today. It was a settled issue. It would have been done.

Help the workers; that is what I say. Give them the tools for the job, and that includes the actual information content they require for business decisions. It grows from there: innovative data-matching integration, where you get data from Health and Education and you add it together and you put an 'Indigenous' tag on it and suddenly you begin to understand what the heck is going on. This is very fruitful for productivity and innovation. Note that workers obviously, in the role of consumers, need access to this as well. If you want to make a household investment decision as a household, as a consumer, you need some of this stuff as well.

What can we do? We can reduce search costs and increase volumes. The range of users is unpredictable, so expose all metadata. We can reduce risks—that is very important for respondents, users, custodians and accountable officers—and add to our stock of capital. You cannot command productivity and innovation but you can set conditions for it to happen.

We believe there are two main framework conditions for productivity, and they are providing the right incentives for people and removing restrictions to allow people to actually act. With GILF what we are doing is removing a restriction on the identification and flow of information capital. The result? Better evidence based policy. And we need that for the economy, for society and for the environment. It all comes from productivity. I think none of this can be guaranteed but, gee, if you do all this I think you are in a much better position to allow people to get on with it.

The CHAIR—Thank you.

Mr BARKER—Neale Hooper and I will take you through the rest of the detail of the Government Information Licensing Framework. The things we will talk about are the stages; the Creative Commons characteristics that make it applicable to the Queensland environment; legal considerations—and this was a legal policy project up until this stage; the policy considerations; the technology; and the business case we have done to look at the effect of a standard licensing framework on the Queensland economy.

I put myself in the position of having a career as a surveyor, an engineer, a GI specialist and now working for the Government Statistician. My whole career has been about getting information, analysing and modelling it and then providing it on to someone to make a useful decision. Technically now we do have the infrastructure in place for me to sit at my computer—and it may be a spatial information system—and pull through a web map service

and pull data into my system. That can be done in real time. That could be the Queensland natural resources department or it could be the Victorian Department of Primary Industries. I could be pulling information from them in real time into my system and adding to the content, adding to the layers of data. I could then contact the Bureau of Meteorology and pull in, for this case, a plume model. This one looks a little bit like Beijing at the moment with that plume. Again, we could start to do analysing, modelling and building there. Finally, I could contact Geoscience Australia and bring in a train model and throw that in and start to do my analysis and modelling. Technically I can do that. I have the knowledge to be able to do that. I have the software. I have the ICT infrastructure to do all that. The frustrating part has been through my career and increasingly, I am having to wear one of these things to work out the legalities of, one, access, two, analysis and modelling and, three, providing that product on to someone to use in a meaningful way. It is about the tech capability outstripping licensing and other legal obligations. Neale will talk to you about the licensing and legal obligations soon.

Increasingly we are seeing governments move towards portal delivery of their information—a single site for all government information to be delivered out to them. Again, technically we can do this, but sitting behind this is having the necessary rights to be able to deliver the information to the portal and then those rights passing on to a particular user.

I will talk about information products through the presentation. Basically they cover everything. It is reports, bulletins and briefs, statistical and factual profiles, technical reports, methodologies, survey frames, maps, satellite imagery, web map services, images, web pages—basically everything we consider as being information product if it can be logged out by government and it can be licensed in some way.

In terms of the GILF project itself, effectively we were given a fairly small task: to deliver a standard set of terms and conditions for information licensing to apply across all government agencies. Secondly, they had to work it legally and effectively in practice. So we work very closely particularly with Neale, who was seconded in from Crown law, and also with QUT law school, and you heard from Brian and Anne earlier today.

Lastly, Queensland is not an island. It has to work within a national context. Again, more importantly, it has to work within an international context. That was our starting point: could we come up with a framework to fit that? It came from my background being the spatial domain. Queensland Spatial Information Council commissioned the work but, importantly, they simply said that if it applies to the spatial it will apply to any information, product or service no matter what particular background it came from.

We believe that the standard terms and conditions had to apply to all information. In doing so, it would improve access because the rules are the same. One department is the same as the next one. One business unit within the department is the same as the next business unit within the department as far as what the rules are for information access and use, and that was pretty important. We believe that if you have all government agencies within a government working under the same framework, you actually are not dealing with 24 departments in the case of Queensland; you are dealing with a single legal entity, a single department.

Therefore when we deal with the Victorian Government or we deal with the Federal Government or we deal with the private sector or we deal with the community, they are dealing with a single entity, not various departments when it comes to their rights to information. It certainly would help us manage our intellectual property associated with government information. Lastly, it will reduce risks associated with information misuse. That is certainly important, but not a driver as far as this particular project is concerned.

What are we trying to do with our licensing? They are all the things that came back in our requirements. Government, employees, community and the private sector want to be able to print, view, play, copy, move, loan, share, extract, edit, embed, add value and integrate. They are the things they want to do. Again, we had to put a licensing framework all around that. In fact, they are the things that the custodians wanted to allow as well. They wanted to be able to legally allow all those things to occur.

The project began in 2005. We have completed three stages. The first is the review of government information licensing practices. The second is developing an open access and use strategy. The third is the definition of GILF including the business case. We are currently in stage 4. We are going to take you through some of the aspects of the delivery of that.

Stage 1, current licensing trends. Effectively—and Dr Crossman talked about this—there is a very strong market philosophy based on value and supply chain extracting rents for data use. That was across Queensland Government. That would be the same across the Victorian Government. In fact, it was the same across all other jurisdictions and internationally. The types of licences are in place and all of these are within there in various different forms with shrink wrap and cling wrap, embargoes and quality layers, mineral restrictive, tiered restrictive and the one that we like the most being non-licensed alternatives. You can read into that what you may.

So we have a plethora of licences currently in place. Interestingly, across that the majority of business units within the Queensland Government did not use any licensing. That is just as bad as having a plethora of licences because they do not know what their rules are and someone getting information from them would not know what their rights are. We have had this situation of agencies feeding themselves as unique entities. That is their data; they are the only ones who understand. Therefore they have to apply their own rules to it, as Dr Crossman mentioned before.

We do have some standard practices in place, standard frameworks—in fact, quite a few—but they are quite dated and very long and very legalese. In some cases we have documented where it is more difficult for a Queensland Government agency to get data from another Queensland Government agency than it is to get that same data from the private sector. That is ridiculous from an efficiency perspective when it comes to government service delivery. Things like interjurisdictional exchange of data for the National Water Initiative become problematic. Not only are you dealing with 24 agencies, but every state and territory, state government agencies, federal government, statutory authorities and private sector providers are all in on the mat and all want to use their own licensing. I will talk a little bit about that later. It is very complex for anyone in George Street trying to deal with a state government agency and wanting to know what the rules are.

Lastly, the interesting part that has come out is that there is a real drive from public servants to a more mature approach, and Dr Crossman mentioned that. It is about giving them some sense of certainty through a standard process. We have talked about this mature approach, and there is a recognition that the value of the information is largely in its use, not in any rent you may extract out of the sale of that information. We are seeing the Federal Government and state and territory governments across Australia, and in fact internationally, trying to unlock the potential of public sector information under similar activities as you are doing in Victoria. We have seen the effect of changing your licensing practices and charging regimes with the ABS and Geoscience Australia, where we are seeing an exponential increase in data use where they simply said, 'If we are providing it through our web site then we are providing it to you for free.' The licensing permissions are then standardised through those portals as well.

We have seen some fairly unique situations where governments are treating certain industries differently from other industries. Particularly in Queensland and in WA we have treated the mining industry very differently from any other. We simply give them their data. Why? Because of the economic effect of mining in our particular state as we are seeing. When you think about it, if there is any industry that could afford to buy data, that would be one.

We are not alone in this, and I mentioned that internationally we are seeing this movement in the UK particularly. We are seeing it happen in the research arena and I think probably Dr Fitzgerald mentioned this morning that we are seeing a change in policy as far as funding of research is concerned, where organisations like the National Institutes of Health and the US National Science Foundation and Science Commons are simply saying, 'We will fund you, but you must make all of your research material and your outcomes openly available to anyone so that they can build off that research.'

I have three boys. My eldest son is 15. The concept of buying your data or buying product is very foreign to them. That is the next generation coming through who have to deal with government. This will be the case with file sharing and music and pictures. Simply having to go through and license something is something they are not used to. Lastly, I put this slide in of hell freezing over. Even Bill Gates has changed his tune. In terms of his foundation, he will fund you as long as you make all of your research openly available.

What came out of stage 1? Quite obviously confusion and cost to clients, the community and custodians, impossible design architectures for online portals when you have a different legal framework underneath them and difficulty for users to know whether or not they are complying. What happens is that they choose not to comply or simply choose not to use the data. Both of those are costly. Lastly, it is an impediment to innovation.

In stage 2 we did further work on the licensing. It reaffirmed the non-standing conflicting approaches. Neale will talk about the open concept licensing Creative Commons and the work we did from the legal side. It was extremely important for us to actually make sure that legally the Creative Commons framework was applicable to all government information within Queensland.

In stage 3 we then started to apply this. We applied this to some fairly strategic data sets. We did a data review and legal audit of eight databases. These databases were and are currently licensed under restrictive licensing regimes. All eight came through as quite clearly being able to have a Creative Commons licence applied to them. We have reports on those. Some of those awarded are databases as well.

That became the basis of developing what we call a Government Information Licensing Framework tool kit and what we call licensing for dummies. This is the tool kit which basically anyone can use to allow them to apply a licence to information they may have to deal with within their work environment.

Neale will talk about restrictive licences. It is very important that we use the terminology of 'break glass as the last resort' with that. The last thing you want to do is put a restrictive licence on. Our review process points you towards quite clearly either an open content Creative Commons licence or what you need to do to negotiate rights to apply a Creative Commons licence. There are quite legitimate reasons to put restrictive conditions on.

We have also looked at the technology more recently. You may be familiar with a term called digital rights management or DRM. That is about locking up your data technically. This is mostly applied to music. Apple will not allow you to play music on anything other than an iPod. What we have proved with our review is that we do not need DRM. What we do need is digital licence management that embeds the licence information into the product itself so that when the product moves so do the terms and conditions of its use. Lastly, we did the business case.

Mr HOOPER—I turn to GILF. We are about standardising licensing as far as we can because it makes it user-friendly and it gets those nasty folk called lawyers out of as many transactions as possible. We are trying to get the legal rights right from the very beginning so we do not have those protracted, expensive and time-consuming negotiation processes.

In short, GILF comprises the six standard Creative Commons licences plus what we are styling as a restrictive licence, which deals with that 15 per cent of information affected by privacy, statutory constraints, confidentiality and security classification. Some 85 per cent of public sector information we have identified as being potentially applicable or able to be used in combination with the Creative Commons licences. As Tim just mentioned to you, resorting to the restrictive licences is really almost like a measure of last resort. There are instances where it is entirely appropriate that restrictions apply, and I will just mention those to you.

We are working on a standard restrictive licence to enable people to have this tool, which they can then customise within certain limits so that government can meet their own requirements.

This would be a tool that will probably be made available more generally. The point is making it user-friendly and available readily.

We have a series of standard licences in our GILF project. What is to like about Creative Commons? It is like *Kath and Kim;* what is to like and what is not to like. Creative Commons licences very importantly protect the intellectual property of government and the licensees using them. At the same time, they also facilitate the extent of re-use. That is a real innovation and productivity driver. They minimise administration with their consistent, transparent and unmediated legal framework. This means that the lawyers do not have to be involved in standard transactions. It makes it far more efficient, timely and cost effective.

These Creative Commons licences can be applied to information in any form of media, whether it be text, graphics, sound, music or the like. The aphorism for this is that Creative Commons makes copyright active. Copyright arises automatically as a matter of law. What Creative Commons does is utilise that very powerful legal basis. As Anne mentioned before, it is a very powerful legal protective device for the protection of information and other copyright protected material. We can use that as a legal basis for our legal licensing. So that is what we are doing. The law gives us this gift in a way and we are utilising it.

There are six Creative Commons licences. The idea is to keep it clear and simple. You can see those on the slide. I do not have time now to go through those, but I am more than happy to discuss those with you at some time.

Ms THOMSON—I would not mind having examples of how you would apply each of those in the government context, if you have them?

Mr HOOPER—I am happy to go through those but I am conscious of the time. There are six Creative Commons licences. The first one is one that as far as possible the GILF framework really supports. So utilise this as much as you can in a legally responsible and informed policy way. The only condition under a 'by' or an 'attribution' Creative Commons licence is that you give acknowledgement of copyright. Once you do that you can make whatever use of that information the law permits. In other words, it is the perfect tool for creativity and innovation.

The other instance where it is a 'by' or 'non-commercial' is this. The agency concerned may say that it has satisfied itself by going through this review. We know that we are the copyright owner. We have gone through a process in relation to looking at third party inputs et cetera in relation to this information so we have the legal right to license the material. The agency makes a decision to put that licence out on the basis of it being a non-commercial requirement because they harbour some desire that they do not want people to make commercial use of it.

That really comes back to a question of policy as to whether or not you permit others to make it a commercial or a non-commercial use only. That is a choice for the custodian to make.

Mr TEE—The trick is, if you want to make a commercial use then you have to go back to the agency and negotiate a commercial agreement.

Mr HOOPER—That is correct. This is a non-exclusive licence. Automatically in an unmediated way—the lawyers are not there—you download this off the web site. If you go through this process you will be entitled to get a licence for a non-commercial use. The custodian has actually made that choice. It is a non-exclusive licence.

Through the metadata, which we are inserting into the information products, they will know who the custodians are, they will know who they can contact if they want to explore the possibilities with custodian as to whether in fact they really do want to insist on this non-commercial aspect. If the agency does not want to make it available on the web just under a 'by' licence and wants to insist upon that constraint or restriction then there needs to be a face-to-face negotiation with the custodian to see whether they can reach agreement on the terms around what commercial use would be permitted for the licensee. So it becomes a

negotiation process.

Ms THOMSON—It makes the assumption that they bother.

The CHAIR—We are in real trouble with Hansard if we keep interrupting you so please take the floor.

Ms THOMSON—We want to know how this works in the Queensland Government context. How do you use those licensing provisions in the Queensland context? I understand you are trialling it in some departments. We want some examples of how you actually use this within the Queensland government.

Mr BARKER—Here is one example. It is not one of ours but I throw it in there as a matter of interest. What is to like about Creative Commons? It is the use of it in a different business model. Universities now are using Creative Commons to license their lecture material. This example is MIT, probably one of the most prestigious universities in the world. They are now putting all of their university material up on their web site and it has now been licensed under a Creative Commons web site.

So we have a category 'attribution non-commercial share alike'. That is their use of it. They are basically saying that they do not want us to take their lecture material and start using it in competition with them but if we want to improve it under 'share alike' and add to the content to improve our courses then we are more than welcome to do so.

We are starting to see a university, which is a business based on getting students in, starting to put what you would see as critical to their business—their lecture material—out and freely available to others to look at, use and add content to and share on. That is one thing.

This is a very recent example. When we license our material basically what we put on it is the State of Queensland copyright and the custodial agency such as Queensland Treasury and the year. Then we have the symbol and then we have a link to the licence. The symbol itself if it is online has URL embedded in it. That all goes on.

I do not need to know what my rights are under the Australian copyright law, but once I see the symbols and from being familiar with the deed and legal terms I know exactly what I can do with that particular information. Our office publishes what we call census bulletins. This is based on information which we source from the Australian Bureau of Statistics under agreement on the 2006 census. We are in the process of publishing about 15 of those. This was published on 8 May. It was licensed under a Creative Commons licence. This is one of the very first products we have put out publicly under a Creative Commons licence.

Whether it was that licence, whether it was the content, whether it was both in combination but basically two days later there was an article in the *Courier-Mail* and an article in the *Sunday Mail* both using the content of that brief—we are looking at a two day turnaround—meeting their requirements being attribution to our office. We have never had something turn around so quickly as far as bulletins going out are concerned.

Ms THOMSON—I want to get beyond that point to the conditional licences.

Mr HOOPER—I will give a couple of practical examples. We may be using the simplest and the most generous of licences, the 'by'. 'By, no derivatives'—a TAFE sector educational program has been licensed under that licence. You cannot change the program. You have to acknowledge copyright ownership. An example of a 'by non-commercial' is we had educational programs, a little bit like the MIT example that Tim alluded to. An example of a 'by, share-alike' is where there were certain survey outputs. The results of a survey were put out on the basis of a 'by share alike agreement'. You could create derivatives or whatever but in turn you then needed to make that value added product available to others on the same licensing arrangements— namely, the 'by, share alike'. There are four examples of those.

Mr BARKER—Another example under the attribution, no derivatives, would be a

land title. The integrity of the title has to be retained. You do not want to allow bits and pieces to be broken up. So it would be an attribution, no derivatives.

We have a fairly liberal interpretation of 'commercial'. Effectively, if your business is based on direct commercialisation of the data itself, we would see that as being commercial. But a consultant who uses information under environmental analysis or impact analysis in order to produce a report, of which that report has a completely different outcome, we would not see as being commercial.

The CHAIR—Does that conclude your presentation?

Mr BARKER—Yes.

The CHAIR—Thank you for that. I do not know if it is going to be humanly possible for us to ask five questions in the time available, but we will see how we go. Dr Crossman, I want to take up a discussion we were having over morning coffee in relation to various departments having information that could be of great political sensitivity. One of the points you made in your overhead presentation was one department is the same as the other. I have made a notation, 'Oh, no, it is not.' There are many departments that have data that is political dynamite and I want to go to that particular kind of example. I also want you to cover in your answer scientific research.

Let us look at the spatial data that has been referred to previously and mining information. I do not think that is political dynamite to a minister, but the two examples I gave you were the juvenile justice system— you could say the adult justice system—and the child protection system. There has been any number of reports done, held within every state, territory and the Commonwealth, on juvenile justice and child protection, which a risk-averse public servant would be saying to the minister, 'You really don't want to release this kind of information.' It is paid for by the public. It is in the public interest, one might say, to have it provided. It is all very well to talk about the academic exercise, but how do you navigate the political realities of some data being of immense commercial value but not necessarily a political hot topic versus those that are utterly boring when it comes to the commercial value of them yet politically are extremely sensitive? I imagine that is quite a difficult juggling act for you in your role to navigate. Would you like to comment?

Dr CROSSMAN—Yes, I certainly can comment. I am afraid that, while I understand the importance of your question—I think it is a very important question; I have had a number of conversations with people, including ministers, over the years about these sorts of issues—we have to draw a distinction between the politics and the public policy. Where I guess I stand, and typically departmental bureaucrats like me would stand, is in terms of administering public policy. That public policy is going to be determined by the cabinet of the day. The cabinet will lay down the rules, for example, the freedom of information rules, which may apply in any jurisdiction.

As you know, Queensland has just commissioned a significant review of our freedom of information system. It is now called the right to information system. The government is considering its response to that review and, undoubtedly, there will be public policy rules laid down for us to follow. As public servants, we will follow those rules exactly as we follow the current freedom of information rules. Beyond those rules, it is a simple matter that these are public data. They are owned by the community—owned by the Crown— and certainly they should be transparent.

There is an issue here about public accountability and transparency. I think everyone knows what that is all about. All I can say is I administer the rules as the cabinet will lay them down. Beyond that, I think it is fundamental that on efficiency grounds information should be used because it is only by using information that you get results.

The CHAIR—Thank you.

Mr DAVIS—I have a couple of questions. The first one is the obvious economic benefits that come out of this. I think your phrase was the unknowability or unpredictability of the positive uses that can be made of information both in the community and in the commercial sector. Have you done any modelling of the economic benefit that is likely to flow from a more open policy of the type you contemplate?

Dr CROSSMAN—Yes, that is a very good question. We have not done that exercise ourselves, but we know of other studies that have actually indicated that there are significant benefit-to-cost ratios from doing this sort of reform. Tim, do you have that at your hands?

Mr BARKER—Unfortunately, I pulled the slide down. We actually had the slide up there. Part of our business case was to carry out as best we could in the time we had an economic analysis. We were fortunate in that we were able to take two studies that were done looking at the impact of open-access policies in both the US and the European Union. Certainly, from a purely economist perspective, it is probably not a legitimate process, but we have simply put in Queensland figures based on their modelling. Based on the US policy, particularly the federal government—which is basically open—we would look at a similar scenario of an open-access policy in Queensland returning about $15 billion to the Queensland economy.

Mr DAVIS—Per annum?

Mr BARKER—Per annum.

Mr DAVIS—So that is actually quite significant.

Mr BARKER—It is significant. The European Union is certainly a bit more conservative. That is looking at $1 billion. But even if we are 50 per cent wrong, you are still looking at a fairly substantial return. As Dr Crossman said, we have not done it. It is certainly something that we would like to do.

Dr CROSSMAN—These are, I think, guesstimates of what the figures might be. It would be a substantial exercise to do this technically and, frankly we believe that the—

Ms THOMSON—You would need the data.

Mr DAVIS—It is the unknowability.

Dr CROSSMAN—It would be a substantial exercise involving considerable and scarce resources to undertake this cost-benefit analysis. We have taken the view that this is fairly obviously something that is going to generate a positive return, and a significant one. So we have gone at it from that point of view comforted by the overseas studies. Could I just return to a second question that the chair asked a moment ago, which I forgot to answer? If I could simply return to that in passing?

Mr DAVIS—Sure.

Dr CROSSMAN—You asked about science and how this relates to science. I think this is highly relevant. Everything we have said here is highly relevant to science. Science is built on the exchange of information and the sharing of and the building on knowledge. So the idea of having more transparent metadata, the idea of having Creative Commons for licensing, is something which I think fits very well into reforms of science. Indeed, the Commonwealth Government has a number of exercises that we are aware of, one of which is in the scientific sphere, which is talking about very much the same sorts of reforms in terms of metadata and licensing reforms. I know the Chief Scientist in Queensland has been very keen to keep in touch with what we are doing in, if you like, the statistics and the spatial information world and reform, because he can see that this is fundamental not only to, I guess, innovation and science, which is part of what he is concerned about for the Queensland Government, but generally science collaboration as well. He wants to know, for example, what research studies have been done by Queensland Government departments. You need to

identify the metadata registries and then you need to license the accessibility of those research reports so that everyone knows where they stand in gaining access to those. So it is immediately applicable to other, as I call them, parallel universes—statistics, spatial information, science and so on.

The CHAIR—The reason I was asking that question was there is so much money being allocated to, in particular, biotechnology—

Dr CROSSMAN—Yes.

The CHAIR—We pride ourselves in Victoria on being one of the five biotech capitals of the world. I know you are fiercely competing also for that airspace.

Dr CROSSMAN—Absolutely.

The CHAIR—The point of the question was, as a requirement of the research grant, should it be obligatory that whatever research is done becomes publicly available? That was what was behind that question, and I take it from your answer that your view is that it should be.

Dr CROSSMAN—I think the policy decisions on this will be likely to be taken by the Chief Scientist in terms of restrictions, and I really cannot answer for that part of the government. But I would assume that, taking a line through science's general philosophy of these things, that unless something is commercial-in-confidence then it would be able to be licensed and made accessible through some sort of Creative Commons arrangement. But, of course, as often is the case in the private sector and commercial firms, if something is a secret then it will be kept a secret.

Mr DAVIS—I just have a second part to the question—

The CHAIR—Did you ask that?

Mr DAVIS—I flagged that I was going to ask it and then we came back to answer your second—

The CHAIR—All right. I am desperately trying to keep to time.

Mr DAVIS—The second part of my question was you mentioned the freedom of information report here—the right to know and so forth—which is certainly a very significant report.

Dr CROSSMAN—Yes.

Mr DAVIS—What do you see is the interaction between these reforms that you are talking about and freedom of information reform?

Dr CROSSMAN—I think the work we have done has been of considerable interest to my colleagues who have been examining what options the government has in responding to the Solomon report. They have been talking to us about the Government Information Licensing Framework, because clearly they would see that as a way of something that is compatible—as Solomon himself pointed out in his report—with the principles of increased access.

Ms THOMSON—I think we often learn from the hard side of these things—the things that are difficult in manoeuvring through government departments and getting acceptability on. I am interested in some of the government departments' responses to what you are trying to do, some of the barriers they see to the processes that you want to put in place and talk about those issues that you have confronted in relation to that open-access policy.

Dr CROSSMAN—I think a lot of this is difficult, because it is cultural change and that

is by itself very difficult to overcome. So there is a bit of a gradual process here of talking to people and explaining that there may be new ways of looking at things, options for development and so on. Generally, our experience has been that in talking about this—not just within the Queensland Government but other jurisdictions and the Commonwealth in particular—once people get the idea, there is a considerable degree of enthusiasm for seeing a solution. For example, we have interest, I think, from South Australia, if I may say so—

Ms THOMSON—No, I want to know about the difficulties within Queensland. You have put some trials in place, as I understand.

Dr CROSSMAN—Yes.

Ms THOMSON—But I want to understand it from the practical application in Queensland—where the difficulties have arisen in doing what you are trying to do and what are the blocks that have been put in your path. I do not want to know about interest in other jurisdictions; I want to know from your experience.

Dr CROSSMAN—We have had very few blockers put in our path in Queensland. Frankly, licensing the material is very simple, it is very easy. We do it now routinely in my portfolio office of Treasury. We are doing a bit of a trial to try to stumble upon problems as we go. Undoubtedly there will be more problems when we get to the restrictive licences, but that is something that we anticipate because it will involve detailed negotiations.

Ms THOMSON—What are the areas that you are seeing where people might want to apply restrictive licensing on and that you would maybe deem not necessarily restrictive licensing? Where are those areas where you are going to have to negotiate that sort of outcome?

Mr BARKER—The main area is where our departments are currently selling their information. They are the ones who actually have a licensing framework in place. It is about either getting an up-front fee or getting an up-front fee plus return on subsequent transactions or sales and so forth. We talk about difficulty. They are the agencies that largely say, 'How do we move from this framework, which we have had in place now in some cases for 10 or 15 years to this other framework?'

The CHAIR—Ms Thomson asked, 'Such as?'

Mr BARKER—The Department of Natural Resources and Mines, probably of all agencies, has the most comprehensive licensing framework in place. It goes from highly commercial—things like titles, valuation information with value-added suppliers in the marketplace who have been doing this for quite some time—through to natural resource management groups. Their rules change and their licensing frameworks change and their business models change, depending on who you are and what your use is. If you discount titles and valuations, the money that they get back on the licensing of all of their information is a small percentage of the cost of administering that. They are very keen to move to what we propose as being an unmediated framework: apply the licence and then allow anyone to come and use that information as long as they comply with that licence.

The question has arisen: does Creative Commons prevent you from charging for that data? No, it does not. If you want to continue to charge the user for the use of that information, you can choose to but it does not lend itself to it. In fact, through our experience and from what we have seen in our discussions with agencies, we do not really want to charge because we do not get any benefit out of it. In fact, it is costing us quite substantially to administer that charging regime.

Therefore, we are seeing two things. We said before, and I think this goes back to the earlier question from the chair, that the study from this project was not with that five per cent of our 15 per cent, which is the highly political, highly commercial, highly tied up. If we had started there we would not have got anywhere. We are starting with the 85 per cent of information

that we know is there and is currently being used or should be used going out to the public. We have 15 per cent, which we know is restrictive, we think 10 per cent can be standardised under a restrictive licence that Neale and Crown law colleagues have developed, and there is five per cent which will always be negotiated. Those are the sorts of things: negotiated so that they will never go out or negotiated so that they go out under very, very tight regimes.

Dr CROSSMAN—Another general example of this is that my office does a lot of data broking where we bring in identifiable information from, say, the health department and more identifiable information for the same set of people from the education department, match the datasets and construct a new unit record file which is considerably augmented, and then deconfidentialise that and release it with the agreement of everyone. Clearly there are interesting licensing issues here, even though there is no actual price being charged. But at the moment we do that and a memoranda of understanding, and frankly it is on a wing and a prayer. There is no legal certainty attached to this.

Therefore, we are looking forward to the full licensing framework being able to give all of the data custodians and the accountable officers some legal certainty about the way this is being exchanged. In this case it is quite simple, say, for an official statistical agency to do that sort of operation. However, you will find there are situations, say, in the e-health world, where this is mushrooming in its potentiality and I would suggest that that is an area where rigorous licensing is desperately needed.

The CHAIR—In e-health?

Dr CROSSMAN—Yes.

Ms THOMSON—And the third party component? When governments actually contract out to do a body of work and that is manipulated work so it is effectively the IP of the third party's work that is there—

Mr DAVIS—Paid for by the community.

Ms THOMSON—I understand that, but it might have a commercial application for them in another guise or form. How would you negotiate that in relation to this?

Mr HOOPER—That is a question for a lawyer, I am afraid. The ownership of intellectual property rights is something that you can deal with in your contractor's contract. In fact, if the government is commissioning a contractor they can say that the government is to own the intellectual property if that were appropriate or otherwise provide for an outcome. You might also provide for ownership plus appropriate licensing arrangements. If you wanted to introduce a royalty or a commercialisation component into it, you could do that but that would be in one of those narrow instances within the five per cent that Tim was talking about where you are effectively going to be negotiating a deal face-to-face. You would not be using just a standard licence for that.

Mr TEE—I want to make sure that I understand where the government has got to with this. From the presentation and the answers, am I right in saying that it is not about putting a blowtorch to the restrictions that the government currently has in place, whether that is commercial-in-confidence, secrecy, security or privacy stuff? It is more about saying that the vast bulk of this information is not being utilised and it is probably not being released, so it is about making that more available.

Two things emerge from that then. One is the fact that the information then being available does not mean much per se, in the sense that your average mum and dad computer user will not get much benefit out of it. The benefit will be for research people who might use it, but also commercial usage. That commercial usage might come back to government almost as a revenue raiser in the sense that, if you put it out on the non-commercial stuff, business comes back to you and says 'Wow, we have this data and we can turn it into a tool that the electorate—the mums and dads—can use. Can we negotiate with you a commercial

arrangement for the release of or the building of that?' Am I in the ballpark in terms of my summary of where you have got to?

Dr CROSSMAN—Yes. A fundamental issue that we see is making sure that everyone in the community can see that data exists and understands what the licensing or access arrangements might be. Following that, you can negotiate to do various things. You can negotiate to do integration and matching or you can actually pick up the data, if you can gain access to it—and metadata should make that clear—and develop new and innovative products that are of benefit to the community. A business can do that. A household might do it in terms of searching neighbourhoods for crime statistics to make a location decision. If you want to invest in a house and you need to know what the education system is like, you will require access on the performance of schools perhaps. All sorts of things like that could be useful for households and individuals.

However, businesses can also develop value-added products from all those datasets and then sell them and make a profit from it. By doing that, having developed innovative products, they have enriched the information environment that is available to all other businesses, the government itself and individuals. That is the way that we see the primary economic benefit coming, hence the cost-benefit studies that have been done there. After all, the government is not a business. We do commercial activities quite reasonably, but the government is not a business. A business is a business; a government is a government, with some commercial activities necessarily.

Mr CRISP—I have a timeline question. You are doing some trials and you are rolling out GILF for the 85 per cent. How far off do you think you are from being what you would say is comfortable with the rollout of the other 10 or 15 per cent? I would appreciate a short view on that.

Dr CROSSMAN—We have started now and sort of routinely we are slipping into a mode now of stamping a Creative Commons licence, a GILF licence, on most of the things that we produce. We are working closely with the Chief Information Officer to develop the information standard. Clearly most departments will be incapable of actually doing some of this stuff until there is an information standard, which is the way that customarily these sorts of activities are rolled out across government in a policy sense and a practical sense. We are working on that with my colleagues on the strategic information management subcommittee of the Queensland Government. I would guess that this will snowball over the next couple of years. In a couple of years time you will see that most Queensland Government statistics certainly and a lot of the spatial information will be stamped with GILF Creative Commons.

With the restrictive licences it is a difficult prediction because clearly the Solomon report has to be analysed, and the Government and Cabinet have to take a view on that. It is simply more difficult, as well, to do. As to my private time frame on this, you can do it in various ways. You can do this with a heck of a bang. If Cabinet decided, for example, that everyone will get this done by Christmas, I would advise against that because I do not think there is the capacity to get it done by Christmas. My advice to cabinet, were it to ask me, would be that a five-year period would see most government information in metadata registries and licensed appropriately with the Creative Commons system. I am looking at five years to see most information licensed in this way. Frankly, I would advise that is a reasonable time frame. If you try to do this too fast, it will not work.

The CHAIR—After I have been encouraging people to curtail their presentations and to ask succinct questions, our next speaker has kindly agreed to wait and allow us more time with you, if you are able to wait until one o'clock. Can you stay with us until one o'clock?

Dr CROSSMAN—Certainly.

The CHAIR—Quite frankly, the information you are providing is extremely helpful. You have had the practical application of what, for a lot of us, is very much a theoretical model at this point. I am going to indulge the committee, if they wish to ask a second

question. I am sorry, Mr Hooper, because your overhead presentation was curtailed the most.

Mr HOOPER—All in a good cause.

The CHAIR—Thank you. I want to come back to the practical applications of what you have been describing to us. Let us take the hospitals that operate throughout your state and presume that a range of them does open-heart surgery and a range of them does hip replacements. They provide their patients with documentation about those operations. Have you done any work on ensuring that the intellectual property of an individual hospital, doctor or counselling team—

Mr CRISP—That is performance statistics.

The CHAIR—No, I am not talking about performance statistics. I am talking about the actual physical documentation that is prepared at a range of hospitals that is not only duplicated but is tripled and quadrupled because everybody is doing basically the same thing. There is an opportunity for people to share that documentation. Just as you outlined with MIT open university and lecture notes, within a hospital system or an education system, somebody who has come up with fantastic lectures, fantastic case notes or fantastic information sheets is able to share it. Perhaps with the legal eye of Mr Hooper, you can say, 'Look, that is far more robust, that is very good and this is the kind of thing we should be working towards. Will you share it with colleagues in another hospital?'

Dr CROSSMAN—Can I jump in here, in an over-arching policy sense. Before I alluded to issues in e-health and how GILF and metadata registration could be of assistance in the e-health area. I think that is certainly true. I think your question is easily answered by saying, yes, if you did have metadata registries and sound licensing, that would remove some restrictions to people actually seeing that other datasets are available and giving them the opportunity, potentially, to compare and contrast and to perhaps get efficiency gains by rationalising the collections and improving by matching the collections. Obviously scientific endeavour, which is a large part of what people do in hospitals, would be improved by people being able to see that you have certain data here, certain data there and another set of data elsewhere, and if you matched all of those together you would get a richer information set for research purposes, which after all is what a lot of hospital and medical activity is designed at—curing not just that particular patient but all patients in that regard.

The CHAIR—This is about information provided to patients.

Dr CROSSMAN—Yes. We come into the realm of privacy very strongly now. As a private citizen I certainly do not want my medical records shared with the community. I am sure you are not suggesting—

The CHAIR—No, I am not talking about medical records. I am talking about information provided to patients who are going, for argument's sake, for a hip replacement or open-heart surgery where a range of different hospitals provide documentation for informed consent provisions.

Mr HOOPER—Information sheets and that sort of thing.

Dr CROSSMAN—That would be information compiled by the health authorities, whoever they might be, and made available. Certainly they would have the facility, under our approach of metadata registry and licensing, to reveal their metadata. Revealing their data, I say again, is a separate issue. You will have restrictions on allowing people to have access to data, but certainly the metadata should be transparent.

The CHAIR—And then going to an example where the government may require information on infection rates or mortality rates after certain surgeries and procedures. Again going into the political environment, take for example a hospital that is prepared to do open-heart surgery and major organ transplants and, therefore, would be likely to have less

favourable results on infection and deaths compared to a hospital that only does—let us pick an example—appendix operations. How do we make sure that the information is available, but that people really understand what we are talking about?

Dr CROSSMAN—At this stage I would look at my colleagues in the health department and pass the question to them, because as a matter of public policy they must determine those issues about what is to be released and in what form.

Mr HOOPER—Without sounding glib, the fundamental issue there is not a legal impediment, as such. The information sheets that have been prepared by employees of the health department—the intellectual property or copyright of those information sheets and the like—are owned by the Crown. So the Crown is the legal owner of those information sheets. So, fundamentally, from a copyright point of view, that is a pretty standard situation. Employees generate material in the course of their employment and generally the employer will own the copyright of that material. It then becomes a question for the employer or the owner of the copyright as to what use they permit of that copyright material by way of licensing or otherwise.

Ms THOMSON—And how it is released.

Mr HOOPER—But, as Dr Crossman said, on that base legal issue about copyright there is an overlay of the policy and the law. If they have passed privacy legislation et cetera, there is policy around privacy. There is policy around certain sensitive issues about classified information. There are fundamentally policy layers that come on the top. That is why effectively we are saying that you need to ensure—sorry, Dr Crossman, I do not mean to cut across you; we are saying the same thing. There are certain legal imperatives that you need to be clear about, but then the tool kit that we have in GILF essentially takes you through that process.

Then it says to the decision maker or the person who is doing the review or the audit, 'Okay. Which way do you want to go now? We have identified if there are any legal impediments. Which way do you want to go now as a matter of choice?' That choice, that pivotal point, as I say, is fundamentally informed by the government's policy of the day as communicated to its employees. That is why government policy is so critically important here, because at that pivotal point there is no strict what I might call legal determinant. It is a question for government to decide whether it is going to make that available or not available but it always has to respect issues of privacy and confidentiality, which Dr Crossman alluded to.

The CHAIR—Thank you.

Mr DAVIS—I have two quick questions. To pick up on something Mr Hooper said before, which related to contracting arrangements with government and so forth, where there is a service delivery arrangement or something like that, it would be a matter for the contractors as to what would be provided but certainly quite possible that you could retain the principles in those sorts of contractual arrangements.

Mr HOOPER—Absolutely. Might I suggest that, as the purchaser, government has a certain capacity to influence the outcome. I have been involved in negotiating many commercial deals or commercial arrangements. Quite often the price for the services reflects, if you like, what the deliverables are from that contract. In other words, if the outcome is that the contractor owns, for argument's sake, the intellectual property rights in a report or in some software they are developing or something else, some deliverable—

Mr DAVIS—Or data they are collecting.

Mr HOOPER—Or data they are collecting or they are compiling for you or surveys or the like, the government can say, 'Well, we actually want to own it. What is your price for performing that service in that model? What is the difference if we say that you, the contractor, can own the copyright or the intellectual property rights?' In other words, it should

be a lower fee at that stage because you have given the contractor ownership of the intellectual property rights. But ownership is not everything. Sorry, I am an intellectual property lawyer. Ownership of intellectual property is not everything, because I can let you be the owner as the contractor and then negotiate with you a licence back to me, which is generous and enables me to do the sorts of things that I need to do.

Mr DAVIS—To use the data broadly.

Mr HOOPER—Exactly. So there is a bit of a misconception about absolute outright ownership of intellectual property and the ability to achieve virtually the same outcome through an informed and negotiated—this needs to be an informed process—licensing arrangement. So we might have the best of both worlds. I might give you, the contractor, under our negotiation ownership of that intellectual property, which then enables you to go on and commercialise it because that is what business does best. But at the same time, because I am an informed government customer I negotiate appropriate broad licensing rights back in favour of government as a whole so that it covers not only its current and immediate operations but perhaps where it might be in the future.

Mr DAVIS—The release of information and so forth for economic benefit elsewhere.

Mr HOOPER—That is right. We are moving into that 15 per cent area. That is where we are in that instance.

Mr DAVIS—There is one further question I had. Local government is a subset in some sense of state government but a very important tier of government. Do you in a sense regard this process as applying to local government?

Mr HOOPER—I think it does because we—sorry.

Dr CROSSMAN—It comes back to the Crown, I think. The Crown owns the Commonwealth, it owns the states and territories and it owns the local government, in a sense.

Mr HOOPER—They are separate legal entities, however. So in a sense—

Ms THOMSON—There are decisions that they have to make.

Mr HOOPER—Yes, that is right.

Dr CROSSMAN—They have to work it out themselves.

Mr HOOPER—Just think, operationally, if this system is going to really have the benefits and realise its potential, this is going to be not only local government, state government and federal government but also the private sector and the not-for-profits. It is going to be internationally—*The Power of Information* report coming out of the UK. We are seeing the web facilitating the interaction between the citizens and government through utilising web 2.0 capabilities—e-democracy, e-petitions. We have this whole dynamic environment arising. I am not a megalomaniac; I am lawyer, but do not hold it against me. The real value is through its greater adoption across the spectrum, and internationally this is really something, which is starting to take off.

Mr DAVIS—As a follow-on from this set of information—the system starting today going forward— you have a large amount of historical—

Mr HOOPER—Legacy issues.

Mr DAVIS—public records and so forth. Do you have a public records office in Queensland? I imagine you do. I am not sure what it is called.

Dr CROSSMAN—Yes, but this comes back to not wanting to do this before

Christmas and not thinking you can. In the fullness of time all of this will be wrapped up, but we have to take it in manageable chunks.

Mr BARKER—The approach we take is a transactional approach. So there is no need to license something until there is a request for it. Once it is licensed then any further request for that product or a similar product—effectively you have gone through the process. Particularly for our State Archives, once you have gone through the process you could basically apply the licence to most of their material.

Ms THOMSON—It is organic.

Mr DAVIS—There is huge data locked up.

Ms THOMSON—In some instances our scientific and biotech research institutes are ahead of us by leaps and bounds because they are already in shared environments, sharing research and in virtual laboratories and doing all of that sort of work.

Mr HOOPER—E-science, science commons.

Ms THOMSON—So in many ways they are leaps ahead of governments in this regard. I want to go to statutory authorities and government business entities and how far this might be invoked and how you see that playing out in that environment. I also want to cover a little bit about what you talked about, the notion of data held in one department that does not get released to another department. Often we find that there is more on the web about what is going on in a government department, that they have put on the web for public consumption, than there is shared between government departments.

Mr HOOPER—That is what Tim said in his presentation.

The CHAIR—Mr Barker is choking at this point—smiling broadly, shall we say.

Ms THOMSON—I was trying to quiz you about the down side, how difficult this has been. I really do think there are lessons to be learnt from the difficulties rather than from the ease of transformation. It is the bottlenecks to transformation. Given the look on your face, I assume that there have been issues about that. How do you address those sorts of issues about this mindset? I accept that 85 per cent of the effort is in cultural change and 15 per cent is in actually putting the systems in place. So can you just go through how you are working through that process of dealing with those institutionalised cultural aspects and how far you are going to take this into statutory authorities and government businesses?

The CHAIR—Given that we have made comment on people choking and smiling, you do not need to mention which part of government you are talking about.

Dr CROSSMAN—Just to address the government business entities of whatever nomenclature we use, if they are not subject to the information standards then they are outside scope, in a sense. If you have a corporation and it is actually being governed by the corporations legislation then it is outside scope. That is the simple answer, I would think. That is not clear fully to me. I thought it was clear, but I think the Solomon report has raised issues about the right to information from GOCs. I do not have a clear policy answer to that at the moment, but I would have thought that if you had an entity that is subject to the information standards they would be subject to in-principle adaptation of GILF. So I think we have a way to go in understanding quite what the GOCs are up for here. You can see the point. They will have quite a lot of commercial knowledge for which they are eligible to seek to extract rents or it is secret for their business. So there are issues there that will need to be very carefully addressed.

Mr DAVIS—Equally there may be data that is not sensitive at all and may well be able to be released.

Dr CROSSMAN—Yes, and there are ways of getting useful data from GOCs. For

example—and I only use this as an example, so no GOC should think that I am about to do this—I could serve a form on a GOC to extract statistical information, which would have identifiable information about their customer base and so on. I could certainly do that. Whether I did that would depend on whether there was a sound policy reason for wanting the government to have access to that information. But there are ways and means for any government for its own purposes to get access to information from GOCs, as it can in fact from probably any corporation. But you need to have statutory backing to be able to do that clearly. You need to have sufficient authority to do it.

In terms of cultural change, we have had quite a lot experience now over a number of years. Tim and his staff I think have had a very interesting set of experiences over the years. To summarise, what we found is that there are many people in the public service, particularly at middle levels, who are very keen on all of this because they are in a position of not having legal certainty for licensing. They are in a risky situation. They often have a very clear appreciation of the value of the information capital which they are sitting on. They are keen to see it used for policy and decision making as much as possible. So I believe there is an overwhelming number of people who have a lot of goodwill towards the concepts of metadata registration and licensing.

The best way, however, to do this—and we have had a very careful look at this and it explains our approach—is not by centralisation and not by taking an authoritarian approach. You have to work with people. You need a collaborative and constructive way forward and you need sound decentralisation. I believe that any attempts to actually bring all of the data from all of the departments into a central repository are doomed to fail for several reasons, one being that all the data custodians will fight it to the death and the agencies themselves, the accountable officers, will hate it. In fact, it very quickly becomes ungovernable and unmanageable. So that is not possible.

You need a system where there is an enablement of the data managers and the accountable officers to actually manage their data properly, and we believe that metadata registration and sound legal licensing removes restrictions on them. That is what we are into. We are not into directions or the authoritarian approach of telling people what to do so much as clearing a path for people to walk. Our approach is that, having talked to a lot of people in a lot of departments, we believe people will actually take the path. They will improve things if only they are able to do so.

The CHAIR—Thank you. Does that answer your question with examples adequately?

Ms THOMSON—That is fine.

Mr TEE—I just want to get a sense of cost in terms of training of departments and agencies in how to use this. In terms of the cost, have they been inundated with requests for information that you have needed to then make a decision about how it is categorised? What cost has there been to government in implementing the system?

Dr CROSSMAN—There are costs. Many of those costs have been borne by our collaborators around the government so it has not actually been a cost that has been felt entirely by the one department. That is one of the pleasing aspects about this. There has been a lot of cooperation, particularly facilitated through the Spatial Information Council in Queensland where syndicates of departments contribute to costs. As well as that, Tim has great relationships with the universities and has attracted outside funding to actually develop GILF as well. So the costs actually have been shared. I think that is probably more important than the total of the costs themselves. Frankly, I do not have an immediate figure of how much GILF has actually cost us to develop thus far. In terms of further implementation, we have a minor controversy within the team, where Tim and I—

Ms THOMSON—Is it on the web site?

Dr CROSSMAN—No. This one comes down to me being a typical Treasury officer

and Tim being rather more practical. Tim says that there will be implementation costs and we will need a fair bucket of money to actually move this; my approach being Treasury says no, people should have been doing this all the time so they should fund it from within their existing budget allocations to manage their data effectively.

Ms THOMSON—It will be a nice little ERC bid.

The CHAIR—Tim, my money is on Dr Crossman.

Mr BARKER—I am taking the hybrid approach, actually. I think it is a bit of both.

Mr DAVIS—They may only want a small budget so that they can announce a program.

The CHAIR—I am glad that Treasury is consistent nationally. Thank you very much for your presentation. Thank you for your generosity of time and the good spirit in which you have tried to navigate a mountain of information and a plethora of questions. Thank you. The transcript will be provided to you within a fortnight. You know the rules: typographical errors can be corrected but substance cannot. Thank you very much.

Mr DAVIS—I want to echo that. You have been very generous with your time.

Dr CROSSMAN—Thank you. May I congratulate the committee on its terms of reference and its interest. I believe that this is a remarkably topical and possibly highly influential exercise you are engaged in. Best wishes.

Witnesses withdrew.