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Official Committee Hansard

SENATE

ECONOMICS LEGISLATION COMMITTEE

ESTIMATES

(Budget Estimates)

MONDAY, 31 MAY 2010

CANBERRA

BY AUTHORITY OF THE SENATE

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**SENATE ECONOMICS
LEGISLATION COMMITTEE
Monday, 31 May 2010**

Members: Senator Hurley (*Chair*), Senator Eggleston (*Deputy Chair*), Senators Bushby, Cameron, Pratt and Xenophon

Participating members: Senators Abetz, Adams, Back, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Bob Brown, Carol Brown, Bushby, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Farrell, Feeney, Ferguson, Fielding, Fierravanti-Wells, Fifield, Fisher, Forshaw, Furner, Hanson-Young, Heffernan, Humphries, Hurley, Hutchins, Johnston, Joyce, Kroger, Ludlam, Lundy, Ian Macdonald, McEwen, McGauran, McLucas, Marshall, Mason, Milne, Minchin, Moore, Nash, O'Brien, Parry, Payne, Polley, Ronaldson, Ryan, Scullion, Siewert, Sterle, Troeth, Trood, Williams and Wortley

Senators in attendance: Senators Abetz, Barnett, Birmingham, Bernardi, Cameron, Colbeck, Eggleston, Heffernan, Hurley, Ludlam, Macdonald, McGauran, Milne, Pratt and Williams

Committee met at 9.00 am

INNOVATION, INDUSTRY, SCIENCE AND RESEARCH PORTFOLIO

In Attendance

Senator Carr, Minister for Innovation, Industry, Science and Research

Department of Innovation, Industry, Science and Research

Executive

Mr Mark Paterson, Secretary
Ms Patricia Kelly, Deputy Secretary
Ms Sue Weston, Deputy Secretary

AusIndustry Division

Mr Bill Peel, Head of AusIndustry Division
Ms Merryn Kennedy, General Manager, Innovation Branch
Ms Wendy Launder, General Manager, Business Development and Commercialisation Branch
Dr Russell Edwards, General Manager Research, Development and Venture Capital Branch
Mr Paul Sexton, General Manager, Customer Services Branch

Corporate Division

Mr Michael Schwager, Head of Corporate
Ms Vanessa Graham, Chief Finance Officer
Ms Cherie Ellison, General Manager, Business Collaboration Branch
Mr Brad Medland, Deputy Chief Financial Officer
Mr Richard Byron, General Manager, Human Resources and Facilities Branch
Ms Chris Butler, General Manager, Corporate Strategy Branch
Ms Nancy Choy, Manager, Budget Estimates Team

e-Business Division

Mr Craig Penniford, Head of e-Business Division, Chief Information Officer
Mr Mike Sibly, General Manager, Online e-Business Services Branch
Mr Steve Stirling, General Manager, ICT Operations Branch
Mr Colin Roberts, Acting General Manager, ICT Operations Branch
Ms Trish Porter, General Manager, VANguard
Mr Paul Mornement, Acting General Manager, ICT Systems Branch

Enterprise Connect Division

Mrs Judith Zielke, Head of Enterprise Connect Division
Mr Paul Trotman, General Manager, Trade and International Branch
Mrs Jane Urquhart, General Manager, Enterprise Connect Branch

Industry and Small Business Policy Division

Mr Barry Jones, Head of Industry and Small Business Policy Division
Ms Ann Bray, General Manager, Business Registration and Licensing Branch
Mr Tony Greenwell, General Manager, Business Conditions Branch
Ms Deborah Fileman, Acting General Manager, Small Business and Deregulation Branch
Mr Richard Snabel, General Manager, Industry Policy and Economic Analysis Branch
Mr Terry Lowndes, Principal Advisor, Industry and Small Business Policy Division

Innovation Division

Mr Ken Pettifer, Head of Innovation Division
Dr Julie Glover, Acting General Manager, Innovation Policy Branch
Mr Peter Chesworth, General Manager, Pharmaceuticals, Health Industries and Enabling Technologies Branch
Mr Tony Weber, General Manager, Innovation Analysis Branch
Mr Doron Ben-Meir, Chief Executive Officer, Commercialisation Australia

Manufacturing Division

Mr Steve Payne, Head of Manufacturing Division
Mr Mark Durrant, General Manager, Automotive and Engineering Branch
Mr Ivan Donaldson, General Manager, Australian Building Codes Board
Mr Mike Lawson, General Manager, Competitive Industries Branch
Dr Michael Green, General Manager, Innovation and Space Branch
Mr Murray Fearn, Acting General Manager, Working Groups Unit
Mr Darren Atkinson, Manager, Pulp and Paper Industry Strategy Unit, Working Groups Unit
Ms Cecilia Wood, Manager, Automotive Legislation Section, Automotive and Engineering Branch

Research Division

Ms Anne Baly, Head of Research Division
Ms Cathy McKay, Acting General Manager, Cooperative Research Centres Branch
Dr Anne Byrne, General Manager, Research Funding and Policy Branch
Dr Caroline Perkins, General Manager, Compacts and Coordination Branch
Mr Anthony Murfett, Manager, ANU Taskforce

Science and Infrastructure Division

Ms Anne-Marie Lansdown, Head of Science and Infrastructure Division

Ms Mary Finlay, General Manager, International Science and EIF Branch
Mr David Luchetti, General Manager, Science Policy and Programs Branch
Mr David Wilson, Acting General Manager, Research Infrastructure Branch
Ms Julia Evans, General Manager, SKA Forum Taskforce

Australian Nuclear Science and Technology Organisation

Dr Adrian Paterson, Chief Executive Officer
Mr Steven McIntosh, Senior Advisor
Mr Lubi Dimitrovski, Manager, Waste Operations

Commonwealth Scientific and Industrial Research Organisation

Dr Megan Clark, Chief Executive
Dr Joanne Daly, Group Executive, Agribusiness
Dr Andrew Johnson, Group Executive, Environment
Dr Steve Morton, Group Executive, Manufacturing, Materials and Minerals
Dr Alastair Robertson, Deputy Chief Executive, Science Strategy and Investment
Mr Craig Roy, Executive Director, Human Resources, Safety and Sustainability
Dr Jack Steele, Manager, Science Planning and Investment
Mr David Toll, Chief Finance Officer
Mr Mike Whelan, Deputy Chief Executive, Operations
Dr Alex Zelinsky, Group Executive, Information Sciences

Australian Research Council

Professor Margaret Sheil, Chief Executive Officer
Professor Andrew Wells, Executive Director
Ms Leanne Harvey, General Manager

IP Australia

Mr Philip Noonan, Director General
Ms Fatima Beattie, Deputy Director General
Mr Doug Pereira, General Manager, Corporate Services Group

Office of the Chief Scientist

Professor Penny Sackett, Chief Scientist

National Measurement Institute

Mr James Roberts, General Manager, Analytical Services Branch
Dr Peter Fisk, General Manager, Physical Metrology Branch
Dr Valerie Villiere, General Manager, Legal Metrology Branch
Dr Lindsey Mackey, General Manager, Chemical and Biological Metrology Branch
Mr Reza Bilimoria, General Manager, Business Services

Questacon

Professor Graham Durant, Director

CHAIR (Senator Hurley)—I declare open this public hearing of the Senate Economics Legislation Committee. The Senate has referred to the committee the particulars of proposed expenditure for 2010-11 and related documents for the Innovation, Industry, Science and Research portfolio, the Resources, Energy and Tourism portfolio and the Treasury portfolio. The committee must report to the Senate on 22 June 2010 and it has set 30 July 2010 as the date by which answers to questions on notice are to be returned. Under standing order 26 the committee must take all evidence in public session. This includes answers to questions on

notice. Officers and senators are familiar with the rules of the Senate governing estimates hearings. I particularly draw the attention of witnesses to an order of the Senate of 13 May 2009 specifying the process by which a claim of public interest immunity should be raised, and which I now incorporate in *Hansard*.

The extract read as follows—

That the Senate—(a) notes that ministers and officers have continued to refuse to provide information to Senate committees without properly raising claims of public interest immunity as required by past resolutions of the Senate;

(b) reaffirms the principles of past resolutions of the Senate by this order, to provide ministers and officers with guidance as to the proper process for raising public interest immunity claims and to consolidate those past resolutions of the Senate;

(c) orders that the following operate as an order of continuing effect:

(1) If:

(a) a Senate committee, or a senator in the course of proceedings of a committee, requests information or a document from a Commonwealth department or agency; and

(b) an officer of the department or agency to whom the request is directed believes that it may not be in the public interest to disclose the information or document to the committee, the officer shall state to the committee the ground on which the officer believes that it may not be in the public interest to disclose the information or document to the committee, and specify the harm to the public interest that could result from the disclosure of the information or document.

(2) If, after receiving the officer's statement under paragraph (1), the committee or the senator requests the officer to refer the question of the disclosure of the information or document to a responsible minister, the officer shall refer that question to the minister.

(3) If a minister, on a reference by an officer under paragraph (2), concludes that it would not be in the public interest to disclose the information or document to the committee, the minister shall provide to the committee a statement of the ground for that conclusion, specifying the harm to the public interest that could result from the disclosure of the information or document.

(4) A minister, in a statement under paragraph (3), shall indicate whether the harm to the public interest that could result from the disclosure of the information or document to the committee could result only from the publication of the information or document by the committee, or could result, equally or in part, from the disclosure of the information or document to the committee as in camera evidence.

(5) If, after considering a statement by a minister provided under paragraph (3), the committee concludes that the statement does not sufficiently justify the withholding of the information or document from the committee, the committee shall report the matter to the Senate.

(6) A decision by a committee not to report a matter to the Senate under paragraph (5) does not prevent a senator from raising the matter in the Senate in accordance with other procedures of the Senate.

(7) A statement that information or a document is not published, or is confidential, or consists of advice to, or internal deliberations of, government, in the absence of specification of the harm to the public interest that could result from the disclosure of the information or document, is not a statement that meets the requirements of paragraph (1) or (4).

(8) If a minister concludes that a statement under paragraph (3) should more appropriately be made by the head of an agency, by reason of the independence of that agency from ministerial direction or control, the minister shall inform the committee of that conclusion and the reason for that

conclusion, and shall refer the matter to the head of the agency, who shall then be required to provide a statement in accordance with paragraph (3).

(Extract, Senate Standing Orders, pp 124-125)

[9.01 am]

Australian Nuclear Science and Technology Organisation

CHAIR—The committee will begin today's proceedings with the Australian Nuclear Science and Technology Organisation, and will then follow the order as set out in the circulated program. I welcome Senator Carr, the Minister for Innovation, Industry, Science and Research, and ANSTO officers. Minister or officers, would you like to make an opening statement?

Senator Carr—Given that at the last two hearings there have been discussions concerning an incident in ANSTO's radiopharmaceutical production facility in August 2008, I seek the agreement of the committee that Dr Paterson be given the opportunity to up-date the committee on progress on that issue.

CHAIR—With the committee's agreement, Dr Paterson go ahead.

Dr Paterson—Thank you for this opportunity. I will briefly run through the context and background of the events under discussion. On 5 May 2010 an ANSTO employee, Mr David Reid, appeared on *Lateline* and made a number of allegations about a safety incident that took place at ANSTO's radiopharmaceutical production facility in August 2008. This incident was also raised earlier at Senate estimates on 21 October 2009 and 10 February 2010. This incident has been the subject of two major investigations. One was undertaken by ANSTO's safety team and experts in radiation matters. This was concluded at the end of September last year. In a separate investigation of the same incident that began in October 2009, the Australian Radiation Protection and Nuclear Safety Agency produced a report which was submitted to ANSTO in January 2010 and which has subsequently been widely discussed in the media.

What did these investigations find? The first finding is that management arrangements in place at the time were deficient in a number of respects. Firstly, the significance of the dropped vial was not understood by the worker. This meant that his colleagues working in the same environment as the event were not informed, although they were not directly exposed to the radiation from the vial. Secondly, the process of informing supervisors did not lead to immediate actions. Thirdly, the initial attempts to locate the source of the radioactivity did not immediately involve specialised health staff. The investigation also revealed that one of the workers had not completed his full in-depth training on working in a radiation environment. These management issues have all been addressed with completed and current actions. Importantly in this regard, ANSTO has a new management team in place at various levels in the organisation relating to the production of radiopharmaceuticals.

In addition, two other claims have been made by Mr Reid. One is that there was a massive dose to a worker who was exposed to radiation from the dropped vial. Both the ARPANSA report and ANSTO's internal investigation based on actual records have shown that this is not the case. This has been confirmed by calculations made independently by three specialists in the field. A second claim is that there has been a cover-up. The investigations show that while

there were management deficiencies at the time, there were no attempts to cover up this incident or not report it at any time.

What does this mean for ANSTO's employee Mr Reid? I have had a meeting with Mr Reid, which was facilitated by the AMWU, and I am very thankful for their help in this regard. In this meeting I gave Mr Reid the opportunity to share with me any and all concerns he has relating to safety incidents, management practices and the work environment in the radiopharmaceuticals production area. We used this opportunity to deal with both the issue of the alleged cover-up and the dose received by the worker. I am now working with the union to close out any residual matters arising from Mr Reid's concerns and the matters he raised. Importantly, that discussion and the matters he raised during that discussion did not change ANSTO's view of its findings in its investigation.

ANSTO is open and on the record. Let me explain. The radiation safety records of ANSTO are the primary independent source of evidence on the effectiveness of radiation safety practices. They are independently reviewed and provided to our regulator, ARPANSA. They are also available to staff and management. These records show that the annual doses are well below the statutory limits and well below ANSTO's lower, self-imposed management limits. With the confidence provided by these records, a new management team in place and the improved quality of incident reporting, we believe that the Australian public can continue to be confident that the 10,000 doses of radiopharmaceuticals used in medical procedures across Australia each week are produced in a facility in which worker safety is not compromised. Thank you for the opportunity to update the committee today.

Senator EGGLESTON—From a medical isotope point of view, what are the implications of this incident you have described for the availability of isotopes used in treatment and diagnosis around Australia?

Dr Paterson—Both with this incident and with all other incidents, we undertake incident reporting, which we then investigate. To date, all of our investigations have shown that incidents can lead to improved work practices, but there is no pattern of incidents that suggests in any way that the facility constitutes a danger to workers or that the radiopharmaceuticals produced in it are not produced safely and effectively for the Australian public.

Senator EGGLESTON—And you will maintain your production volume?

Dr Paterson—The production volumes are being maintained. We are currently in a process of refining our product mix in order to optimise the use of moly-99, which produces the main radioisotope, technetium-99m. That is so that we can ensure that we always have supply available for Australia and can assist as far as possible in the current global shortage.

Senator EGGLESTON—You have not needed to import more radioisotopes in view of this?

Dr Paterson—The current import levels are lower than they were this time last year because of the coming on-stream of our own molybdenum-99 production facility. That is increasingly resilient and robust. We still have some work to do to absolutely ensure that, but we have significantly downgraded the level of imports now that the facility is in place and operating.

Senator LUDLAM—Thank you very much for the update. I have some follow-up questions. You said you have addressed the issues that were raised in the ARPANSA report and in your internal report. You said that some of those actions are completed and some are ongoing—‘current’ was the word you used, I think. Can you describe for us briefly what is still ongoing?

Dr Paterson—The ongoing development is ensuring that the changes we have made in our training system are indeed embedded. It is no longer possible to work in the radiation facility without completing all of the radiation training. We are just ensuring that all of those procedures are indeed followed and that they are embedded in the practices of the organisation. Secondly, we are still evaluating a number of engineering controls that would further strengthen the protection of workers so that they would not have to rely on management controls, because engineering controls tend to be more robust. These evaluations are ongoing in the case of the area immediately around the door and will be finalised within the next six months.

Senator LUDLAM—The ARPANSA report, which is now a public document, noted that when the inspectors were there they noted that there are or have been frequent problems in handling tasks on the cell conveyer system and ‘no apparent attempts to introduce improved handling systems’. Is that covered by your comments just now? Is that what is being addressed?

Dr Paterson—The conveyor handling system is indeed being reviewed. Typically there are two aspects: there is the conveyor and the exact condition in which the vials are transferred. We have already changed the conditions in which the vials are transferred to make it much easier for the workers to handle them with a larger element rather than the picking up of individual vials. In the container area we have reviewed the comments of the regulator and we believe that the engineering ideas they have put forward are useful but may not be sufficient to deal with the concerns that they have, and there are further engineering studies in that regard.

Senator LUDLAM—When ARPANSA went through there they noticed broken glass inside the cell and apparently it is quite frequent for vials to be dropped. Is that being addressed by that kind of changes you are describing now?

Dr Paterson—Certainly the arrangements with the transfer of vials between cells will reduce the number that are dropped. The frequency of dropping is in fact quite small. The particular vial that was noted by the inspectors on that day was an empty vial which had been crushed in the conveyor system. That is relatively unusual and it was cleaned up in the normal course of maintenance procedures.

Senator LUDLAM—The ARPANSA report was pretty strongly worded. One of the things that came through most strongly was that we are using a research grade facility for industrial production of radioisotopes and that it was never really intended for the kind of throughput that you are putting through that facility. Is there any consideration, in terms of looking after the workforce and the people who are in there, of revamping the facility and actually bringing it up to the standard that you would expect?

Dr Paterson—There has been considerable work in this regard. We have completed a review of 37 reports on the facility, all of an OH&S or manufacturing nature, since 1998.

Those had more than 300 specific recommendations. Of those more than 300 specific recommendations, 91 per cent have been implemented and the balance are either not practical at the moment or were of such a general nature that they could not be easily understood as implementable. Therefore there has been a process of continually improving the plant over the years. We have been able to verify that by closing out all of those 37 reports in a proper management fashion and ensuring that we had in fact made the changes that were intended.

In July last year I began a process of working with the team in the radiopharmaceuticals area to understand what other changes we could make. Working with the staff and the workers at the cell face, we were able to identify some 80 improvements which are from very small improvements, improved ergonomics in the place where they stand, right through to quite complex ones in changing the workflow, for instance, of the production of the generators for technetium-99m. Of those 80 proposed changes, 50 will be completed by the end of the current calendar year and the other 30 have all been planned and dispositioned and funds allocated to do that. In our last meeting of our capital investment committee we made two other significant decisions. One is to make a major change to the workflow to reduce the movement of generators from 116 metres net distance travelled to 16 metres. This will greatly diminish the movement of those materials through the facility. In addition to that we will put in an automated washing facility for the returned generators. That will be a very significant improvement. We are also integrating the waste management of the facility and we have just approved a budget for the detailed design of a waste management facility under building 23A which will allow us to stratify the waste more effectively, will allow the decay and delay processes to minimise the total amount of material that ultimately goes to a waste repository and indeed will allow us to ensure that there is less dose to workers arising from waste materials in the facility as a whole.

Senator LUDLAM—Going back to the original incident, have you identified the person or persons who were directly involved in not being able to retrieve the vial? My understanding is that when it eventually came out it was brought out with a device, some kind of a mirror stuck to a tool with a bit of sticky tape, which sounds like something you would have wanted to look at. You acknowledged in your new opening comments that were people on the work floor who had not been trained to a suitable level. Were there any suspensions or any consequences to those operators? Have they been retrained since then?

Dr Paterson—Yes. I think we have now identified all people who were involved in that incident, and there is ongoing operator training. In addition, based on our incident reporting and our management procedures, wherever there is a radiological incident or a failure to comply with a management arrangement, retraining is essential, and we undertake that before the workers return to the cell face.

Senator LUDLAM—Would you say that the disclosures were validated by ARPANSA's report? You have referred to them before as allegations, but would you say that they have been more or less completely validated by the subsequent reporting and all the action that you describe as having occurred since then?

Dr Paterson—I would say that it was valuable that Mr Reid, as a health and safety representative, re-raised these matters in April 2009, and I said that to him when I met with him. I feel that that was a very useful action on his part, and the fact that the investigation

chain, which has subsequently followed, was initiated by that action I regard as very positive. I think that it was helpful both to management and to the workforce as a whole in the radiopharmaceuticals production area to go through a process of internalising what had happened, working through it in some detail and coming to a solid set of conclusions about how we could improve management and how we could improve the interaction with the workforce in order to mitigate these effects. So I would say it was good.

Senator LUDLAM—It would appear to me, obviously not having been at any of these meetings and not having visited the radiopharmaceuticals plant, to be a pretty good example of the benefit of a whistleblower. This fellow has taken some risks, and you would hope, on the basis of all the reviews and all the changes that you are making, that conditions for the workforce in there are improving as a result of what he has done.

Dr Paterson—I think he was absolutely correct in his position of an HSR to raise it internally, which he did. I applaud that. I applaud the fact that he and a colleague also raised it at the central committee, which we use for all of the union representatives, in May 2009. I certainly believe that those actions were very solid. Where I have a concern is that, as the information came out of the investigation, he has not changed his view about the dose to his fellow worker. We had a very fruitful discussion of that when I met with him, and I think we have achieved a difference of view but a respect for one another's views.

Senator LUDLAM—What are his circumstances or his conditions now? I understand that he has been on special leave and that there have been some quite serious consequences for him.

Dr Paterson—There were no consequences that arose for him as a result of his safety activities.

Senator LUDLAM—So when will he be back on normal duties?

Dr Paterson—He is currently working on an agreed return to work program, which was agreed with the union and with Fair Work Australia. He has not completed that return to work program, but in the spirit of advancing the matter he has been offered an assignment with our decommissioning team and I hope that when he completes his return to work program he will be able to make a major contribution to the decommissioning work of ANSTO.

Senator LUDLAM—If he was the safety officer whose report and whose ringing of the alarm bells led to all these improvements in your facilities, why is he on a return to work order? Has he been disciplined or stood down?

Senator Carr—Can I just indicate that if you wish to discuss individual cases at this level then it puts the officers in a difficult position, given the privacy questions that do arise. Dr Paterson has indicated to you that there has been no penalty whatsoever for him pursuing this question. They are working very closely with the union on these matters, and perhaps it is better for you to pursue these matters on a private basis rather than a public one.

Senator HEFFERNAN—Can I just seek clarification: are we talking about OPAL here?

Senator LUDLAM—It is a building adjacent to OPAL, not actually OPAL itself.

Senator HEFFERNAN—Because OPAL is only temporarily repaired.

Senator LUDLAM—Can you tell me about your production in there. You said that some of these actions are still ongoing. How many batches per week do you process through that facility?

Dr Paterson—There are a significant number of batches, and it would be difficult to answer that question in a precise way unless we unpacked the notion of a batch. But effectively about 10,000 doses per week reach Australian patients as a result of the production in that facility.

Senator LUDLAM—Just briefly, because I do not want to take up too much time with this, you do them in certain runs and can you just talk us through how it actually works once you have actually got a run on the go?

Dr Paterson—Within the total facility there are a number of workflows but in the particular environment that we are talking about—which produces, for example, the iodine 131 used to treat thyroid cancer—the radioisotope would enter at one side of the facility and would be reduced into the doses in the particular containers that then come out of the other end of the facility in a lead pot. Those lead pots are placed in boxes, subjected to quality control and then dispatched to the hospitals and clinics that apply them to the patients to deal with their thyroid cancer.

Senator LUDLAM—There are roughly 10,000 doses per week through that process. Do you do them in certain kinds of runs? My understanding is that you do two runs per week.

Dr Paterson—In the case of the technetium-99m there are usually two runs a week, sometimes more.

Senator LUDLAM—What qualifies as a run? Can you just define what that means?

Dr Paterson—What will happen is the hospitals and clinics will make orders and that will lead into a production planning process. The production planning process is then stratified to meet the requirements of the customers and each of those would turn into a run. So there are two runs a week in our molybdenum-99 production facility, which then feeds into production of generators.

Senator LUDLAM—I am particularly interested in the moly-99 because that is also partly arising from the incident that we have been discussing. Is there a proposal within ANSTO to increase the amount of runs that you do per week?

Dr Paterson—There is a proposal to increase the number of runs of digesting fuel plates and producing the moly-99m but there is no proposal to increase the production in generators.

Senator LUDLAM—Do you want to just make clear what that distinction is there? So you are not intending to undertake more than two runs per week?

Dr Paterson—They are—Building 23 a process for the production of generators. Ultimately we are trying to reduce the number of generators that go into the market and get more efficient distribution because of that. But the increase in runs is intended to take place in a completely separate building called Building 54.

Senator LUDLAM—Okay, not through Building 23. Is that increased activity likely to require you to bring on more staff or expand the amount of work that goes on through that?

Dr Paterson—We have staff to undertake that number of runs per week.

Senator LUDLAM—And you do for the foreseen expansions?

Dr Paterson—Yes.

Senator LUDLAM—ARPANSA's report was obviously extremely useful for us once we finally managed to get our hands on it, as far as that incident report goes. Can you just tell us the relationship between ARPANSA and ANSTO? Do they have access to your facilities on a spot inspection basis? Can they just turn up without any warning at all?

Dr Paterson—Absolutely correct.

Senator LUDLAM—How frequently does that happen?

Dr Paterson—It happens on a regular basis.

Senator LUDLAM—Is that days or weeks?

Dr Paterson—I cannot really notify you of that because they have access without notice and so I cannot always tell whether they are on our site or not.

Senator LUDLAM—Is that right? They could have visited and they do not even need to give you a call?

Dr Paterson—Absolutely.

Senator LUDLAM—Which is, I think, how it probably should be. They do not have to get permission from anybody first?

Dr Paterson—No.

Senator LUDLAM—Having been into OPAL, it is not easy to get into some of these areas. There is a lot of process and work to get onto the site. But ARPANSA just have access-all-areas passes, effectively?

Dr Paterson—They have their own swipe badges. If they went into the secure area of OPAL they would do it under escort. That is the normal process. Certainly, they have very wide and general access to our facilities.

Senator LUDLAM—Do they have access to your personnel unaccompanied or do they need to be under escort wherever they go?

Dr Paterson—In general they have had access unaccompanied but that is not a global best practice and it will be something that I will take up with the new CEO over time. In general it is good to have a process by which the inspectors can engage with staff but where there is the ability to have independent verification of the discussions.

Senator LUDLAM—There is no proposal to change that access regime, is there?

Dr Paterson—There is no proposal to change the access regime unless there is a security requirement to do so.

Senator LUDLAM—I just want to bring us back to waste. Is there anything that you can update us on about your planned repatriation timetable for spent nuclear fuel of Australian origin that is currently in Europe?

Dr Paterson—The update at the moment is that we received funding in this year's budget in order to begin the planning work for the repatriation of the waste. That budget over the next number of years is \$30.3 million and will allow us to initiate the planned process for the return of the residues.

Senator LUDLAM—Do you have dates of expected return from France and the UK yet?

Dr Paterson—We have final end dates available to us.

Senator LUDLAM—That is an envelope; it is not an arrival date.

Dr Paterson—It is not an arrival date.

Senator LUDLAM—You do not have any more detail?

Dr Paterson—No detail at this time.

Senator LUDLAM—Can you tell us, and maybe table it if we are little short of time, a decommissioning time line for the HIFAR facility?

Dr Paterson—I do not believe we can give a decommissioning time, because we do not yet have a decommissioning licence. We are in a possess-and-control phase. Therefore it would be premature to provide a decommissioning table for HIFAR.

Senator LUDLAM—Is one under development?

Dr Paterson—There is one under development.

Senator LUDLAM—And that will be provided to your minister at some stage, on applying for a licence. Does that have to go through EPBC approval? Is that considered a nuclear action?

Mr McIntosh—Yes. We will put it through an EPBC process and it will have to go through the licensing process as well.

Senator COLBECK—I think I am on the same thing as Senator Ludlum. Is the funding for the decommissioning process for the high-flux the additional \$9.7 million that has been allocated in this year's budget?

Dr Paterson—The funds for the \$9.7 million for this year are not for HIFAR; they are for other decommissioning actions, in particular the Moata reactor and the National Medical Cyclotron facility.

Senator COLBECK—So the \$13.2 million provided in the mid-year economic outlook is going to that same process?

Dr Paterson—Could you give us a little more detail so we can identify that one?

Senator COLBECK—It is actually 2007-08. I am just trying to get a sense of the final costing for the overall process. Is that \$13.2 million plus the \$9.7 million the extent of your expected costing on that?

Dr Paterson—The expected costs of decommissioning are significantly larger than that, and we have provision in our accounts for that.

Senator COLBECK—So if they are significantly lighter, what is the basis for the additional \$9.7 million in this year's budget?

Dr Paterson—The decommissioning plan for the Moata reactor and for NMC was updated during the course of the year. That led to the estimate of \$9.7 million for the balance of that decommissioning work in the next year, and that is the amount that is being sought in the budget and has been received by ANSTO.

Senator COLBECK—But your expectation is that the cost is going to be less than that?

Dr Paterson—No, I may have misspoken. The total cost of all decommissioning for all of the facilities in ANSTO is a significantly larger number than the \$13.2 million and \$9.7 million that you raised.

Senator COLBECK—I misheard; I am sorry. Do you have a sense of where that is going to be and what additional funds you will need to seek for that at this stage?

Dr Paterson—We regularly estimate the cost of decommissioning, and we are currently busy with a project upgrading our decommissioning plan. That work will be completed towards the end of August and that will give us the most up-to-date and reliable estimate of the long-run decommissioning costs for our nuclear facilities.

Senator COLBECK—Can you give me a sense of the impact of the efficiency dividend and where you are applying the impacts of that?

Dr Paterson—The efficiency dividend is applied to our administrative functions, which constitute approximately 15 per cent of our budget. We have worked hard to understand how we can streamline the activities of ANSTO, which are primarily based on a set of enterprise applications. By the effective deployment of those, we will become a more flexible and agile organisation, and it will allow us to make the savings that are intended in the efficiency dividend.

Senator COLBECK—The extent of the efficiency dividend is \$3.25 million?

Dr Paterson—I think that is correct, yes.

Senator COLBECK—There must be a limit to the extent that you can bear that, though. You can only become so flexible and so more nimble and agile. You are taking out \$2.5 million over this current four years. Where is the limit to that?

Dr Paterson—We have not determined a limit at this point. We had very fruitful discussions with the department about this efficiency dividend. We think it is appropriate for us to be careful with taxpayers' resources and to seek efficiencies where we can. These are obviously best achieved in the administrative functions. I think the efficiency dividends are currently applied in an area where they can be affected and where it can only lead to improvements in the responsiveness and agility of ANSTO.

Senator COLBECK—Where will they be applied in this coming financial year?

Dr Paterson—In this coming financial year we are undertaking an upgrade of our SAP system, which is the system we use to manage a lot of our operations. This will allow us to simplify the procurement processes in the organisation. It will allow us to organise and operate our travel more efficiently and reduce the costs that are attendant to that. It will also allow us to review our business planning process and bring efficiencies in that as well.

Senator COLBECK—Do you have plans for this on an annual basis? Do you have a plan for what you intend to do in each of the coming years?

Dr Paterson—We are currently concluding the last year of a four-year strategic plan for our IT systems, and the IT strategy for the next four years is currently under development and consultation with all of the users internally and the stakeholders externally. It is certainly my hope that we can continue to find more effective ways to deploy ANSTO resources and to do our business. This efficiency dividend of \$2.5 million is the first time that it has been applied in recent times in ANSTO and I think it is a useful test for us to apply our minds to achieving these efficiencies.

Senator COLBECK—So this is the first year that you have had this applied to you.

Dr Paterson—Yes.

Senator COLBECK—I want to go back to the repatriation of waste—\$30 million over four years including \$25 million in capital funding. What is the proposal to apply the capital funding to?

Dr Paterson—The capital funding is applied to a number of elements. The major element is the containers for the waste. These containers are highly specialised in order to ensure the safe return of the waste, and they constitute the bulk of the capital requirement.

Senator COLBECK—What proportion of that money goes into the containers?

Dr Paterson—The total capital expenditure on the French and the UK return, depending on the exact configuration of the UK return—the numbers change a little bit—is of the order of \$23 million to \$25 million.

Senator COLBECK—You also say in Budget Paper No. 2 that this funding includes provisions for an interim storage facility. How does that fit into the costings and where?

Dr Paterson—The interim storage facility is part of a larger budget request but within the \$30 million. Should it be prudent to provide for such a facility we can begin expenditure to plan it. Such a facility would of course not be an alternative to a long-term waste repository and therefore would have to serve the purpose of temporary storage at Lucas Heights.

Senator COLBECK—So you are proposing at this stage to store that material, when it comes back, in a temporary facility at Lucas Heights?

Dr Paterson—Our proposal would be to send it directly to the national waste storage facility, which I believe is currently before the Senate.

Senator COLBECK—So it is potentially going to the proposed site in the Northern Territory?

Dr Paterson—That would certainly be the most effective way to deal with the waste.

Senator COLBECK—My understanding of that facility is that it was a low-level waste facility. Is that not correct?

Mr McIntosh—The proposal is for two facilities co-located: a low-level waste repository and a store for intermediate-level waste, an above-ground store. So this waste would go into the above-ground store.

Senator COLBECK—So the figures that you have in your budget at this stage do not incorporate any of the costs associated with that proposal?

Mr McIntosh—No—

Senator COLBECK—That is part of a larger budget request?

Mr McIntosh—No, that project is being run by the Department of Resources, Energy and Tourism, so you would need to talk to them about their costing.

Senator COLBECK—I am happy to do that.

CHAIR—I think Senator Cameron has some questions now.

Senator CAMERON—Thank you. Dr Paterson, you indicated in your opening statement three aspects of the investigation into the safety issues. One was that the worker did not know the procedures. Could you just take me through the other two points?

Dr Paterson—Yes, the second aspect was that the process of informing supervisors did not lead to immediate actions. At the time, the two supervisors were in meetings in another part of the facility. When they were informed of the event, they did not take immediate action. There was therefore a delay which was not acceptable.

Senator CAMERON—And the third point?

Dr Paterson—The third point was that the initial attempts to locate the source of the radioactivity did not immediately involve specialised health physics staff. The staff working at the cell face were using radiation detectors to try to discover what the source of the activity was—where it was coming from. They took some swabs and wipes in order to see if there had been a spill in the area. That did not show anything. At that point it would have been prudent to call in the health physics staff, but there was some delay between their determination that there was not a spill and the health physics staff arriving. They were in the building at the time.

Senator CAMERON—You indicated that you had improved your engineering controls. One of the issues for me is that there seems to be lots of reactive management positions taken but not too many proactive safety positions adopted. I would like you to comment on that and I would also like you to comment on the issue that you can put as many engineering controls in as you like but, if you have bad management systems in place, that will not assist; it will all break down. You have to have the engineering controls working with the management controls, surely?

Dr Paterson—I agree with you. I think it is entirely appropriate to have the correct level of engineering controls, and any engineering control that can be economically applied is a good control. Therefore a lot of attention is going into the improvement of those controls, and some improvements have indeed been made. However, the management systems are absolutely crucial. It is absolutely essential to not just have a technocratic approach to safety but to involve the whole of the workforce and to continuously improve the management actions in support of safety. One of the things that I have done since I joined ANSTO is to really work on the behavioural and management aspects of safety, because, in my view, we could not depend solely on the technocratic aspects of safety in order to achieve what we need to achieve in the organisation.

I think it has been very fruitful. I think there has been a change in approach. There has been an improvement in incident reporting, there has been an improvement in the close-out of investigations and there is better tracking of the actions. As I indicated, these 37 reports from 1998 had never been formally signed off by management. We run a very careful process of studying all of those reports, reviewing the recommendations and seeking to find out whether they were or were not applied, and we are now in a position to say that all of those reports have been dealt with in an effective management way. In addition, we have changed the process of dealing with final incident reporting. There was a process by which the initiators of incident reports and the staff involved at the time did not have a close-out meeting when the investigation was complete. It is now standard in ANSTO for there to be a close-out meeting when an investigation is complete, so that all staff are briefed on the findings of the investigations, the attendant actions and their future role in that regard.

It is important to recognise that we have also increased the number of hours that executive and senior management use in the safety activities. The current goal of the executive is four hours a week on safety related activities. This involves our executives moving into areas where they do not normally work—bringing fresh eyes to the situation and bringing their expertise and disciplines with those fresh eyes to better insights. In addition, most of the new hires that we have made over the recent period of time come to ANSTO with significant Six Sigma and lean manufacturing practice as part of their toolkit. This will lead to an ongoing improvement in the quality of the workplace as we drive continuous improvement. I can only agree with you, Senator, that safety is a management commitment. It has to be visible every day and it has to be consistent, effective and in line with the other actions on engineering controls.

Senator CAMERON—You mentioned Six Sigma, but it is not Motorola, is it? It is a bit more dangerous than Motorola who developed the Six Sigma system. We are dealing with nuclear—

Dr Paterson—The benefit of a Six Sigma and lean manufacturing type of approach is that it removes from the workplace anything that is essentially not contributing to the work. I believe that we will see the benefits of that. Statistical process controls do lead to better insights into the quality of processes, and therefore to apply them in a rigorous way will improve the quality of safety and the efficiency of production.

Senator CAMERON—The first point you made is that the worker did not know the procedures. Are you blaming the worker for that or was this a management breakdown in terms of the training?

Dr Paterson—My view was that it was a management breakdown. We do not blame workers. It is practice in the nuclear industry to have a no-blame approach to incident reporting. This means that workers can feel confident that if they make these reports they are not going to suffer any negative consequences. In fact, they should be applauded and rewarded for making these reports.

Senator CAMERON—You indicated that there have been 37 reports. The frequency of vial dropping is quite small.

Dr Paterson—Yes, it is.

Senator CAMERON—Who do you benchmark that against?

Dr Paterson—We benchmark that internally on the production in the facility, but we are able, for example, to benchmark our radiological records with other production facilities around the world. In general, we are in the same range or better. From that point of view, we have always had an excellent safety record.

Senator CAMERON—You are confident that the issue with Mr Reid is being worked through effectively with the AMWU?

Dr Paterson—We have had tremendous support from the AMWU. We have worked with them at the highest level in this regard. They have been very supportive of Mr Reid, correctly. We have agreed to a return-to-work program. That program was mutually agreed and supported by us and the union and we hope that he will achieve his goals and that he will be able to return to the assignment in the decommissioning of HIFAR.

Senator HEFFERNAN—Are you going home for the soccer?

Dr Paterson—No, I am not. It would be inappropriate, Senator!

Senator HEFFERNAN—Welcome. I have some questions, most of which I will put on notice. The original estimate for ANSTO's new cyclotron PETNET was \$10 million. What was the actual cost?

Dr Paterson—We will take that one on notice.

Senator HEFFERNAN—I will try to pick out questions that you may be able to answer. Why did ANSTO need to form a joint venture with Siemens, given that I would have thought you were capable of running cyclotrons without assistance from the manufacturer? Why was there no tender in that process?

Dr Paterson—I will comment on the nature of the relationship with Siemens. It is more a franchise agreement rather than a joint venture, because we are the 100 per cent shareholder of the facility. As to the reason that we have gone with Siemens and the basis of that process, I will take on notice.

Senator HEFFERNAN—Is it ANSTO's position that it will subsidise PETNET in competition with other FDG suppliers in the Sydney market?

Dr Paterson—It is not ANSTO's position. ANSTO will run PETNET as an arms-length facility with its own set of accounts and its own balance sheet. It will have to compete on the same basis as any other in the marketplace.

Senator HEFFERNAN—So, at the present time with the investment, how many customers is PETNET shipping to now? I believe you are going to Royal North Shore Hospital. Is there anyone else?

Dr Paterson—I believe that we should be cautious about raising particular customer names as they may be commercial-in-confidence matters.

Senator HEFFERNAN—How many customers do you supply? Put it that way. Only the one?

Dr Paterson—I believe that there are a number of customers, but I will take it on notice to give you more detail.

Senator HEFFERNAN—I will put those on notice. I will go to the cyclotron. Is it true that ANSTO is providing capital funding for equipment using the cyclotron technology at hospitals around the country?

Dr Paterson—ANSTO has a number of programs in which we collaborate with research groups. This includes, on occasion, co-investment in facilities and in some cases the extension of existing facilities. ANSTO is involved currently in five separate discussions that involve partnerships and funding of cyclotron facilities around Australia.

Senator HEFFERNAN—As I understand it, you are going to Austin. But what process do you use in determining where the funding goes?

Dr Paterson—The process is derived from the nature of the partnership. In the case of Austin, for example, it is the opportunity to develop a solid targetry and to use the attendant radioisotopes for a range of applications in research and clinical trials. It is the new IBA facility at the Austin Hospital and its unique capabilities that make it a very good facility to work with.

Senator HEFFERNAN—Was there any particular reason that the Peter MacCallum did not get a shot at it?

Dr Paterson—The Peter MacCallum is in a series of other relationships with us. They are a very strong partner for us in the CRC for biomedical imaging development. The Peter MacCallum will continue to work with us in that regard and in other collaborations. I think it is a case of a generosity approach across the system rather than specific individual relationships.

Senator HEFFERNAN—As I say, I have a lot of questions to put on notice. Obviously there are some distressed people in the market. Can ANSTO explain how the head of PET at the Austin Hospital, Professor Andrew Scott, who is also an ANSTO board member, can be the recipient of nearly \$2 million worth of ANSTO capital without an open grant process?

Dr Paterson—ANSTO is not a granting agency. It is a national research facility which partners right across Australia in different relationships.

Senator HEFFERNAN—So do you cover off the conflict-of-interest thing somehow?

Dr Paterson—Absolutely. The conflict-of-interest matter is always raised at every board meeting and there is an opportunity for members of the board to participate or not to participate in certain aspects—

Senator HEFFERNAN—So in the case of Austin Hospital, what did Professor Scott say and do?

Dr Paterson—I do not think he said or did anything.

Senator HEFFERNAN—Can you take that on notice. I will put all of these on notice anyhow. I have questions on the national medical cyclotron, but I will go to the OPAL reactor. Can you confirm that the original budget for the reactor was \$300 million?

Mr McIntosh—In 1997 dollars it was \$286.4 million.

Senator HEFFERNAN—Near enough. What is the cost, including rectification, to this point?

Mr McIntosh—There was some additional money granted in the budget in 2002 or 2003 for security costs consequent upon September 11. That \$286.4 million was also inflated over the years and the cost of the reactor has been within that inflated—

Senator HEFFERNAN—So how much is it? Is it \$400 million?

Mr McIntosh—In current dollars? We will have to take that on notice.

Senator HEFFERNAN—Thanks. You will probably take a good few of these on notice. I am actually only qualified in wool classing and welding. It was an adventurous weld—

Senator CAMERON—Welding?

Senator HEFFERNAN—Yes.

Senator CAMERON—Oh, yeah?

Senator HEFFERNAN—What do you mean?

Senator CAMERON—You know what I mean.

Senator HEFFERNAN—I have been to tech, mate; you have not.

Senator CAMERON—You went to tech; I did an apprenticeship.

Senator HEFFERNAN—Just because you cannot weld—

Senator CAMERON—Heffernan the welder!

Senator HEFFERNAN—Go to Junee and find out for yourself, mate. The cause of the leak of the light water into the heavy water was welding that destroyed a seal; correct?

Dr Paterson—No. It was a defect caused by a phenomenon called delayed hydride cracking, which resulted in cracks opening up in the weld itself.

Senator HEFFERNAN—It was an adventurous weld. It was a weld that was taken as a precaution but it was not technically the right thing to do.

Dr Paterson—I think all of the design reviews showed that the welding was indeed the correct procedure.

Senator HEFFERNAN—Did they X-ray it when they did it?

Dr Paterson—They did postwelding inspections.

Senator HEFFERNAN—Did they X-ray it as soon as they had finished it? You may know that if you are doing a gas pipeline you X-ray every weld as you do it.

Dr Paterson—I would be very happy to brief you in detail on these matters and the background to them, but I am not certain I can explain all the details of the processes.

Senator HEFFERNAN—I will put all the questions of a technical nature on notice.

Dr Paterson—Thank you. We will take them on notice.

Senator HEFFERNAN—One of the strongest arguments for OPAL was the production of mo-99. Is that correct?

Dr Paterson—Correct.

Senator HEFFERNAN—Have you produced any yet?

Dr Paterson—We have produced significant quantities. We have been essentially supplying the Australian requirement, while OPAL is operational, since about September last year. We have had some processing problems in the moly plant, which is separate to the OPAL reactor, but the OPAL reactor is a very successful irradiation device for the molybdenum-99 targets and is meeting all of its requirements to specification.

Senator HEFFERNAN—So what are we importing from your homeland, South Africa?

Dr Paterson—We import moly-99 from South Africa when OPAL is shut down. These are fill-in imports that are used widely around the world to supply, and during the time that we were qualifying the plant we had backup imports to ensure that we would not disadvantage the Australian healthcare system.

Senator HEFFERNAN—Would it be unfair to say that the reactor is not reliable in producing mo-99?

Dr Paterson—It would be very unfair, Senator.

Senator HEFFERNAN—I will put the rest of my questions on notice.

Senator EGGLESTON—What progress has occurred in the creation of a nuclear waste repository at Muckaty Station?

Senator Carr—It is the wrong department to ask that question of, I am afraid, Senator.

Senator EGGLESTON—My apologies. I thought it was this department. Which would be the correct department?

Senator Carr—Resources, Energy and Tourism.

Senator EGGLESTON—I see. It was given to me as being under this. I have heard there were certain problems associated with the development of that.

Senator Carr—Perhaps you could address your question to those officers today.

Senator EGGLESTON—I will do that. We were told to come here.

Senator LUDLAM—I would like to follow up some of the questions that Senator Colbeck was asking about the funding in the budget for an interim waste building or facility on site at Lucas Heights. Can you go through exactly what it is intended that that contain and for what interim period.

Dr Paterson—Basically, prudent planning would suggest that to meet the time scales that are currently embedded in the return of the spent fuel we have to envisage the possibility that the national above-ground storage facility for the intermediate-level waste will not be ready. In such a situation the logical place to return the spent fuel would be Lucas Heights, and a small storage facility that would be dedicated to that purpose would be required to be built.

Senator LUDLAM—When you say ‘small’, what are you talking about? How large would it be?

Dr Paterson—It would be of the order of the size of this room.

Senator LUDLAM—I suppose that is similar in scope to what it is proposed be built in the Northern Territory.

Dr Paterson—We are not directly involved in the planning of that facility, so I cannot answer that question.

Senator LUDLAM—Okay, fine. The last time I spoke to the officers they told us that there was the potential to station a counterterrorism unit at the site in the Territory, but they were not sure whether the categories of waste that they would be receiving would require them to do that. I thought that was odd because you folk have had this waste well categorised for years and years. Can you shed some light on that?

Mr McIntosh—As part of the licence, whoever applies for the licence to operate the facility will have to put forward a security plan.

Senator LUDLAM—Do you have counterterrorism officers or troops stationed at ANSTO?

Mr McIntosh—We do not have counterterrorism troops stationed at ANSTO.

Senator LUDLAM—You do not, but I figure that in Sydney you have closer access to specialised folk like that than they would have up in the NT. Can we talk a bit more about the interim building. Presumably the government would prefer that this material come back through Darwin and be taken straight to the Territory, but are you working on interim contingency planning for the material to come back through Sydney and rest at Lucas Heights for a period of time?

Dr Paterson—We have not begun any detailed planning. The conceptual planning is under discussion with our board, and I regularly brief them on that.

Senator LUDLAM—Okay, but you have requested a budget for it, so there must have been some work that has been done or you would not know how much to ask for.

Dr Paterson—As I indicated, conceptual design work on the facility allowed us to make an estimate of what it would take to build it.

Senator LUDLAM—I am interested, obviously, that the government has been saying, ‘It can’t go to Sydney; it has to go to the Territory.’ Will it be safe in Sydney?

Dr Paterson—I think that nuclear waste is best stored in national facilities, and those national facilities need to be provided on a national basis to all users of nuclear materials. My belief is that it is not usually appropriate to return spent fuel to research reactor sites. It would be more appropriate to deploy it in a site that is properly located and run on a national basis. However, prudence suggests that if the timescales cannot be met, in order to meet our obligations to other countries we can envisage a temporary storage facility on the ANSTO site, and it would, indeed, be safe.

Senator LUDLAM—Can you describe to us, as much as you are able, in what form that reprocessed material will return to Australia. What does it look like? It is not in 44-gallon drums, is it? It would be something else.

Dr Paterson—Chair, with your indulgence I will invite our expert to speak on this.

Mr Dimitrovski—We have a specially designed cask. They weigh about 112 tonnes each. They are highly shielded casks. They follow the transport code. They will be shipped and

stored in a facility as they are. So the waste is coming back from two places. That is, in France it will be in large 112-tonne shielded casks with the vitrified waste in there. There are canisters placed in baskets inside the casks. It is up for discussion now whether waste from Dounreay will be in cement or vitrified waste. That is still under negotiation.

Senator LUDLAM—I think we have just about run the clock down. Finally, my understanding—you mentioned the word ‘store’ before—is that the reprocessed waste is not heading to the Northern Territory for final disposal but for interim storage while we think about what to do with the material. Is that correct?

Dr Paterson—That is correct.

Senator LUDLAM—As a follow-up to a question that Senator Heffernan raised before, my understanding is that your weld testing was done using ultrasonics and that it was not X-rayed at all. I think we covered some of this terrain last year, or maybe the time before last. If you could confirm, for both of us, that they were not actually X-rayed, I would appreciate that.

Dr Paterson—We will take that on notice and provide the reasoning for the post-weld inspection procedures and what they revealed.

Proceedings suspended from 9.58 am to 10.14 am

Commonwealth Scientific and Industrial Research Organisation

CHAIR—Welcome to the CSIRO. Dr Clark, would you like to make an opening statement?

Dr Clark—I would, Chair. As you know, our people strive every day to make a difference on the things that matter to this nation and the globe. I want to just update you on a couple of the things that our people have done since we last came together. First of all, together with Delfin-Lend Lease and the Henley Property Group, we launched the first zero emissions home for Australia. That will really allow, for the general mass market of Australian homes, a completely new design.

Secondly, our astronomers have hooked up the first radio telescope in Western Australia, the first antenna, with our radio antennas in Parkes, Narrabri and Coonabarabran, with an antenna in New Zealand. This has really created a completely new telescope array which has 10 times the resolution of the Hubble telescope.

Our prawn researchers, working with industry, have successfully, for the very first time, closed the breeding loop for pawns. This means that for the first time that industry can have a sustainable future. Not only have they done that, but we have seen yield increases of two times and in some cases three times traditional yields in the ponds. That is both national and world record yields.

Lastly, we have joined up with Deakin University and the Victorian Centre for Advanced Materials Manufacturing to create one of the world’s largest centres in carbon fibre research. This will produce new products for the biomedical, for the defence and for the manufacturing industries.

CHAIR—Thank you for that rundown of some of the new CSIRO initiatives.

Senator COLBECK—Can I go, firstly, to the closure of the Limestone Avenue head office and your environmental research site at Gungahlin Homestead in Canberra. Can you give us the reasons for the closure of those two facilities?

Dr Clark—Those properties were sold off some time ago. They are leased properties. We are currently consolidating under our property at Black Mountain.

Senator COLBECK—So that is at the entomology division?

Dr Clark—Our entomology division is housed at many of our sites. A large part of our entomology is already at Black Mountain. We do have other representations of the division at other sites around Australia.

Senator COLBECK—What will be the employment impacts of the merger?

Dr Clark—The purpose of the merger is to create both national and global scale in that area of sustainable environment. We are looking to bring the researchers together. We do not expect to see any reduction in our research effort. There may be some administration areas that are overlapped, but essentially it is bringing together the scale of both of those groups to produce something that is now at a global scale in the very important areas of ecology, biology, our environmental work and our work on insects. That, of course, is extremely important to our work on biodiversity, sustainable agriculture, ecology and the environment.

Senator COLBECK—So you see no impact on research effort but potentially some impact on administration.

Dr Clark—We will actually see an improvement in our research effort. That is why we are bringing this together. We have had a long-term approach, to build both national and global scale critical mass in our critical areas of capability. This is the reason behind that. It is really to build our critical mass and to make this kind of capability available to our flagships in the various areas. So the rationale behind it is a strategic one. It is not a rationale of headcount in any way. It is actually looking to augment our research effort and bring those teams together.

Senator COLBECK—I understand that, but can you give me any sense of the employment implications of the decision, from either side of the equation? If I hear you right, you have said that there will be no impact at the research level. I am just wanting to get a sense of the employment implications of the decision.

Dr Clark—As I mentioned, we are not expecting to see any implications in terms of reduction of effort with this merger at all.

Senator COLBECK—You have mentioned that it is something you have been planning for a period of time as an approach. How does that relate to the criticisms from the staff of lack of consultation with the decision-making process?

Dr Clark—Certainly this has been an ongoing trend not recently but over many years—in fact over many decades, so it is something that is quite ongoing. It is quite important of course, in a globe where we are seeing a lot of competition and a lot of fast moving in these areas, to make sure that we do have that kind critical mass, so we have had an ongoing program over many decades to do that. And of course it is very important to make sure we have clarity on that, and now our staff are working together on the merger and the details of that, so are fully

engaged now on the details of how that will work, underneath the direction of one of our most esteemed leaders in Mark Lonsdale.

Senator COLBECK—So they effectively should have seen it coming because it is a process that has been going on for a period of time? The criticism that the staff have made about lack of consultation really doesn't matter in that context because they should have seen it coming? You have no response to that?

Dr Clark—I just was not sure what your question was.

Senator COLBECK—The staff have made criticism of the fact that there was no consultation in this particular move. Your comment implies to me—and if I am wrong, I am wrong: tell me—that because there has been an ongoing approach—

Senator Carr—Senator, I think we should be clear about the process here. The decision to sell the facilities on Limestone Avenue was taken under your government.

Senator COLBECK—I am not questioning that.

Senator Carr—Just be clear about this: the decision to sell—

Senator COLBECK—I am just asking about the consultation on the decision.

Senator Carr—Hang on. The decision to sell those facilities was the previous government's.

Senator COLBECK—There has been criticism in the media by the staff. I am asking Dr Clark to respond to that.

CHAIR—Senator Colbeck, could you just wait a moment.

Senator BERNARDI—Chair, you just interrupted Senator Colbeck while he was asking a question.

CHAIR—I have not said anything yet. I just want two people to stop talking over each other. I have not aid anything further than that. I have just asked for a little order. Is that okay with you?

Senator BERNARDI—If there is order. But you should have intervened and stopped the minister from interfering over Senator Colbeck.

CHAIR—Senator Bernardi, if I need your assistance with the chairing I will ask you.

Senator BERNARDI—You clearly do. I am just trying to assist.

CHAIR—Have you quite finished? Can we get along with the questioning?

Senator BERNARDI—If you want order, I am happy for Senator Colbeck.

CHAIR—Minister.

Senator Carr—The decision to sell the facilities was taken under the previous government and there has been a process of consolidation of units and divisions within the CSIRO now for some time. On the physical facilities at Limestone Avenue, I recall a long discussion with officers of the CSIRO when I was sitting on your side of the table, Senator. The process of consolidation of the organisational structure of the CSIRO is a longstanding position that has been taken in which the union has been intimately involved. In the case of the merger of the

sustainable ecosystems divisions and entomology divisions that was announced on 6 April, my understanding is there were consultations with the unions about this matter. There was always going to be a subjective debate about the level of consultation: is it enough, is it too much? These are arguments that will go backwards and forwards. But there should be no question about the nature of the dialogue that has gone on for many, many years around these issues.

Senator COLBECK—Thank you for the history lesson, but—

Senator Carr—It is just useful to get a sense of perspective on this.

Senator COLBECK—That is fine. I said thank you. But there obviously was some surprise within the organisation when the announcement was made—

Senator Carr—There was a report in the *Canberra Times*, which is not a reliable source of information on this question.

Senator COLBECK—You have made the point on the public record. Let us go to the CSIRO Staff Association, which said:

This merger is going to further entrench a culture clash between management and scientists, by creating a massive top-heavy bureaucracy.

You might want to comment on the reliability or otherwise of the staff association, Senator, but I will ask Dr Clark to comment on that.

Senator Carr—I will comment on it. The union of course is going to make comments about this. I have never known a union that—

Senator COLBECK—Recognising that Dr Clark has said that they are now engaged, I am just trying to get a sense of the consultation in the lead-up to the announcement. That is all I am trying to do. It is not necessarily all that complicated, Senator Carr.

Dr Clark—I am very happy to do that. This of course is consistent with our stated strategy. Also, in March 2009, we set our broad direction setting. We also flagged this direction in that process, so the announcement was completely consistent with our strategy and the previously announced strategy for over 12 months. Following the announcement, it is very important that staff are fully engaged now in the implementation process and the decision making that will need to happen to make sure that all of those things are covered. It was certainly flagged well and truly in advance and is very consistent with our stated strategy.

Senator COLBECK—How do you respond to the assertion by the staff association about the balance of the organisation?

Dr Clark—Certainly as we look to bring our critical mass and our capability together there are opportunities to reduce the management bureaucracy there and make it simpler, so we would certainly see that as consistent with the feedback—and very constructive feedback—we have had from the staff association.

Senator COLBECK—That was the point I was trying to get at earlier—perhaps it is just my questions—in respect of the staffing implications of the merger from both a research and a management perspective. Now you are indicating that there may be some staff savings, and I am trying to get a sense of the quantum of that.

Dr Clark—I am just saying, in terms of having groups separated, that when these groups need to work together obviously there are a lot of synergies. As I have mentioned, we are certainly not expecting any reduction of effort through the merger.

Senator COLBECK—From either a management perspective or a research perspective?

Dr Clark—Certainly I can confirm that there are no changes in our research. In fact, we would expect an increased research effort. I would be very happy, once we have concluded the details of the merger, which will be some time, to bring back the details of any synergies et cetera that we have achieved. At this point it is too premature to clarify those because clearly we need to go through quite a major consultation stage in that process.

Senator COLBECK—So the consultation with the staff has now effectively commenced post the official announcement?

Dr Clark—Exactly.

Senator COLBECK—And, during the process of that, you are suggesting that the research is effectively quarantined—or you are not expecting to see any reduction in research effort. Issues in and around management will be looked at and considered and the impacts will be determined as part of the consultation process going ahead on the details of the merger?

Dr Clark—Consistent with our approach always to look at efficient management of the organisation, we would certainly always explore those opportunities, as we do throughout our operations.

Senator Carr—Senator Colbeck, I must say that I am gratified to hear that the coalition has now discovered the role of unions in consultation within government agencies. I look forward to this being announced as part of your election commitment on an ongoing basis.

Senator COLBECK—Thanks, Senator Carr. I will not go to your comments in the *Canberra Times*, Senator Carr, where you—

Senator Carr—No, I would love you to! I would love you to, because I am still waiting for the *Canberra Times* to correct the report.

Senator COLBECK—Really?

Senator Carr—I am looking forward to it.

Senator CAMERON—I might have to ask you about them then.

Senator COLBECK—Senator Cameron can ask you a few dorothy dixers later, as has become his practice to utilise time.

CHAIR—Senator Colbeck, Senator McGauran has questions.

Senator COLBECK—Do you want to talk about this issue specifically?

Senator McGAURAN—Not the outrageous staff cuts, no.

Senator CAMERON—That is your staff cuts, is it?

Senator COLBECK—How many staff within the organisation are working on climate-specific project issues at the moment?

Dr Clark—In terms of our total investments in the environment area this year, we now have \$229 million invested in that, an increase of some \$10 million. We have increased our allocation to both the climate and the water space. Today with us I have Dr Andrew Johnson, who heads that particular group, who can answer any detailed questions that you have on any breakdown that you would require in the climate space.

Senator COLBECK—So that is \$229 million?

Dr Clark—Yes, in the total Environment Group.

Senator COLBECK—How does that relate to staffing?

Dr Clark—I will just call Andrew Johnson, who has that detail. Actually, I would prefer to take that on notice. We do not have the numbers right at hand, unfortunately.

Senator COLBECK—Okay. Has that unit taken on any work that has come out of Land and Water Australia?

Dr Clark—No.

Senator COLBECK—Okay, no projects out of Land and Water Australia. Has the nature of the work that the unit is doing changed because of the government's decision to shelve the introduction of the ETS?

Dr Clark—No, it has not.

Senator COLBECK—No change in any project focus at all. Can we confirm that the CSIRO is a sponsor of the Women in Climate Change national forum series?

Dr Clark—Could you repeat that?

Senator COLBECK—The Women in Climate Change national forum series.

Dr Clark—I am certainly not aware of that, but we would be happy to take that on notice.

Senator COLBECK—Did the CSIRO contribute financially to the series?

Dr Clark—As I have just mentioned, not to my knowledge or the knowledge of my officers, but I am happy to take that on notice and provide any further detail.

Senator COLBECK—Can you tell me what process you follow when you are considering whether or not to sponsor a particular event?

Mr Whelan—Typically the issue of sponsorship involves consideration of the alignment of potential stakeholder audiences with the CSIRO research program and also whether there would be value for money associated with the sponsorship and whether there would be CSIRO scientists or researchers associated with the program.

Senator COLBECK—Do you have a panel that considers those things, or is it done at an individual unit level?

Mr Whelan—Those decisions typically are taken at an individual business unit level.

Senator COLBECK—A copy of the brochure for that particular forum indicates that you were sponsors. You might have to take this on notice, but could you indicate how much was invested in that particular event?

Mr Whelan—Yes. As Dr Clark has indicated, we will take that the question on notice and we will provide you with advice on whether there was sponsorship and what the value of it was.

Senator COLBECK—Thanks. I want to go to the document *State of the climate*, the snapshot. Is that a regular publication? Is that something that is done on a regular basis?

Dr Clark—We certainly put out a number of reports and joint reports with the Bureau of Meteorology, but that particular report was the first instance of us jointly putting out a state-of-the-nation report. We have certainly had feedback that suggests we should make this a regular report to the nation, and we are considering that.

Senator COLBECK—Where would that feedback have come from?

Dr Clark—Following the release of the *State of the climate* report, we had considerable feedback from many of the communities that it was welcomed.

Senator COLBECK—I understand that you might have done that; that is fine. I am talking about the decision to instigate the publication in the first place. What was the process for instigating the *State of the climate* document in the first place?

Dr Clark—There was certainly interest in making sure that the facts of what was happening in this country were available to Australians. There was obviously a lot of work that we have that looks forward, but it was particularly important to present the information that was on hand at the five-decade level in a way that was clear, across a number of areas such as temperature, rainfall et cetera. There was no attempt to look at the forward models or to look at what might be or what could be. It was simply a statement from both the CSIRO and the Bureau of Meteorology of the research that we have been jointly undertaking and of the observations made by the bureau in these particular areas. It was simply a statement of fact of what we have been seeing.

Senator COLBECK—So it is a snapshot in time, effectively. Is that what you are saying?

Dr Clark—It looks at the decadal trends and, as you know, there is a lot of information around—global data—that is available to the public. But there was very little aggregation of information that was relevant just to Australia, and we felt there was a desire for that. Consistent with our role and the bureau's role to provide information to the Australian public, the report was released and, as I said, we are looking at a regular release of this type of report from the two organisations.

Senator COLBECK—You made a comment about not attempting to do detailed modelling. You made a comment about modelling in your previous answer, which led me to the question about a snapshot in time. Could you expand on that for me, please. I just want to get a sense of where that is at.

Dr Clark—Not a problem. We were looking to demonstrate what Australia has experienced over the last 50 years—for example, in the temperature.

Senator COLBECK—So you are not looking to be projecting that far out, as far as this document is concerned?

Dr Clark—No. As I said, it is really just a statement of what has happened and it was simply to inform the debate on the facts of what we have seen—not what we might see or could see, but what we have seen. We felt there was a thirst for that kind of information, particularly with the Bureau of Meteorology's temperature information.

Senator COLBECK—What are the primary sources of the data that you have used in the document?

Dr Clark—The Bureau of Meteorology has some of the best records of temperature across the world. We also looked at the record highs and record lows shown over each decade. Every decade from 1960 through to our current decade has broken the records of the previous decade, and on average we have seen fewer cold days—really cold days—every decade. The rainfall data, of course, is sourced from the Bureau of Meteorology, showing the trends of a relatively steady, slight increase in rainfall over the past 50 years but showing major changes in where that rainfall is occurring. The sea level data is sourced from the CSIRO, showing the changes of sea level, and we reported the difference in sea level changes in different parts of the country. We also looked at the mean sea-surface temperature, which was sourced from the Bureau of Meteorology, and the atmospheric carbon and methane as well as the carbon dioxide measured at Cape Grim, which is a joint facility between CSIRO and the Bureau of Meteorology.

Senator COLBECK—What is your reaction to the discussion in relation to criticism of Australia's temperature records particularly because of the changes of methodology of capturing those records over time?

Dr Clark—Sorry, Senator, I did not hear.

Senator COLBECK—Given the criticisms over the changes in methodology of capturing those records, particularly from changing to automatic weather stations in a lot of cases where there used to be individual personal stations and closures of lighthouses, for example, and the locational issues that come out around that, can you give us a sense of that? You talk about the fact that we have got a very long history, but there is some criticism and I would just like to get your analysis of that.

Dr Clark—Sorry, Senator, I did not mean to turn around while you were speaking. As I mentioned, the temperature data is sourced from the Bureau of Meteorology. I understand the Bureau of Meteorology has addressed those questions. It is a very significant and robust set of temperature data but—

Senator COLBECK—There is some debate about that adjustment in the scientific community, isn't there?

Senator CAMERON—Lord Monkton I think it is.

Senator COLBECK—Actually that is not where it comes from and frankly I am not interested in one side of the debate. I am just trying to get a sense from another scientific organisation as to an assessment of that process. That is all I am trying to do.

Dr Clark—You are absolutely right, there is obviously considerable debate in this area. As we reported in the *State of the climate* report, we simply report the data that is available and the Bureau of Meteorology's data. It is simply the factual records that we have.

Senator COLBECK—So it is based on the documentation you have been provided by that agency and you make no judgement about that?

Dr Clark—That is right.

Senator McGAURAN—Why then did you, when you had the available data, not put the methane levels beyond 1990 in the report?

Dr Clark—If you go to the graph, the methane levels are reported up to 2009. It goes all the way back as far as we can go from ice cores et cetera right through to 2009. In the original report you will notice there were no axis marks on the bottom and given that it was over such a long time we certainly got feedback that it would have been clearer if we had included the axis marks, which would clearly show that both of those data were included right up to 2009. We have now done that and in fact both the methane and CO₂ data went right through to 2009 on that original graph.

Senator McGAURAN—But that was the criticism. You initially published this report that we were all meant to rely upon and left out a crucial element, an important graph. The criticism was that you stopped it in 1990 because you wanted your result in regard to methane levels and then you had to republish it, if you like. You could not even get it right the first time. That is the criticism towards you.

Dr Clark—Let me correct you. The original graph had the data right up to 2009 so that assertion was incorrect.

Senator COLBECK—That does lead me to the question I was going to ask about that. Effectively the adjustment to the document was to include the axis?

Dr Clark—No. We did not have the little marks on the axis showing exactly where 1990 and 2009 were. I thought it was a good observation that that would certainly make the graph clearer.

Senator COLBECK—Effectively the scale was not included on the graph?

Dr Clark—The numbers were included but the tick marks were not on the graph. It certainly was a clearer graph by adding that, which is what we have done. We made it perfectly clear that the data was included right up to 2009. It certainly clarified that point.

Senator COLBECK—That was an important clarification to demonstrate the divergence between methane growth and CO₂ growth, which was the point of the criticism in the first place. Is that correct?

Dr Clark—I think the feedback to us was that it could have been clearer. Whilst the information on the graph is identical, we have certainly made it clearer and we thought the feedback was appropriate.

Senator CARR—Can I draw your attention to a letter in the *Australian* this morning that responds to the claims that were made by Terry McCrann—

Senator COLBECK—You have told us many times in question time that the *Australian* is not reliable. Are you going to rely on it today?

Senator Carr—I have often commented upon the accuracy of the *Australian*; that is true. On this occasion I am quoting a letter from Dr Clark, who I do know is very reliable. So I suggest you read the letter in today's paper.

Senator COLBECK—So the editorials are not reliable but the letters to the editor are.

Senator Carr—The editorials certainly are not reliable.

Senator COLBECK—I am pleased we got that on the record.

Senator Carr—It might help clarify this issue. Would you like me to table the letter?

Senator McGAURAN—I get the *Australian* everyday religiously. I suggest you should too.

CHAIR—Thank you, Minister, please table the letter.

Senator Carr—That is a good suggestion, Senator McGauran.

Senator COLBECK—Have you issued an erratum to clarify that? Is there something that clarifies the fact that you have modified the document since it was published?

Dr Clark—The data, of course, was exactly the same. But we have clarified the access points on the graph. We also have provided feedback to *Quadrant Online*, who provided the feedback to us in the first place. We have notified them that we have done that. So we have certainly clarified that.

Senator COLBECK—Who instigated the current housing and sea level rise survey being conducted?

Dr Clark—As part of our climate adaptation flagship we are looking at public attitudes to that.

Senator COLBECK—Who has instigated it? How was it instigated? What was the process for that?

Dr Clark—Our CSIRO flagship.

Senator COLBECK—What is the staffing allocation to it.

Dr Clark—I will have to take that on notice. I am happy to provide it.

Senator COLBECK—When is the final document—the project—due for completion?

Dr Clark—I will take that on notice.

Senator COLBECK—What can you tell us about the project? You cannot tell us how many staff, how much it is going to cost or when it is going to be completed. What are the terms of reference for it?

Dr Johnson—The project is part of a portfolio of research that is undertaken in our climate adaptation national research flagship. I apologise we cannot give you the details. As you can imagine, there are literally hundreds of projects going on in CSIRO but, as Dr Clark indicated, we will take the specifics on notice. My understanding of the project is that it is engaged in a consultation with local communities about their attitudes to sea level rise and the risk associated with that. That is useful for our research in terms of informing future adaptation strategies under scenarios of inundation as a consequence of sea level rise.

Senator COLBECK—Do you know who the partners in the project are?

Dr Johnson—I know who the project leader is. I do not have the specific details that you are after for the particular project. As I have indicated, there are literally hundreds, if not thousands, of projects going on inside the environment portfolio at any one time. I am happy to take that on notice.

Senator COLBECK—Senator Eggleston may have some more detail but my understanding is that a number of the states have different projections for sea level rise. Is that something that the project will look at and try to clarify?

Dr Johnson—No, not to my knowledge.

Senator McGAURAN—We have a Prime Minister who said that over 250 houses were going to be flooded.

CHAIR—Senator McGauran, I have you on the list. Senator Colbeck, have you finished?

Senator COLBECK—I am trying to get the sense of a fairly significant project. We have some information that indicates that the states have varying projections for sea level rise. I just want to know how that is consolidated, and what the basis for the project is.

Dr Johnson—As Dr Clark indicated, we have made our position very clear on sea level rises through the *State of the climate* snapshot report. I am not aware in detail of whether there are differences.

Senator COLBECK—I thought the *State of the climate* snapshot report was talking about a snapshot in time, not necessarily models and projections.

Dr Johnson—We made it very clear what the observations of the sea level rise are, Senator.

Dr Clark—You are absolutely right—we do see different sea level rises in different areas, as we reported in the snapshot—seven to 10 millimetres per year in the north and west but only 1.5 to four millimetres in the south and east. That is not immediately intuitive—certainly you would think that the sea levels would simply equilibrate instantly around the world, and that is actually not the case.

Senator COLBECK—I understand they do not.

Dr Clark—Also there is different equilibration from the Northern and Southern Hemispheres. So, in terms of the observations, we have seen different rises in different areas as well.

Senator COLBECK—In terms of the snapshot, where does that sit with respect to projections? Dr Johnson was talking about projections. My understanding from you, Dr Clark, was that we were not talking about projections—we were talking about a snapshot in time. I just want to get a sense of where we sit with those two.

Dr Clark—On your question for Dr Johnson, which area would you like to delve into?

Senator COLBECK—It is probably more a question for you, Dr Clark. I am trying to get a sense of whether we are talking about projections in the snapshot section. I noticed that there is a heading that says ‘Australia will be hotter in coming decades’ as a general statement, and that section gives some detail in respect of that as far as projection is concerned. I am just

trying to get clarification. Let us go to something else. What is the cycle that you are going to put this document out over?

Dr Clark—We are actually discussing that. Just going back to your original point, in the snapshot it talks about the sea level rises that have occurred, not the projections, and the temperature data given is of the temperature changes that have occurred, not the projections. Whilst of course we undertake modelling, the snapshot shows what has actually happened and the measurements that we have taken in the past. In that document they are not projections.

Senator COLBECK—Under item 5 it says:

Australian average temperatures are projected to rise by 0.6 to 1.5 °C by 2030.

Dr Clark—Yes. Under the final part of the ‘What this means’ section, we include some information on the projections I was referring to.

Senator COLBECK—How often do you do intend to publish this now that you have had the feedback you have had?

Dr Clark—We have not finalised that with the bureau, but certainly there is an appetite for us to publish this regularly. I will be able to confirm at our next hearing our agreements on when we will do that.

Senator COLBECK—That is fine.

Senator PRATT—I also wanted to ask about the *State of the climate* snapshot—in particular, the implications of that report for Western Australia. I note that the snapshot found that about half of the observed reduction in winter rainfall in south-west Western Australia can be explained by higher greenhouse gas levels. I wanted to know the implications of the snapshot for planning an adaptation for climate change, particularly in Western Australia’s south-west.

Dr Clark—Certainly. Dr Johnson’s group covers both climate adaptation as well as water resources in the south-western part of Western Australia. Both of those questions—

Senator PRATT—I beg your pardon. Chair, I cannot hear the witness because of the conversation going on next to me.

CHAIR—Sorry. Please continue, Dr Clark.

Dr Clark—As I mentioned, Dr Johnson’s group covers both climate adaptation and sustainable yields in terms of water resources for the south-west part of Western Australia, and I am sure he would be comfortable to provide any further detail you require.

Dr Johnson—Thank you, Dr Clark. Senator, you are correct—there are significant implications for the state of Western Australia. As Dr Clark indicated, they span across a range of sections—water, land use, biodiversity and infrastructure. We have not published, to the best of my knowledge, any specific studies on those issues, with the exception of water, and I would be happy to provide you with that information if you would like.

Senator PRATT—Is that the study of water as part of the flagship’s research?

Dr Johnson—Yes. It was the sustainable yields assessment that was done as part of the Water for a Healthy Country Flagship national research program.

Senator PRATT—So the implications of looking at climate change and greenhouse gas levels have been incorporated into that flagship's work?

Dr Johnson—That is correct. The study, like the other sustainable use studies, looked at a range of different land use scenarios and climate scenarios as part of its assessment of the likely future availability of water in south-west Western Australia.

Senator PRATT—What are the particular implications for agriculture in south-west WA? I suppose, having observed these debates over some years now, it does seem that we are slowly coming to grips with being able to translate climate change information into information that enables us to make decisions at a community level.

Dr Johnson—Obviously, if the drying trend and the trend for increasing temperature increase, that will have significant implications for agriculture. As part of the flagship, we are working very closely with the Western Australian government and farming communities to develop adaptation responses for the agricultural sector in Western Australia. They are quite extensive. I would be happy to provide that information to you if you would like.

Senator PRATT—Yes, that would be terrific. Thank you very much.

CHAIR—Senator McGauran.

Senator McGAURAN—I have one question on sea level issues and then I want to get on to a few other matters. In the *State of the climate* report you mention that the change in sea level is 1.5 to three centimetres. How are we to interpret that—with great concern, with triviality, what?

Dr Clark—Let me just correct that fact there. It is 1.5 to three millimetres, Senator, not centimetres.

Senator McGAURAN—Millimetres?

Dr Clark—Yes.

Senator McGAURAN—How is that to be interpreted? Is that a concern? Is that a climate change concern?

Dr Clark—It is certainly important just to have those numbers and those facts and those trends out there, I think, so that people can look at them and look at the differences that we are seeing in different regions.

Senator McGAURAN—If anyone interpreted that with concern, 1.5 millimetres, then they are beating up the whole climate change issue. Now, what I would like—

CHAIR—Thank you for your scientific opinion on that, Senator McGauran! Would you like to ask another question?

Senator McGAURAN—Yes, well, that is how much sea levels have risen in the last decade. What a joke. In relation to the staff cuts—which must have come as a great surprise and shock to you because you have a minister next to you who boasts about his CSIRO—is this the third budget in which CSIRO has faced cuts to its global budget?

Dr Clark—Let me correct you there. Our budget is actually projected to increase to \$1,183,000,000. That is an increase of \$15.2 million. In addition to that, we also have our

capital increases, some \$81.6 million next year, which includes the capital for the ASCAP in Western Australia, the telescope; for our replacement vessel; for the Pawsey centre, which is a supercomputer in Western Australia; and for our phenomics, which is around our plant biology area in Black Mountain, of around \$1.7 million—

Senator McGAURAN—But you are facing what we believe to be 130 job cuts.

Dr Clark—We have, in our budget, looked at an average staffing level reduction of around 129. We are not expecting to see a major change to our research effort. We will certainly endeavour to maintain our research effort in our critical areas.

Senator PRATT—Why do you care when you don't believe in the science anyway?

Senator McGAURAN—CSIRO is all about manpower, and to cut 130 jobs is a serious cut into their ability to research. In relation to bushfire research, first of all, are there any proposed cutbacks in that area; and what research is being undertaken at the moment?

Dr Clark—In terms of covering some detail in our bushfire area, I would direct that question to Dr Johnson.

Dr Johnson—Senator McGauran, we have an extensive engagement in providing research around bushfires. It could probably be divided into five, maybe six, categories. We have an extensive program of work describing, effectively, learnings from the past, and I would be happy to supply you with more detailed information. For example, we have a groundbreaking study on the survivability of cars trapped in firestorms, we have looked at a house vulnerability assessment tool for assessing assets in bushfire prone areas and we have looked at the robustness and the role played by residential centre systems and water storage tanks in bushfire prone areas. We have also been working with colleagues in Victoria to develop housing which is much more resistant to bushfires. We have just recently flame-tested a house constructed from steel and featuring a non-flammable roof cavity. We have done extensive work with the Country Fire Authority around fire tanker crew protection systems. We have also worked extensively with the Bureau of Meteorology to improve our ability to forecast dangerous bushfire weather.

Senator McGAURAN—And none of those extensive programs will be affected by these staff cuts?

Dr Johnson—To the best of my knowledge, no.

Senator McGAURAN—What about fire detection research? What are you undertaking there?

Dr Johnson—You would have to be more specific. Fire detection research in what regard?

Senator McGAURAN—Early warning.

Dr Johnson—I will have to take that question on notice. I am not aware of any, but that does not mean to say we are not doing it.

Senator McGAURAN—Does anyone else know? No? Okay.

Senator COLBECK—I have a question about the building research. When is the stuff you are doing in Victoria with fireproof roof spaces and things of that nature going to be published?

Dr Johnson—That work is currently being written up. It will feed into a process that relates to the Australian Building Codes, which is administered by Standards Australia, so my expectation is that the outcomes of that research will feed into a well-established and sophisticated process for bringing new knowledge to bear on Australian building codes.

Senator COLBECK—I was just interested in when we might be able to get hold of it.

Dr Johnson—I would be happy to supply you with a summary of the work to date if you are interested in it.

Senator COLBECK—Thank you.

Senator Carr—I would like to follow through on some of the outrageous claims that Senator McGauran has been making. He started his questions with a series of false accusations. I have heard no retractions whatsoever. What we have in this portfolio budget statement is an increase in appropriation funding of 2.6 per cent, a five per cent increase in external revenue, an increase of \$21.4 million in investment in research and a 50 per cent increase in expenditure on scientific equipment. Within that context there is prioritisation of research activity. In the context of what is a very tough budgetary circumstance, I would have thought you would be congratulating the CSIRO on the way they have managed these circumstances.

Senator McGAURAN—Mr Johnson, I believe there is a program called FireWatch in which CSIRO are working closely with an organisation for early fire detection. Can I get some information on that and when the results of that study—

Dr Johnson—I would be happy to take that question on notice.

Senator McGAURAN—I would like an update on calicivirus. Where has it been released? Will it also face research cutbacks? Minister, I noticed you said the overall budget had increased 2.6 per cent.

Senator Carr—I am waiting for you to congratulate the CSIRO on how they have managed the budgetary situation.

Senator McGAURAN—I notice that is below the current inflation rate, so they are losing.

Senator Carr—This is your chance. Come clean; congratulate CSIRO for what a good job they have done.

CHAIR—I believe we are in the middle of a question.

Dr Clark—It has been some time since we were doing active research on the calicivirus, but I would be very comfortable taking that question on notice.

Senator McGAURAN—The program for the release of the calicivirus is still being undertaken. Who undertakes that? It is the local state agriculture departments, I suspect.

Dr Clark—I will have to take that on notice. It is certainly not CSIRO. We will have to provide you with the information about which state and relevant authorities are doing that.

Senator McGAURAN—The one thing about the CSIRO budget that has been watched over the last three budgets and that has faced three consecutive budget cuts is the rural and regional sector—the farm gate research. The minister turns his back. As much as the minister

wants to rant and rave that a below-indexation level of increase in the latest budget is something to boast about, I know that down on the ground at the farm gate the CSIRO not only has to a great degree lost its once shining reputation but is undertaking far less research. It is extremely disappointing.

Dr Clark—Let me provide you with the information. Our investment in the agricultural sector increased by \$35 million this year—

Senator McGAURAN—But it was cut \$50 million in the first budget.

Dr Clark—to a total of \$315 million. As you know, I am on record being clear about the strength we have in that sector and the importance of the work that we do for this nation in our regional centres. Also of note is that CSIRO is one of the only institutions in this country that is in the top 10 in the world for three of its research areas. Plant and animal science is, of course, directly relevant to that sector, as is our agricultural and environmental research. In addition to that, we have seen an increase in support from the agricultural industry; our external earnings increased in that area as well. It is a very important area for us, as you point out, and it is one which we take very seriously and which is a very solid part of our foundation. It is one in which we are moving into the future and continuing to provide the sorts of innovations and developments that that sector needs to increase yields and manage the challenges that we see at the moment.

Senator CAMERON—I want to follow on from Senator McGauran's questioning in relation to the number of employees in CSIRO. What is the total number of employees in CSIRO?

Dr Clark—Our total number of research employees is now at a decade high of 2,108. Our total number of employees is 6,698.

Senator CAMERON—Does that total head count include the research?

Dr Clark—Yes, it does.

Senator CAMERON—How many resignations do you have on an annual basis?

Dr Clark—Our staff turnover has fallen from 13.5 to 10.4, but our resignations have fallen from 5.5 to a low of 3.8 per cent currently.

Senator CAMERON—Your resignations would include retirements, resignations and people moving on for any reason?

Dr Clark—The total turnover that I quoted as reducing includes the retirement. Resignations are in fact just resignations.

Senator CAMERON—So each year you have come down, but it is roughly 660 if you equate that to your numbers?

Dr Clark—Yes. As I mentioned, those turnover rates are reducing. Of course, with resignation rates now at 3.1, they are at significant lows for the organisation.

Senator CAMERON—Given that Senator McGauran says that a cut of 130 is a serious cut, what are the implications for the CSIRO of a cut of 660 in one year and another 660 the next year, consistent with the announcement by the Leader of the Opposition to have a two-year freeze?

Mr Whelan—If we were not able to fill vacancies, we would see a substantial reduction in staffing. As Dr Clark indicated, we currently have 6,698 staff in head count terms. If that were to reduce by 660 a year for the next two years we would see a reduction of 1,300 in head count. Even though we have tried very hard over recent times, we would not be able to make sure that our overhead areas would be sufficient. That is where the bulk of reductions have happened in the organisation. It is hard to imagine that there would not be some implications for research as a result of that.

Senator CAMERON—Would you be able to fulfil your obligations under the act?

Mr Whelan—That is a difficult question to answer. The organisation's resourcing levels have fluctuated over time and I am sure the management and the board have always sought to strive to meet their obligations under the act. It would be a long bow and I really could not comment on that.

Senator CAMERON—What about being able to continue cutting-edge scientific research for rural and regional areas? Would that have an effect there?

Mr Whelan—That is a hypothetical and it is difficult to forecast it, but the organisation uses a prioritisation process for the allocation of its resources and, subject to the circumstances applied at that time, we would seek to reduce resourcing to lower priority research. But I could not comment on what that would be at this point in time.

Senator CAMERON—How many graduates do you employ each year?

Mr Whelan—We do not have a graduate program per se, but the number of postdocs employed in the organisation is currently 332 and the number of PhD students we sponsor is 629, so you might put approximately a thousand into that category.

Senator CAMERON—If there were a staff freeze, would there be an effect on the contribution that you make?

Mr Whelan—We have been increasing the numbers in those categories over recent times. In 2004, we had 259 post-docs and we now have 332. In 2004, we had 464 PhD students and we now have 629. If there were to be a staffing freeze then clearly we would not be able to continue to increase those numbers.

Senator CAMERON—I come to the correspondence in the *Australian* from Dr Clark where she says:

CSIRO remains ranked in the top one per cent of world scientific institutions in 14 of 22 research fields ...

If you had these cutbacks, do you think you could maintain your ranking?

Mr Whelan—Again you are asking me to speculate on the implications of this particular impact, and I am not in a position to do that.

Senator CAMERON—I continue on Dr Clark's correspondence to the *Australian*. This is in response to an article by Terry McCrann. Is Terry McCrann a scientist?

Dr Clark—I could not tell you that.

Senator CAMERON—You are not aware of whether he is a scientist?

Dr Clark—I could not tell you that.

Senator IAN MACDONALD—Madam Chair, a lot of us have serious questions for CSIRO. On a point of order, CSIRO do not know what journalists' backgrounds are, or they should not. I have serious questions to ask. Please ask Senator Cameron to confine himself to serious questions.

CHAIR—I am not sure that it is not a serious question, Senator Macdonald. We do put up with a little lead-in approach to questions from a number of senators, so I will let Senator Cameron continue with his line of questioning.

Senator CAMERON—I have not seen Mr McCrann's critique, but I assume it is in relation to the *State of the climate* report. In the *State of the climate* report you indicate that according to the analysis you have done:

Australian will be hotter in coming decades ... Much of Australia will be drier in coming decades ... It is very likely that human activities have caused most of the global warming observed since 1950 ... Climate change is ... real.

Has anything been put to you this morning or since this report has come out that has changed your view on those assessments?

Dr Clark—No.

Senator CAMERON—So none of the criticism of the report has made you change your scientific analysis?

Dr Clark—The report was simply a statement of the facts and that record is there and published now.

Senator CAMERON—Thank you.

Senator Carr—I think Senator McGauran wants to apologise. Perhaps we should allow him time!

CHAIR—I don't think that actually was the tenor of the approach. Senator Eggleston has the call at the moment.

Senator EGGLESTON—I would like to change the subject a little bit—

Senator CAMERON—I'm sure you do!

Senator EGGLESTON—Well, you know, we have to have some rationality, Senator! I want to go to the SKA array in Western Australia, near Geraldton. I understand the Yamatji Marlpa land council had made a land claim over the SKA review area. Is that the case?

Dr Clark—We are currently working with the Yamatji group on that.

Senator EGGLESTON—So there was a land claim, and there was a settlement, I understand. But there has been some criticism about the terms of the settlement. That is what I wanted to ask about. I refer to an article in the *West Australian* of 19 April, written by Paul Murray. He said:

The Barnett Government will pay a group of Murchison Aboriginals about \$10 million to drop their native title objections to the CSIRO's Square Kilometre Array telescope project.

He also said:

When the agreement was announced in November, the State Government, the CSIRO and the Geraldton-based Yamatji Marlpa land council released no details of the payments, despite a clause saying nothing should be treated as confidential.

I understand that the federal government report into native title payments last year criticised the amount of secrecy attached to such agreements. I just wonder why it is that the CSIRO and the government are not releasing details of this agreement.

Mr Whelan—It is not unusual for CSIRO not to broadcast every agreement it enters into. We would sign many thousands of contracts and agreements on an annual basis. We do not issue a press release or make a statement every time we sign one. There is no secret here. The journalist who requested a copy of the agreement was provided with one. It is a matter on the public record, so there was no secret or attempt to keep the agreement secret. The agreement was arrived at in good faith and was made available, and can be made available to anybody who would like a copy. There was no attempt to keep it secret.

Senator EGGLESTON—So you are saying that there was no inconsistency with the federal government's report into native title payments last year criticising the amount of secrecy attached to Indigenous agreements?

Mr Whelan—As you have just heard, Senator, there was no attempt to keep the agreement secret—so, no, I do not believe there would be any inconsistency.

Senator EGGLESTON—That is interesting, because a few people, such as mid-west Aboriginal leader Sandy Davies, says the lack of accountability and, in effect, secrecy of the trust under which this has been set up, is a matter of some concern. It seems that this has been set up under a trust and that the details of the operations of the trust have been kept subject to a secrecy clause. I find that a little bit hard to understand, given the government's policy on not keeping these agreements secret.

Mr Whelan—As I indicated, I do not believe the agreement has been kept secret. If you would like a copy, I could make one available to you.

Senator EGGLESTON—That is fine, but it seems that it has been set up under a trust and there is no obligation for the trust to make the details available to the local Indigenous people. I find that very curious.

Mr Whelan—Just to clarify: I do not believe the CSIRO has created a trust. It may have been that the other participants in the agreement created a trust, which would be a matter for them to disclose. But, with respect to the Commonwealth's dealings and CSIRO's dealings with those individuals, it is a matter of public record and the information is available to anybody who asks.

Senator EGGLESTON—Very well. Perhaps to the minister: was the minister concerned then if the actual mechanics of the operation of this grant as set up under a trust—

Senator Carr—Senator, what I am concerned about is that you are relying on unsound press reports—

Senator EGGLESTON—if I might finish, Minister, with respect—is that there is a degree of secrecy about it which I would have thought was inconsistent with your government's policy on these sorts of issues.

Senator Carr—What I can advise you is that since you have asked me about the government's position there has never been any intention or any reason to keep the details of the agreement secret. Upon request from the journalist, he was provided with the full text of the Indigenous land use agreement which included full details of the benefit package negotiated with the Wajarri Yamatji native title claimants. Now just because the journalist does not report that, might I suggest that it does not necessarily justify you regurgitating inaccurate and misleading information after the officers have advised you that that report is wrong.

Senator EGGLESTON—In fact we have to follow it through a little bit further to the creation of of this Wajarri People's Trust—again quoting the journalist, I concede—which has been set up to operate 'at the sole discretion of Geraldton accountant Abul Shahid'. It would seem to me—

Senator Carr—This is not our actual—

Senator EGGLESTON—It is, I think, with respect, the same matter, Senator. There is secrecy about this because one particular person, a Wajarri elder, Victor Mourambine, has complained about the fact that the operations of this trust are secret.

Senator Carr—Lots of people complain about lots of things; that does not necessarily make them true. You have been advised by the officers, and I have advised you on the basis of the advice that I have received, that the information was actually provided to the journalist who chose, presumably, given that you are quoting from a report—

Senator EGGLESTON—I am indeed—

Senator Carr—not to refer to that information that he has been given. I am advised that there is no reason why we cannot table the documentation, if that helps you. I trust it will clarify in your mind any questions you have about the nature of the agreement.

Senator EGGLESTON—It is a sequential matter though, with respect, Minister. It is known that you have paid \$8 million, and that is public, but it goes into a trust which it seems operates under something of a cloud of secrecy over a 6-year period, and I would have thought that was inconsistent with the policy of your government to make such matters open and transparent.

Senator Carr—But what you are ignoring is the advice that the officers have given you, which is that the trust has not been established by the Commonwealth. I have understood that correctly, have I not?

Senator EGGLESTON—If you were listening carefully, Minister, what I said was that it follows through from the grant, and then I would have thought that your policy would have extended to all the subsequent developments regarding the disposition of that money and I find it a little hard to understand why it does not.

Senator Carr—The land use agreement was concluded in good faith between the native title claimants, the Commonwealth and Western Australian governments, CSIRO and the Aboriginal corporation. The establishment of the trust which you report, relying upon a *West Australian* newspaper report, is not a matter for the Commonwealth. That is the evidence the officers have provided you—

Senator EGGLESTON—The Commonwealth surely has a policy that such agreements should be transparent—

Senator Carr—We have said that to you.

Senator EGGLESTON—and if local Aborigines are complaining that they cannot get details of the operation of the trust, surely that must be a matter of great concern to you as a minister in the Rudd government.

Senator Carr—What is of concern to me is that you are seeking to rely upon an inaccurate report in the *West Australian* newspaper. The officers have provided you with advice. I have indicated to you that we are happy to have the documents actually tabled here. The journalist was provided with the documents. How the journalist chooses to use them is not a matter we can control.

Senator EGGLESTON—As I said, the details of the grant are known, the mechanics of its operations under a trust appear to be clouded in secrecy and I would have thought that would concern you as a minister in this government since you stated—

Senator Carr—I will just check to see if there is anything further I can add to that.

Senator EGGLESTON—that the government's policy is to make these things transparent.

Senator Carr—I am advised that the advice I have provided you is accurate in all respects and there is not much more I can say.

Senator EGGLESTON—As far as you go—and it is limited advice; I am sure that is true—it does not deal with the issue of transparency on the ground for the local Indigenous people in the mid-west, with respect, Minister. But I will leave that matter there.

I would also like to ask about CSIRO's involvement in the UWA Oceans Institute. Could you please tell me a little about what CSIRO is doing there and what kind of funding, if any, they have committed to it.

Dr Clark—We are certainly committed to working with both the University of Western Australia and AIMS on collaborating with our own marine research to create a national level of critical mass in that area. We have also entered into a memorandum of understanding with the University of Western Australia for our oceans research, and the head of our Wealth from Oceans Flagship will be located in Western Australia.

Senator EGGLESTON—Does this now mean that CSIRO will be involved in research on the west coast, in the north of the state, equivalent perhaps—or beginning to be equivalent—to their involvement on the east coast and tropical ocean research?

Dr Clark—We have, of course, been involved for a long time in research on the west coast. As you pointed out, we have a significant critical mass in Tasmania, working on the Southern Ocean, together with our partners at the University of Tasmania. Some 500 researchers are working on that effort. It is a very important area. It is an area where all of the researchers in the nation must come together and we must build that kind of level of critical mass, which is what we are endeavouring to do with our partners in Western Australia.

Senator EGGLESTON—Have you been involved to any degree in the progress of Ord stage 2 and the planning for it?

Dr Clark—Progress of Ord stage 2?

Senator EGGLESTON—Of the Ord River Scheme.

Dr Johnson—The short answer is no, although we have offered both the Australian and Western Australian governments our support should that be required, so there is a standing offer to both jurisdictions in that regard.

Senator EGGLESTON—Thank you very much.

CHAIR—Senator Abetz.

Senator ABETZ—Very quickly, if I may wish you well in the matter that was raised in the *Australian* on Tuesday, 18 May, 'CSIRO takes on top US carriers'. I understand that they are the ones that have not come to the party and settled with the CSIRO, unlike others. Is that correct?

Dr Clark—We are certainly in active commercial and legal activities with that sector.

Senator ABETZ—I dare say, given that proceedings are underway, you cannot tell us much about it, so I wish you well in that. It would not be the Senate estimates of CSIRO unless I inquired about the cricket ball. Have we developed that any further? I missed out at last estimates, so I thought I had better get an update now.

Mr Whelan—No, there has not been any progress. CSIRO provided a proposal to Cricket Australia to do some work on that.

Senator ABETZ—So the ball is with Cricket Australia, if I can use that terminology!

Mr Whelan—That is correct.

Senator ABETZ—All right. Thank you. I put a question on notice on 22 March 2010 in relation to the disclaimers used on climate change papers. I am just wondering where we are at with that question, given that it is now somewhat overdue. I can understand that a lot of work would be involved in it, so I do not want to be overly critical. But, if we could be provided with a time framework, that would be helpful.

Dr Clark—We have provided the answer to that question to you already.

Senator ABETZ—Aha! When was it tabled?

Dr Clark—I am just trying to check that. Can we take that on notice? But we have provided that answer.

Senator ABETZ—We will not delay this process any further. If an answer has been provided, I would be much obliged to you if you could let my office know.

Dr Clark—I would be happy to do so.

Senator ABETZ—I do not seem to have it as yet. It was sent to the Table Office on 23 March; that is the one. There is a Senate question, No. 2588, to which you answered:

Given the preliminary and limited nature of the research, there is insufficient data to support publication of any results.

Have we got any further with the research so that we are now in a position to publish results? Once again, if I may, I will leave that with you on notice.

Dr Clark—Thank you.

Senator ABETZ—It is question No. 2588. In response to a similar question in relation to the carbon footprint of electric cars, SI-23, from the October estimates, I was told:

CSIRO has done some preliminary modelling to understand the relationship between electric vehicles and the source of electricity used to charge them and how this compares with various fuels in terms of carbon footprint, but results from this work are not yet ready for publication.

How close are we to publication?

Dr Clark—I understand we have provided an answer on that, but we are not planning at the moment to publish anything further. But we have provided to your office an answer to that question.

Senator ABETZ—No, what I just read out was the answer, which was fair enough at the time—so there is no criticism of that. I do have an answer to SI-23, but it says that your research has not gone far enough, so it is not ready for publication. I am just wondering: since October 2009, in the last six months, has there been further study undertaken which now allows you to provide us with any information that is ready for publication?

Dr Clark—My apologies. My understanding is that we are not planning to publish anything further at this stage.

Senator ABETZ—Oh. Possibly some of my concern—no, I will not say why it is not going to be published, but thank you for that answer. Without delaying the hearing, is Dr Fraser with us? No. But he is still with the CSIRO?

Mr Whelan—Are you referring to Dr Paul Fraser?

Senator ABETZ—Yes, Dr Paul Fraser.

Dr Johnson—Yes, my understanding is that he is still employed with CSIRO.

Senator ABETZ—I understand that there has been a war of words between Dr Paul Fraser and Mr Des Moore. I have been provided with a copy of the letter from this Mr Des Moore, who is very much on the ‘anti’ side of the global warming debate. He wrote a three-page letter to Dr Fraser on 27 March 2010 making a number of assertions. I do not want to take sides in relation to this debate, as a self-declared agnostic, but I am just wondering whether it is Dr Fraser’s intention to respond to that correspondence. I do not know if you know anything about that, Dr Johnson.

Dr Johnson—No.

Senator ABETZ—But if that could be taken on notice—

Dr Johnson—I am happy to take that on notice, but I am not aware of that correspondence.

Senator ABETZ—Could I inquire as to whether anybody in CSIRO has read Dr Garth Paltridge’s book called *The Climate Caper*, or a section of it—

Senator Carr—Anyone? There are 6,500 people. Has anyone read that book?

Senator ABETZ—and, if so, whether the CSIRO would like to respond to the suggestion that was made in the book in relation to the pressure put on certain CSIRO scientists to adhere to a particular line, which I suppose is a follow-up to the Dr Spash position, albeit Dr Paltridge

makes it as a generalised claim as being part and parcel of his experience, keeping in mind that he devoted his lifetime of expertise to the study of climatology.

Dr Clark—I know we discussed this issue the last time that the committee met. We have had no further updates in this area. It is difficult to understand exactly which area you want me to explore here. There is not really any—

Senator ABETZ—I would have thought it is not difficult, with respect, other than for the fact that I have not been sufficiently articulate. So allow me to restate it: this is a general statement made by somebody who has a worldwide reputation in relation to intimidation and pressure on CSIRO scientists, which would suggest that there may be some cultural issues—I will put it as conservatively as I can—in the CSIRO. I would have thought that when somebody who had such a long engagement with the CSIRO makes such an assertion, it might be worthwhile for the CSIRO to come out and publicly accept it, to do a mea culpa or to say, ‘Absolute nonsense, of course he is wrong and there is no such culture.’ But I would have thought when somebody such as Dr Paltridge makes such an assertion there may have been a response from the CSIRO to protect its reputation.

Dr Clark—It was a long time ago, and before my time. But we do have a very consistent process for how our publications are reviewed. It is a process that is both endorsed by our staff union and our staff, because it makes it clear. It also allows staff to maintain our independence and our role as trusted advisers. We have been very clear about that process, and I think it has a lot more clarity than in the times when Dr Paltridge was part of the organisation which, as I said, is a long time ago.

Senator Carr—It was 1990! This fellow has not worked for CSIRO since 1990.

Senator ABETZ—He is still considered an emeritus professor. He was the foundation—

Senator Carr—His advice to you is predicated on his experiences from 1990.

CHAIR—Senator Abetz, I have three other senators on the list: Senator Macdonald, Senator Heffernan and Senator Milne.

Senator ABETZ—If I may; I was about to finish there, but this is an outrageous comment in relation to Dr Paltridge. Many people retire from their official positions, such as Mr Whitlam, yet still continue to comment on issues of public policy. Do we say that Mr Whitlam was sacked in 1975 and, therefore, for 35 years we should not have been listening to any comment he makes?

Senator Carr—You are accusing this organisation of intimidation! If you want to know about outrageous comments—

Senator ABETZ—That is an outrageous and silly—

Senator Carr—You have accused CSIRO of intimidation—

Senator ABETZ—No, I have not.

Senator Carr—based on the advice of someone who worked there in 1990!

Senator ABETZ—No, I have not. Chair, I have made no allegation—

Senator Carr—Of course you have!

Senator ABETZ—No.

Senator Carr—Don't get cute with us—of course you did!

Senator ABETZ—I have asked about the allegation made by somebody else and whether the CSIRO has seen fit to respond to the allegation and, if so, how they have responded to it. I make no allegation; as I said previously, as a self-confessed agnostic in this debate—

Senator Carr—Don't be so smarmy—of course you are accusing the organisation of intimidation!

CHAIR—Minister!

Senator ABETZ—No, I am not.

Senator Carr—Of course you were!

CHAIR—Dr Clark, do you have any further response?

Senator Ian Macdonald interjecting—

Senator Carr—That is a separate question. That is the clear intent of his question.

Senator HEFFERNAN—I am next.

Senator ABETZ—No, I do want an answer—sorry.

Dr Clark—Since that time, we have been very clear about our process and public comment, which does help our—

Senator ABETZ—Since what time?

Dr Clark—Since Dr Paltridge's time in the organisation—

Senator ABETZ—No, I was referring to his book *The Climate Caper*, which was only published last year. So this is fresh—

Dr Clark—I understand that. I am just trying to explain what we have done to make sure that one of our strongest values, which is the integrity of our excellent science, is held right through the organisation, and that our officers have a very clear process for public comment that allows them to maintain their independence and their scientific integrity.

We have a very clear process and we also have a very clear guiding principle and goal in our organisation that our journey and science are guided by our integrity of excellent science. We can go through the detail and letter of that process on public comment, if you care to, but we have certainly made a lot of clarity around that to assist our staff in this area. As you can imagine, many of the complex issues that we deal with now are challenges that face both this nation and the globe. They are interconnected and they involve all aspects of society, so it has been very important for us to make sure that our scientists are protected by a very clear process of which they are very much aware and adhere to

Senator MILNE—I notice you say your merging of the entomology and sustainable ecosystems you say will cut costs and duplication of technical support services which therefore are being regarded as overheads. Can you tell me who is going to pick up the technical functions that are being cut as overheads in this merger?

Mr Whelan—I am not sure of the exact source of that quote, but, as Dr Clark indicated earlier in the hearing to questions on the matter, the intent of the merger is to increase the critical mass of researchers working in this broad field of environment and ecology. It is not the intent of the merger to reduce the scientific effort associated with that work. There may be some changes to the management and overhead arrangements of the division. For example, we will go from two chiefs to one chief. There probably will be some rationalisation at the deputy chief level. So there may be some management changes in divisions, but as far as the conduct of science is concerned the purpose of the matter is to increase critical mass, to drive synergies and, if those synergies do exist, to reinvest the gains from those into further research.

Senator MILNE—So we are not going to see technical functions, so to speak, cut.

Mr Whelan—I am not sure of the source for the reference to ‘technical functions’. Some people might regard the management division as a technical function. I think the focus in the merger will be on driving our efficiencies in the management structures. It is not meant to be targeting the research itself.

Senator MILNE—Can you tell me about the move to Boggo Road in Queensland? I am told there might be a few problems with that.

Mr Whelan—I am not aware of any problems. The development of the site is on schedule, on budget. Planning is advanced for the relocation of CSIRO staff to that site. We will end up with, I think, about 1,000 people—probably the largest consolidation of environmental scientists and policymakers in the southern hemisphere. I think about 270 CSIRO staff will be based there. Plans are advanced and on track for that move.

Senator MILNE—When do you expect that move to be finalised and for them to be in there?

Dr Johnson—We expect the move to commence this calendar year. As Mr Whelan indicated, the relocation task is currently in preparation. I would anticipate that there would be CSIRO staff physically located in the building this calendar year.

Senator MILNE—What about the wireless and computer access?

Dr Johnson—Yes, there will be computer access for all staff there. Is there a specific question in that regard?

Senator MILNE—I just want to make sure there is going to be wireless and computer access and enough storage for everyone.

Dr Johnson—There is a comprehensive process of engagement between CSIRO and the Queensland government. There is a specific committee that is planning to ensure that we have absolute best-of-breed telecommunications and information technology in the building. So there will be wireless there.

Senator HEFFERNAN—In view of the global food task and the doubling of it by 2050, is the CSIRO, given that agriculture is well and truly off the radar in terms of research—we have fallen below critical mass—interested in modelling the future of the global food task? I ask against the background of the phenomena we now have of the Arab states, China and India going into other agricultural lands—the poorer countries with the best agricultural land on the African continent—and buying up the best of their land. And I am talking about the same thing

happening in Tasmania with our dairy farmers, and New Zealand's 17,000 cows in one go. Is anyone in the CSIRO—you say there are going to be God knows how many people in some bloody office up there—going to be interested in the global food task and modelling it so we can give ourselves some sovereign protection?

Dr Clark—As I previously outlined, the agricultural sector investment of CSIRO is increasing. We have increased it by \$35 million this year.

Senator HEFFERNAN—All right, I do not need a long answer—we do not have much time. Are you going to model the global food task unit to give advice to the government?

Senator Carr—It is unfair for you to make assertions against the officers—

Senator HEFFERNAN—No, I am not at all. That is enough answer—

Senator Carr—Give them a chance to answer.

Senator Heffernan—This is such an uncivilised bloody process! You get two minutes to ask the most important questions about the future of Australia's agricultural task. It is under the radar.

Senator Carr—You should talk to your colleagues about how they use their time.

Senator HEFFERNAN—Will you be modelling the future of the global food task to give advice on Australia's sovereignty?

Dr Clark—We are absolutely looking at food security. We are looking at sustainable agriculture.

Senator HEFFERNAN—But will you model the global food task? For God's sake, if there is anything you should do, it is that.

Dr Clark—As part of our work in both our agricultural sustainability area and in our food futures we do undertake work looking at the food demands, the market changes, and of course the issues of food security and the relevance, both the opportunity and the challenge, to Australian agriculture. So it is certainly part of the work that we do.

Senator Carr—For clarification, Senator Heffernan asserted that there was a cutback to agricultural research by the CSIRO. My information is that that is not true.

Senator HEFFERNAN—I did not say that at all. I said that there is a serious falling off the base in agricultural research right across the institution in Australia, and that is true.

Senator IAN MACDONALD—I was going to suggest and move—although I am not a member of the committee—that we do extend this by 50—

CHAIR—We have.

Senator Carr—No.

CHAIR—If you would like to ask your questions.

Senator IAN MACDONALD—I do not want to interrupt. Mine are serious questions. They are not hypotheticals and political things like Senator Cameron was asking—

Senator CAMERON—You are not running away from your budget position, are you? You want to decimate CSIRO as if it is not important—give us a break!

Senator HEFFERNAN—We just want to make sure that when you go to Coles or Woolies there is some bloody tucker there, mate.

Senator CAMERON—It is your policy. It is not hypothetical.

Senator IAN MACDONALD—Perhaps if I ask my question, we can come back to Senator Heffernan. Dr Johnson, out of the Northern Australia Land and Water Taskforce report, what work is CSIRO currently engaged in in pursuing the recommendations, or doing work that the recommendations touched upon, whether they are doing that as a result of the recommendations or not? I am interested in what work CSIRO is currently doing in the general area of northern land and water.

Dr Johnson—As you know, Senator, the task force recommendations are still with government. We obviously do not know how the government will respond to the taskforce's recommendations. As I have indicated at previous hearings here—

Senator IAN MACDONALD—That is why I asked the question the way I did.

Dr Johnson—we have nearly 260 staff in Northern Australia who are conducting work across a range of sectors—agriculture, the environment, Indigenous livelihoods, ocean research and water research. Without having seen what government's response to the taskforce would be, my view is that all our research investment in the north is entirely relevant to the issues that the taskforce identified and, as CSIRO's Dr Clark has indicated here as well previously, we will continue to support high-quality work in the north.

Senator IAN MACDONALD—Dr Johnson, what I am really asking for is—and perhaps you can even take it on notice—a list of the projects that you are doing at the moment. I prefaced my question by saying that I appreciate the government had not responded, but I am aware that even before the taskforce was set up, CSIRO were doing a certain number of projects related to the north.

Dr Johnson—We have been working in Northern Australia since after the Second World War, so we are happy to provide that listing of projects to you.

Senator IAN MACDONALD—Okay. The only other question I have again relates Northern Australia—very much so because mining is a very, very big driver of activity and infrastructure and people in northern Australia. Has CSIRO been asked to do any modelling in relation (a) to the mining tax or (b) to the advertisements in relation to the mining tax?

Dr Johnson—No, Senator.

Senator IAN MACDONALD—You have not?

Dr Johnson—No.

Senator IAN MACDONALD—Do any of the programs in Northern Australia that CSIRO are currently involved in have a direct or even major indirect relevance to the mining industry in the north?

Dr Johnson—CSIRO has an extensive engagement with the mining and minerals sector in Northern Australia both in your home state, Senator, in Queensland, but also in the Pilbara, and increasingly in terms of the potential expansion in oil and gas in the North West Shelf and

the Kimberley Browse Basin. So yes, we have an extensive engagement through a number of our national research flagships with the mining sector.

Senator IAN MACDONALD—From my association with CSIRO and from previous estimates, I know that you have not only what we normally think of as ‘science scientists’ but also ‘social scientists’ and ‘business scientists’. Are any of those projects looking at the profitability or otherwise or at the impact that mining activity in Northern Australia is having upon infrastructure, people, jobs and Indigenous employment—that sort of thing?

Dr Johnson—I am aware through our Minerals Down Under National Research Flagship that we are engaged both in the Surat Basin and in the Pilbara in working with industry and local communities around how to maximise the full value that the sector delivers to regional Australia.

CHAIR—Thank you, Senator Macdonald. And I thank the officers of the CSIRO for attending today.

[11.51 am]

Australian Research Council

CHAIR—Welcome. Professor, do you have an opening statement that you would like to make?

Prof. Sheil—No, I do not have an opening statement.

CHAIR—We will go straight into questions then.

Senator COLBECK—Could you give me a progress report on the implementation of the Excellence in Research for Australia program and the sort of feedback you are getting on it, particularly from the universities and institutions that you are engaged with.

Prof. Sheil—Sure. We are in the final stages of preparations for submissions from the institutions, which will open tomorrow. We have had extensive consultations with the universities. We have had them engaged in a whole range of processes in the background in terms of trialling, for example, their repositories and tagging their journal outputs. As recently as Friday, Ms Harvey met with the research office directors from the Group of 8 and they indicated that they were on track to make their submissions.

Senator COLBECK—What issues have cropped up during the process that you are having to deal with?

Prof. Sheil—We have had an extensive consultation process around ERA. Most of the issues that have arisen have focused on the ranking of the journals, and that has been a major exercise. We considered 45,000 journals. In the final list there were 20,712. There is less than one per cent which we are continuing to receive correspondence about, and for only two of those journals have we had more than five pieces of correspondence.

Senator COLBECK—What was the process to rank the journals? And whose job was that?

Prof. Sheil—It was done by the ARC in consultation with a range of peak bodies, societies, individual experts, extensive reviewers both in-house and external to the ARC. Ms Harvey could provide more statistics on that consultation, if you are interested.

Senator COLBECK—Please.

Ms Harvey—We started back in 2007 when we contracted through the four learned academies. They did the first draft for us. Then on their advice we contracted some other bodies where they did not feel that they had appropriate representation. We have listed those before and we would be happy to supply them again. I can actually pass them through now.

Then we went to a process where we put out a public list. We had consultation over that for several months, where anybody could submit feedback. We had just over 100,000 pieces of feedback based on that list. We then worked through that. We had 700 external reviewers that assisted us with that, including peak bodies where we felt that we needed peak bodies, councils of deans, learned societies—those types of things—and then we published the list. So there has been quite a long process in that regard. I would be happy to table the list about the different councils if that would help.

Senator COLBECK—I presume there is a website.

Ms Harvey—Absolutely, yes.

Senator COLBECK—I will chase it through that process. Is the ranking process a categorisation process? I do not mean a 1 to 20,000 list. Is it in categories to take account of things like applied research or practical application of research? Senator Heffernan asked some questions about rural research. The question goes to making sure that we get a balance across different forms of the more applied type of research to research that actually has a very practical application so that we can provide a ranking that gives us a direction towards practical types of application as much as the blue sky stuff.

Prof. Sheil—There are four categories on the journal list—A*, A, B and C—and there are a range of different types of journals distributed across the different categories, ranging from applied journals through to more theoretical journals. By taking the approach of looking at eight discipline clusters and looking at what is important to each of those discipline clusters, we have designed ERA so that what is the norm in the discipline or what constitutes excellence in the discipline is taken into account in the indicators that we use. A good example of that would be in the computer science area, where publication in the latest conferences is often much more current and much more relevant to the application of that discipline than publication in journals, which is a slower process. So by looking at it in eight clusters with a range of different indicators for each of the clusters we have attempted to take that into account.

It is fair to say that we are still looking for really robust indicators of applied research, and we will continue to do that post this first round of ERA and we are continuing to do that in consultation with bodies such as the Academy of Technological Sciences and Engineering and various different peak bodies of deans that have more interest in applied research. But there is a very good representation of applied journals in the list and in the other indicators.

Senator HEFFERNAN—What about agriculture?

Prof. Sheil—Agriculture sits across two clusters: the biological sciences and biotechnology cluster, and also the environmental science cluster.

Senator HEFFERNAN—Could you provide this committee with written details of what bidding is going on in agriculture against the global food task. I still do not know what Dr Connall O’Connell’s PhD is for, but I do not think it adds anything. This is in terms of picking things that you can touch and feel against the future problem of the global food task—you give us the details of the clusters.

Prof. Sheil—Within those broad eight discipline clusters the research is assigned to different fields of research and there are a range of different fields of research that relate to agriculture that we will be able to report on when we finish the exercise.

Senator HEFFERNAN—Will there be a cluster on the global protein task?

CHAIR—Senator Heffernan, I will put you on the list for later. Senator Colbeck has the call.

Senator COLBECK—You talked about the eight broad clusters, and part of your authority this year is a full evaluation under the initiative of all the broad clusters. What does that actually mean that you are looking at doing? What is the target of that evaluation of each of the clusters? Could that potentially mean a reorganisation of some of the elements under those clusters? What is the target for that? That is out of the PBS statement, where it says, ‘conduct a full evaluation under the ERA initiative of all eight broad clusters of disciplines’.

Ms Harvey—There are some 22 divisions, which is what we call a two-digit field of research code. For example chemistry is a two-digit code. Sitting underneath that is what we call a four-digit field of research code, which is like organic chemistry and things like that. There are 22 divisions and 156 four-digit codes. We will be doing an assessment of the research conducted under publicly funded research through the universities of how that has been over the past few years in our reference period. For example, what type of research has been done and how good is it against all of the different indicators for the last six years. So we are then able to say at both an institutional and a national level how good Australian research is compared to the world with regard to its quality. That is what that means under a full evaluation. For example we had the two trials: the first was for physics, chemistry and earth sciences and the second trial was for humanities and creative arts. Under each of those two clusters more than 40,000 research outputs were assessed to see how good was Australian research in that area. We are able to look at a whole range of things with regard to that for Australia. When we say a full evaluation it means all eight of them.

Senator COLBECK—You have done a trial across two of the clusters. You are going to extend that across all eight.

Ms Harvey—Yes, and redo those two again.

Senator COLBECK—Then get a sense, a measurement, of quality of research based across all the criteria on the eight clusters, the 22 divisions and the 156 four-digit codes.

Ms Harvey—That is exactly right.

Senator COLBECK—What does a four-digit code mean?

Ms Harvey—It just means it is a four-digit field of research code. For example, organic chemistry is a four-digit code. It is an Australian Bureau of Statistics classification system and there are very granular field of research codes that sit underneath it. We could read you out

some more if there are any you are particularly interested in but they are quite granular in nature such as organic chemistry and things like that. They are about to narrow that down to do that assessment.

Senator COLBECK—It is effectively a measurement system.

Ms Harvey—It is a national stock take.

Senator COLBECK—How does the project with the National Health and Medical Research Council and the support of the Australian Research Integrity Committee fit into the process?

Prof. Sheil—The Australian Research Integrity Committee will be a joint committee between us and the National Health and Medical Research Council. It will be the same committee separately constituted to meet the requirements of each of our acts. The proposal is that it will review cases where someone is unsatisfied with what has happened at the institutional level. We will not do prima facie investigations but we will be looking into what the institutions have done in their investigations in the very small number of cases where people remain unsatisfied with the process.

Senator COLBECK—It is an oversight of the oversighters?

Prof. Sheil—Yes.

Senator Carr—It is an appeal mechanism, Senator, to ensure that we can be satisfied that people are not badly treated at the institutional level.

Senator COLBECK—I understand what you are saying and that it is providing an oversight to the processes that occur within the organisations.

Senator Carr—Yes, given how important these issues are to our international reputation and given how important these issues are to individual researchers.

Senator COLBECK—I think we had a discussion last time about publication of a paper from within the CSIRO and the internal processes that were happening there about the publications.

Senator Carr—This is for universities.

Senator COLBECK—It will not look at research organisations; it is purely looking at universities?

Senator Carr—It is for universities and the NHMRC.

Prof. Sheil—Which is medical research institutes.

Senator Carr—The funding mechanism, the instrument, is the two acts. You asked a question in regard to the evaluation process because we want to be certain that this system works. So much will depend on ERA to verify claims from people about the quality of the research they are making.

Senator COLBECK—I understand that.

Senator Carr—That is why we are putting so much energy into getting this right.

Senator COLBECK—I do not think there is any need for a defensive mechanism here at all. I am just seeking some information and asking some questions about it. So there are no implications—I just want to get an understanding of exactly where this all is. So it is confined to university research processes?

Prof. Sheil—It is confined to institutions funded by either the ARC or the NHMRC. In the case of the ARC that is primarily universities. In the case of the NHMRC that also includes medical research institutes and some hospitals.

Senator COLBECK—So CSIRO could potentially come into it if they were involved in a partnership sense with—I do not want to pick on anyone in particular; I am just trying to get a sense of the coverage of the process—

Prof. Sheil—If research is involved in a joint collaborative proposal with another publicly funded research agency then potentially that could be included, yes.

Senator COLBECK—How does the broader ERA process recognise and measure the actual impact of research?

Prof. Sheil—There are a range of different measures, including things like, in the agricultural area, the number of plant breeder rights and, in the medical area, the extent to which the research has been taken up in various protocols and guidelines. Our attitude is that it has to be measurable, so wherever we can measure it and we can easily collect it or the universities can easily collect it we are happy to assess it. There are also a range of indicators buried within the research income and the sources of research income from more applied areas and so on. But if we cannot measure it then they have not been included.

Senator COLBECK—Is there any guidance on that measurement, because quite often one of the things that are very difficult is to actually measure the benefits or the impacts of that sort of research? I have seen that before with the government's research and development corporations, for example. One of the very difficult things is to actually measure and scale those things. Is there any assistance or guidance in there in respect of that?

Prof. Sheil—There is a very detailed set of submission guidelines in relation to the indicators that we have included for this assessment and, as I said, there is ongoing work with other areas. This is not an easy area. We are in many ways leading the world in some of the things that we are doing. Trying to find the sorts of applied measures that measure the outcome of research two or three steps removed from the initial research is not easy and also often requires quite a long time frame.

Senator MILNE—All through your material you say that you want to enhance the scale and focus of research in areas of national priority. What are the areas of national priority?

Prof. Sheil—There are four areas of national research priority that were determined some time ago. I can tell you what they are.

Senator MILNE—Determined by whom?

Prof. Sheil—They were determined under the previous government. The four national research priorities are: 'An Environmentally Sustainable Australia', 'Promoting and Maintaining Good Health', 'Frontier Technologies for Building and Transforming Australian Industries' and 'Safeguarding Australia'.

Senator MILNE—Since all those research priorities can encompass just about anything, I am interested to know how you give those any kind of priority.

Prof. Sheil—Our processes mostly, with the exception of a small number of targeted programs, are bottom-up-driven processes, driven by the excellence of the people making the applications. For most different schemes we have a range of selection criteria that include the quality of the project, the track record or evidence of the performance of the researchers and, usually, a criterion in relation to national benefit or national priority, which researchers address as part of their application. That, along with the other criteria, is assessed in making the awards.

The practical outcome of having national research priorities has actually been that researchers think much more carefully about the practical outcome and the national benefit of their research. Then that goes into the framing of the application, the quality of that application and the assessment. But we do not have a strategic element to what we do where we say we are going to fund a number of proposals in X.

Senator MILNE—That is where I was coming to. It is very difficult to see how much of the overall research dollar is going to carbon capture and storage, compared with sustainable agriculture production, for example. You say you do not prioritise, but there is likely to be a bias. I would like to look at where the money goes when those grants are allocated to one of the four priorities. Let us have a look at where the money is going.

Prof. Sheil—We can provide that data for you. We routinely provide data like that to a whole range of organisations that ask for that information. All the information coded by national research priorities is available on our website, where people can download it and so on. We can provide something if you have a specific query.

Senator MILNE—I have a specific query in relation to carbon capture and storage, but I will give you that notice.

Prof. Sheil—Sure.

Senator MILNE—Is there any political sign-off on these, particularly the collaborative grants across a range of institutions? Do you have to put that up to the minister to be signed off, or is that something that automatically occurs after the selection process?

Prof. Sheil—For all of our schemes we have selection advisory committees that make recommendations, through the executive directors responsible for the scheme, to me. I in turn make recommendations to the minister for his approval for funding. The process for that is set out in our act. The minister has indicated that if he were to not accept one of my recommendations then we would provide him with a vehicle to make those reasons public.

Senator Carr—We have been very clear about this. In the previous government there were 12 occasions where advice was rejected. I have indicated that, where advice is rejected—and it is within the rights of government to reject advice—I will make a public declaration on that point. I have the power also to direct the ARC under the act and, again, that requires a public declaration of the use of that authority.

Senator MILNE—I am particularly interested in a collaborative research grant that was made across a number of universities in the very last days of the Howard government. A

recommendation was made by your organisation that it go to the ANU research collaboration in solar energy in particular. That was crossed out by the minister, initialised, and it went to the Griffith University consortium based in Queensland.

Prof. Sheil—That was not part of his portfolio.

Senator MILNE—Which portfolio is that, then?

Prof. Sheil—It is the department of the environment. It was not from the ARC.

Senator MILNE—But it was across a whole range of universities.

Prof. Sheil—But it was not an ARC proposal.

Senator Carr—Universities secure money from a range of portfolios.

Senator MILNE—I understand that, but I thought it was an ARC one.

Prof. Sheil—No, it was not.

Senator MILNE—Okay. I will go back and find out from them.

Senator Carr—When was the decision made to change the recommendation from a funding body? Was that something done under this government?

Prof. Sheil—That selection process occurred under the previous government, but it was not ARC funding.

Senator MILNE—Thank you.

Senator IAN MACDONALD—Thank you for supplying me, on notice, an answer to a question I asked a year ago about the ARC research grants to climate change. Can you update the list I was given?

Prof. Sheil—We will be happy to do that, but I would have to take that on notice.

Senator IAN MACDONALD—Of course. Do you have any general policy on research into climate change, in view of the fact that the government has now given it a low priority and has delayed any climate change action for three years?

Senator Carr—The failure to secure its passage through the Senate means we have delayed it, not that we have given it a low priority.

Prof. Sheil—As I explained earlier, in answer to an earlier question, the amount of funding that we award particular areas is, by and large, as a result of a bottom-up the process. The people putting in applications and the quality of those applications determine the amount funded for a particular area of research. So, no, we have not changed any of our practices in relation to research that involves climate change.

Senator IAN MACDONALD—Would you keep funding some area of research if the government had indicated to you that it was no longer interested in it in the immediate future? That would seem to be a bad use of research dollars if nothing were to be made of the research because of government policy and delaying things.

Prof. Sheil—In our discovery projects, for example, it is the cutting edge research questions of the day that we fund. Very often that is a long way removed from its immediate application. The people who are making the decisions and recommending funding to me—and,

hence, through me to the government—are looking at the quality of the question that is being addressed and the quality of the person addressing it, not short-term priorities.

Senator IAN MACDONALD—There are some quite recognised scientists who do not agree with man-made climate change. Without getting into that debate, if there were reputable scientists in the climate change debate who put in a good proposal to do work debunking, for example, the man-made climate change theories, would that be judged in the same way—on the quality of the applicant and the quality of the application?

Prof. Sheil—It would very much depend on the quality of the applicant and the quality of the proposal.

Senator IAN MACDONALD—Regarding the people who constitute your council, are they scientists?

Prof. Sheil—Yes. We have three layers of input into the selection process. We have thousands of experts from around the world who provide the most detailed review. Then we have a group of readers in the middle who read a larger number of proposals than the international experts. On top of that we have a group known as the College of Experts, which is 78 individuals divided into five groups, who look at all the evidence from the other two layers and collectively make recommendations on the grants that should be funded.

Senator IAN MACDONALD—This is hypothetical, but it is a shorter way of getting to the question I want answered. If there were someone on your council who was totally opposed to the theories on climate change—the ultimate denier—does that person's own belief in these things impact upon that person's work by saying, 'Yes, we'll give one of these to someone who has a totally different view to me'? Does that come into it at all?

Prof. Sheil—As I said, the robustness of the system relies on the input that goes into the final decisions. There is the very large layer at the bottom and a very large layer in the middle. Each of the proposals at the top level is read by two members of the College of Experts and then their opinions and rankings in relation to the next layer down and the comments at the next layer down are then tested within the whole committee. It is quite difficult for one individual to influence a grant one way or the other.

Senator IAN MACDONALD—Do you have a no-conflict-of-interest policy? If someone is a climate change expert, are they put onto dealing with the submissions that come forward, either for or against, pro or anti climate change or are they excluded on conflict-of-interest grounds?

Prof. Sheil—Having knowledge and expertise in the area is not a conflict of interest. The sorts of things that are conflicts of interest include: coming from the institution where the grant is proposed, having a personal relationship or a financial interest in the proposal. Regarding the kind of thing that you are talking about, which is about individuals who might have a particular view, the checks and balances are there, and those are the 12 members of the committee.

Senator IAN MACDONALD—Thank you for that.

Senator HEFFERNAN—In your cluster for agriculture, I take it—from the process you described to Senator Macdonald—that you assess, 'If we approve this bit of research are we

going to get a useful outcome for the benefit of all?' Do you give consideration to things like the restrictions placed on research by gene patents? If you do not; why not?

Prof. Sheil—I am not quite sure what you mean by that.

Senator HEFFERNAN—One of the great restrictions—the IP are waiting patiently down the back—in recent years is that through very broad interpretation of patent law we have not drawn a line between discovery and invention. So there are patents now with people like Monsanto, Syngenta et cetera in the agriculture field, which are attempting to tie up access to the gene. They are not patenting the downstream inventive step and commercialising it. They are—through the generosity of the system—being allowed to patent the actual gene. Are you able, in your consideration of merit based research, to give consideration to the restrictions and the added cost of the world allowing patents on the genes? It has never been challenged in a court in Australia.

Prof. Sheil—I think my colleagues from IP Australia would be better placed to comment on that but—

Senator HEFFERNAN—But your job—

Prof. Sheil—I can answer your question in part. One of the sections in each application is approach and methodology. So the researchers, in the approach and methodology, would typically describe what they are going to do, how they are going to do it and, if there are issues in relation to access to materials, how they are going to obtain that access. Then the four or five experts that read the proposal would be in a position to say whether that is reasonable or not. They are the ones—not me—who would know whether the research is going to be hindered by that or not.

Senator HEFFERNAN—Could I put on notice to you a question of your assessors in this three-step assessment. What knowledge do they have of the impact on research of the restrictions of gene patents?

Prof. Sheil—That would be very difficult for me to expect from—

Senator HEFFERNAN—Take it on notice.

CHAIR—Senator Heffernan, I really think you should listen to Professor Sheil's description of the—

Prof. Sheil—What I am saying is that I do not think I can take that on notice because I do not think we have that information now.

Senator HEFFERNAN—I will rephrase it: shouldn't you have that information?

Senator Carr—I think it is unfair for the officer. It is a matter that would be better directed to IP Australia, who are undertaking a series of reforms in this area.

Senator HEFFERNAN—No, I—

Senator Carr—Let me try to finish this. There has been a long-standing debate within the research community about the role of IP laws with regard to research. I am not aware of any matters that impinge on the ability of the ARC to fund the matters but I am advised that IP Australia is currently proposing a number of intellectual property reforms which include the introduction of a statutory research exemption to provide these research and businesses with

greater certainty as to the type of experimental activities that can be done without infringing a patent. These are matters that we can take on notice in terms of the specific changes that are being proposed and how they relate to the ARC. But as to what is in the minds of thousands of readers is a more difficult question for the officers to be able to deal with. In fact, I suggest to you that it would not be appropriate to take that on notice.

Senator HEFFERNAN—Do you recognise the capacity of a gene patent—which is not an inventive patent; it is a discovery patent—to restrict and add to the cost of research? When you have prioritised research projects up until this point you would not have given consideration to that—would that be the answer?

Prof. Sheil—No; what I am saying is that the individual experts, who are expert in plant science, for example, would consider what is written in the applications when they are making their judgment about the applications. It is not an area that I have personal expertise in.

Senator HEFFERNAN—To get an idea of whether they have an idea of the added costs, who should I talk to?

Prof. Sheil—These are academics working in Australian institutions. I can only look at the quality of their track records when we are assigning them proposals to read. I do not have any understanding—

Senator HEFFERNAN—Could I illustrate: the GRDC, the grains research mob, have no knowledge of the impact of gene patents in their world. I have had them before the committee. Perhaps you do not either.

Senator Carr—It is not a reasonable proposition to put to the ARC. If you have questions that relate to IP Australia, I suggest you ask them questions.

CHAIR—I think this might be a good time to move to IP Australia, even though we have five-odd minutes left.

Senator HEFFERNAN—But, finally, you are the body that prioritised these research projects?

Prof. Sheil—As I have indicated before, we rely on the expertise of people providing us with advice.

Senator HEFFERNAN—I accept that.

Prof. Sheil—If it is an issue for the discipline, the readers in that discipline will raise it in relation to those particular applications.

Senator HEFFERNAN—But, to your knowledge, it has never been raised?

Prof. Sheil—I have no information one way or the other.

Senator HEFFERNAN—Can you take on notice whether it has ever been raised.

CHAIR—No, Senator Heffernan.

Senator HEFFERNAN—What is wrong with that? Has it ever been raised? That is a fair question.

CHAIR—Senator Heffernan, these are individual discussions—

Senator HEFFERNAN—No. This is a question for that department or whatever—

CHAIR—I think it has been said several times that it is more a matter for IP Australia.

Senator HEFFERNAN—Who are this mob? The ARC. Could I ask the question formally of ARC: have your researchers—that is the ARC, not you as an individual, but the body—ever given consideration to it? Will you take that on notice?

Prof. Sheil—We will see what sort of information we can provide, but I am saying in advance that I suspect it is very limited, if we have the information at all.

Senator CAMERON—Professor, how many employees do you have in the Australian Research Council?

Prof. Sheil—As of 30 April, 110.

Senator CAMERON—What is your turnover annually?

Prof. Sheil—It varies. In the last year it was 19.1 per cent.

Senator CAMERON—So that is about 20 employees a year.

Prof. Sheil—We have a number of projects. That includes ongoing and non-ongoing staff.

Senator CAMERON—If you were reduced by 19 per cent per year over two years—or, say, 40 positions—how would that affect your capacity to provide policy advice, to measure research excellence and manage the research funding schemes?

Prof. Sheil—We are a small agency with limited career opportunities, with 110 positions; and many of our staff have been promoted into the department. So we work very hard to ensure that we have steps in place to ensure that there is overlap of understanding of various duties and so on. We are working very hard, and in fact have just completed a process of engagement with the staff, particularly in the program area. One of the reasons there is a relatively high turnover is that, in the program coordination area, with the grants, it is very high volume—4,000 grants at any one time—and repetitive. So what we are endeavouring to do, and have just about finished it with a reorganisation of the program coordination area, is to ensure that there are better and more interesting career opportunities for staff within the agency.

Senator CAMERON—But my question is not about better and more interesting career opportunities; it is about a freeze on your being able to employ anyone for two years. How would that affect you? So if people leave, and you cannot replace them for two years, how would that affect you?

Prof. Sheil—We can replace them.

Senator CAMERON—No, there is a proposition that there should be a freeze on recruitment generally in the Public Service, which you come under. If you had a freeze on your capacity to replace 19 per cent of your staff over two years, what effect would that have on you meeting your obligations and goals?

Prof. Sheil—We would be severely constrained.

CHAIR—I thank the Australian Research Council and Professor Sheil for coming in today.
[12.30 pm]

IP Australia

CHAIR—Welcome. Do you have an opening statement?

Mr Noonan—No, we do not.

Senator EGGLESTON—I would like to ask a few questions about IP rights. Obviously intellectual property rights are very important in terms of the return on scientific inventions and innovations. Perhaps you would outline how the system works for the benefit of the committee.

Mr Noonan—Yes. The IP rights which we administer are in four parts. The largest part of our resources is devoted to the patent system. The concept of a patent is that a party applies for a patent in respect of an invention which, if granted, gives the person an exclusive right to exploit that invention for a 20-year period. The second right relates to trademarks. A registration of a trademark gives an applicant the right to the exclusive use in business of that trademark for an initial period of 10 years but renewable in 10-year segments after that indefinitely. Next is industrial design. A person who secures registration of an industrial design has the right to exclusively use that design. Finally, plant breeder rights grant a right to use a particular plant variety for a period which varies according to the genus.

Senator EGGLESTON—Thank you very much. I suppose one would say those four sets of conditions brought great benefit to Australia through the exercise of IP rights and licensing them out.

Mr Noonan—Yes. Countries all over the world have run an IP system, in the case of the patent system, to try to encourage innovation by offering those who innovate a commercial return for their innovation free of the possibility of free-riders deriving most of the benefits of their invention.

Senator EGGLESTON—This committee recently has been conducting hearings into the new research and development legislation, which, if passed, would no longer require that IP rights should remain in Australia and would provide the option for them to be held overseas. In their evidence Cochlear Australia expressed some concern about that to the committee and suggested that perhaps permitting IP rights to go overseas should only be for a limited trial period of three years. What other countries do not retain exclusive IP rights within their jurisdictions and allow them to go abroad?

Mr Noonan—I cannot respond on other countries' laws in the area of research and development funding. I can only say that, in Australia, most of the patent rights that are registered by IP Australia are in fact derived from foreign companies. That is only what you would expect with a country that is relatively small within the global economy. So most patents which we register were originally registered in another country and come to Australia for registration under the Australian system so that that technology can then be used in Australia with appropriate IP protection.

Senator EGGLESTON—So are you saying that, for example, in the United States one presumes these companies you are referring to, if they are an American company, would have primary IP registration protecting their patents et cetera in the United States but, in effect, they transfer that and get a second registration to cover Australia?

Senator HEFFERNAN—So they can make a living.

Senator EGGLESTON—I know, but the R&D legislation—

Senator Carr—I think we are confusing a couple of issues here. What we have done with the R&D legislation is to remove what it is known as the beneficial ownership test, which, under previous arrangements, essentially meant you had to have your IP here. We have said that we want the activity to be here to attract any support from the R&D program. We have just moved the emphasis. It has nothing to do with the patents law as such; it is to do with those who wish to apply for what is now a very, very substantial improvement in terms of the R&D tax credit, which will double the benefits to small business and increase the benefits to large business by one-third.

Senator EGGLESTON—We are just interested in the IP issue.

Senator Carr—Yes, but that is what I am saying to you. The question you are asking goes to legislation which removes the beneficial ownership test. The pharmaceutical industry is an example. To get the benefit for any R&D work undertaken in Australia you actually have to do the work in Australia. That position has not changed. The issue is where the IPs are held.

Senator EGGLESTON—I assure you that I understand the basic IP system; I am just interested in international comparisons. Why is it that we in the past have retained or had legislation requiring an IP for Australian inventions to be held in Australia and are now permitting it to be held overseas? I am interested in international comparisons and whether other countries may have similar legislation or similar provisions.

Mr Paterson—The issues that Senator Eggleston is raising deal with the R&D tax credit, which is not a matter that is within the responsibility of IP Australia. It is an issue for the department. The department is giving evidence straight after lunch for outcome 1, and we would be happy to respond to questions that Senator Eggleston may have at that time. But the beneficial ownership test that the minister referred to, as part of the changes to introduce the R&D tax credit, does not have an impact in relation to IP laws here or overseas. So it is not a question for IP Australia.

Senator EGGLESTON—But you are saying it is a question for the department?

Mr Paterson—I am happy for you to put those questions to the department.

Senator EGGLESTON—Thank you.

Senator COLBECK—I just want to ask a question on that specific issue. You said that a large proportion of our registrations are registrations of IPs from overseas countries which are registered here to support research done in this country. Can you give us a sense of what that proportion is?

Mr Noonan—It is approximately 90 per cent.

Senator HEFFERNAN—It should be moved to Treasury.

Senator COLBECK—Can I say that 10 per cent of the registrations are generated by R&D or are developments that are conducted in Australia. I do not want to make an assumption that I should not make by taking 90 off the rest.

Mr Noonan—It is a complicated question because of the presence of treaties and various ways in which patents can be transmitted overseas. But, broadly speaking, 10 per cent of patents originate in Australia.

Senator COLBECK—I am trying to get a sense of how the strength of our IP protection and our IP protection laws on an international scale benefit the activity of R&D in Australia. I am hesitant to name any other countries, but there are jurisdictions where IP protection is not strong but it is changing and improving—the subcontinent is probably one such area. Is there any sense of movement in registrations in that area, with the changes in IP registrations and the strength of IP protection internationally?

Mr Noonan—I am not sure I understand the question.

Senator COLBECK—It is a bit abstract, I know. I was involved in a conversation recently where they were talking about the strength of IP protection in India not being very high and not being recognised all that well, and there have been conversations previously about what might be going on in China and that goes back some period of time. But those countries are starting to recognise it because of their desire to conduct R&D—they are saying, ‘Bring your R&D here,’ and other countries and companies are saying, ‘We won’t, because your IP is not strong enough.’ I am just trying to get a sense of the change in that overall global environment for IP protection and of what impact that might have on having registrations and activity here in Australia.

Mr Noonan—From the point of view of Australian exporters, it is always an advantage to be satisfied that the countries they are contemplating exporting to will have appropriate levels of IP protection. As you say, this is a situation that is changing in particular countries from year to year, and the government, in various ways, seeks to promote stronger IP protection in other countries.

Senator COLBECK—But are we seeing any movement in the registrations here that might be, for example, being sacrificed to other jurisdictions where it is improving? Are we seeing any change in our numbers, in our registrations? You might not notice it; I do not know. That might be the answer; I do not know. But I am just asking: are we seeing a change in the numbers based on changes in international jurisdictional strengths?

Mr Noonan—No, I would not see any change of number that I would attribute to that. Growth has been fairly steady over the last decade, with some drop-off in the last year or so associated with the global financial crisis—that is a trend that has affected all countries with patent registrations.

Senator COLBECK—You talk in the budget documents about continuing to address the ‘patent applications backlog’—can you give us a sense of the extent of that?

Mr Noonan—Yes. The origin of this was rapid growth in patents around the world for about a decade leading up to about 2007 which, coupled with a strong economy here, made it very difficult for us to recruit and retain the kinds of scientists and engineers we needed to examine patents. In Australia’s case, the backlog peaked at about 75,000 or a bit over that. We have made some progress over the last year or so in reducing that and it is now down to about 65,800.

Senator COLBECK—And you have been resourced to do that?

Mr Noonan—We are a user-pays agency, so we derive most of our funds from the fees that applicants for rights pay.

Senator COLBECK—So is it 100 per cent cost recovery?

Mr Noonan—It is about 97 per cent cost recovery. So, in a sense, we have had to look at our revenues and expenses and work them as hard as we could and we have increased the number of patent examiners that we have, and that has been the main reason why we have been able to reduce the backlog.

Senator COLBECK—What has been the impact of that on your fees and charges?

Mr Noonan—There has been no direct impact on fees and charges arising from recruiting more patent examiners.

Senator COLBECK—How are you actually resourcing the additional cost?

Mr Noonan—A couple of years ago we were running surpluses and now we are running much tighter budgets.

CHAIR—Senator Colbeck, do you have much more to ask?

Senator COLBECK—No, I do not have too much more. I know there are others that want to ask questions. Can you give us a sense of the progress on the implementation of the quality management system project?

Mr Noonan—Yes. Our intention here is to examine many more patents before they are issued from the organisation and to have an independent review by a senior reviewer in order to try to pick up errors before they leave the organisation. Our intention is to review a statistically significant number against each individual examiner. There is some IT needed in support of that, and we hope to have that in place early in the new financial year. At the moment we are conducting trials and working on having the IT in place.

Senator COLBECK—What is the error rate you experience and what is the target you aim to get it down to?

Mr Noonan—At the moment we can only measure that under our previous system, which had far lower levels of review. It has 95 per cent compliance with our quality standards. We would like to review many more files and we expect that the new system will indicate a higher percentage of errors, in which case we would look to correct those.

Senator COLBECK—Is the process of discovery of that error rate based on the review or is it based on the review plus reporting from people involved in having to deal with the issues?

Mr Noonan—At the moment we do have a system of reviewing patents—or we have had—that we derive this data from. That is based on a system of review but a much less sophisticated system than we are aiming to move towards.

Senator HEFFERNAN—Is that approach not drawing a line between inventions and—

CHAIR—Senator Heffernan, you are on the list. We are trying to quickly work through this.

Senator COLBECK—It is a different issue, Bill. I will not be much longer, so you will get a crack in a second. Is there a reporting process that you have alongside the internal review process—an experiential reporting process?

Mr Noonan—Yes. The performance against the standards is reported quarterly to the executive committee of the organisation, and results are published under the customer service charter—I think also quarterly.

Senator COLBECK—You mentioned about a 95 per cent compliance rate. What is your target? Obviously, the ultimate target is 100 per cent.

Mr Noonan—There are targets set out. I think 96 per cent is our target for compliance against those service standards.

Senator MILNE—I want to know if your department is involved in the discussions that are currently being undertaken on a trans-Pacific free trade agreement? Is there any prospect that IP laws and regulations are going to be on the table?

Mr Noonan—Discussions about that agreement are at a very early stage. IP issues potentially could be on the table, but—

Senator HEFFERNAN—You are dead right about that!

Mr Noonan—I cannot give you any more detail about that.

Senator MILNE—That is what I feared. Secondly, can you tell me whether any other countries are using IP as a mechanism for minimising the income of subsidiary companies, wherever they might be in the world, or are using IP as a non-trade tariff barrier?

Mr Noonan—That is a bit of a triple-barrelled question. Could I ask you to break that down a bit.

Senator MILNE—Let me start with the first one. I understand that, if someone owns the IP in the States and has a subsidiary company in Australia, one way of minimising the income of the subsidiary in Australia is to charge very high access fees and service fees et cetera for the IP that is then registered here—hence minimising the income and hence minimising their tax. Is that something you are aware of?

Mr Noonan—That would not be something that we would have any familiarity with.

Senator MILNE—The other issue is in relation to using IP as a form of non-trade tariff barrier.

Mr Noonan—I am not familiar with that.

Senator PRATT—I want to ask about a decision that was made to fast-track patents for green technology. I want to ask why that decision was made and what the significance of it is.

Mr Noonan—We wanted to offer those who had an invention that would be relevant for green technologies the opportunity to have a faster examination of their patent than they would otherwise have had just by progressing through the stockpile, which is large, as we say. So what we have undertaken to do is if they request expedited extermination we will complete that between four and eight weeks after they have asked for it, which is much quicker.

Senator PRATT—Why is it important in particular for green innovation for that to be the case?

Mr Noonan—I think we would see it as IP Australia's contribution to the promotion of green technologies and their dissemination, to be able to give those who feel that they have invented a patentable technology early certainty about whether their technology is patentable or not.

Senator PRATT—The last thing I want to ask about is the potential of a staff freeze, a recruitment freeze, and what its impact on the agency would be, particularly if you were not able to replace staff with particular expertise as to particular kinds of patents, and whether the processing of applications for some patents might actually fall behind.

Mr Noonan—Our turnover in the last quarter was 7.2 per cent so if there were a staff freeze eventually numbers would fall across the organisation. It is difficult of course to anticipate where they would fall but if they fell, for instance, in the patent examination area then that would tend to reverse the recent gains we have made in reducing the backlog.

Senator HEFFERNAN—Do the patent examiners have to draw a line between invention and discovery in looking at a patent? You haven't, so do they?

Ms Beattie—Patent examination is conducted by the patent examiners and they consider whether or not the patent is claiming an invention. If it is claiming an invention then there are other criteria that the application must meet including novelty, inventive step, industrial applicability, description et cetera. In consideration of whether or not something is an invention, yes, patent examiners are required to consider whether it is an invention or a discovery.

Senator HEFFERNAN—So in terms of Gene Technologies Australia's successful application to have the licence in Australia for Myriad on BRCA 1 and 2, did they draw the line between what was the invention and what was the discovery and what was the method versus what was the substance? They did not, obviously.

Ms Beattie—The Myriad patent was examined in accordance with Australian legislation and Australian examination practices and it was considered to satisfy those requirements.

Senator HEFFERNAN—But my point is there is no line that you draw between the discovery and the invention, is there?

Ms Beattie—With respect, the manner of manufacture test is interpreted and applied in accordance with Australian law.

Senator HEFFERNAN—Yes, all that mumbo jumbo; we will come to that later. I understand the annual appropriations for IP Australia are made in accordance with the outcomes and outputs framework first introduced in 1999. I also understand this framework imposes a means of structuring corporate governance and management arrangements and reporting, on planned and actual performance, on IP Australia. Furthermore, this framework addresses what the government wants to achieve in the form of outcomes, how that is to be done by IP Australia in the form of outputs and how those administering the outcomes can know if IP Australia outputs have been successful in achieving the outcomes in the form of

performance reporting. So that is in that context and, on this framework, is it true that IP Australia administers a number of special accounts established by written determination?

Mr Noonan—There is one principal special account.

Senator HEFFERNAN—What is the purpose of that or other special accounts, if there is only one?

Mr Noonan—Essentially it operates the user-pays system which I referred to earlier. Normally a payment received by a government agency would go into consolidated revenue. In our case it goes into the special account and then we are able to draw upon the special account for our expenses.

Senator HEFFERNAN—So it is used to fund your operations?

Mr Noonan—That is correct.

Senator HEFFERNAN—Are you sure there is only the one account?

Mr Pereira—There are three special accounts—

Senator HEFFERNAN—There are indeed.

Mr Pereira—but IP Australia only has control over the moneys in the IP Australia special account. The other special accounts are not part of our financial statements. They are not controlled—

Senator HEFFERNAN—You use one. Could you identify the accounts? For the receiving and depositing of income received from its customers as payment for the provision of its intellectual property there is only the one account?

Mr Pereira—In the portfolio budget statements there is a table that lays out the different special accounts. It is on page 235.

Senator HEFFERNAN—Let us clarify this. Does IP Australia use one or more of those special accounts and, if so, identify them for receiving or depositing income received from its customers as payment for the provision of its intellectual property services? Can you do that?

Mr Pereira—Yes. On page 235 of the portfolio budget statements—

Senator HEFFERNAN—Could you do that on notice for me?

Senator CAMERON—Chair, on a point of order: the witness has tried to respond twice to the question and he is being interrupted each time. I think the witness is entitled to respond effectively.

Senator HEFFERNAN—I want you to take it on notice.

Mr Pereira—The information you are after is in the portfolio budget statements and the annual report.

Senator HEFFERNAN—Could you take it on notice and deliver it?

Senator Carr—Senator, the officer has drawn your attention to the page number and the table. My reading of that table suggests it covers the detail of your question.

Senator HEFFERNAN—Thank you very much. How much has IP Australia received as income from its customers for the provision of its intellectual property services in each year of the past 10 years?

Mr Pereira—I would have to take that on notice. I cannot answer it here.

Senator HEFFERNAN—In meeting the costs of IP Australia's operations over the past 10 years, what proportion of those costs have been met by the income derived from its customers? You can take that on notice?

Mr Noonan—I can supply you with an answer to your first question, on the total income. In 1999-2000, \$74,687,000. In 2000-01, \$79,169,000. In 2001-02, \$82,931,000. In 2002-03, \$85,529,000. In 2003-04, \$90,656,000. In 2004-05, \$104,405,000. In 2005-06, \$115,702,000. In 2006-07, \$127,996,000. In 2007-08, \$145,122,000. And in 2008-09, \$143,649,000.

Senator HEFFERNAN—How much of that income in each year is attributable to the provision of intellectual property services by IP Australia related to or associated with patents which claim as inventions isolated biological materials such as human and animal microbial genes and proteins?

Mr Noonan—I will have to take that one—

Senator HEFFERNAN—God bless you. According to—

Mr Noonan—Excuse me, Senator—

Senator HEFFERNAN—You can take it on notice.

Mr Noonan—We cannot actually provide that. This issue has arisen at a previous committee hearing where our answer was that we were not able to pick out the particular types of technologies—

Senator HEFFERNAN—I am sure you could if you wanted to.

Mr Pereira—Senator, the outcome structure and the output structure have changed significantly over the past decade, so it is an apples and oranges exercise to do that.

Senator HEFFERNAN—You cannot define it?

Mr Pereira—I can define it against the output structure as it is now.

Mr Noonan—Senator, your question was on particular technologies and patents. We are unable to give you that information.

Senator HEFFERNAN—You do not know how much gene patent applications are as a proportion of your budget? Righto. According to the IP Australia cost recovery impact statement 2010, over 94 per cent of IP Australia's revenue is cost recovered through the sale of goods and services, by which I understand is meant the income it receives for the provision of IP related services to its customers. Is that correct?

Mr Pereira—That is correct.

CHAIR—One more question, Senator Heffernan.

Senator HEFFERNAN—I will put the rest on notice. Of your costs in the cost recovery impact statement, how much are attributable to legal costs incurred by IP Australia in the

defence of and the support of decisions made by its examiners and officers in accepting or rejecting patent applications?

Mr Noonan—For what year?

Senator HEFFERNAN—For 2009.

Mr Beattie—Can you clarify what you mean by ‘defending’ because we do have a pre-grant opposition process and there are also court cases where the commissioner may need to appear in order to explain procedures or practices. We normally do not attend court cases which are between parties in relation to infringement or invalidity, but sometimes when the commissioner is required to attend we do so, so which bit are you after?

Senator HEFFERNAN—In administering your set-up.

CHAIR—If that is answered, then that is it.

Senator HEFFERNAN—It is not answered. She wanted clarification.

CHAIR—Are you clarifying?

Senator HEFFERNAN—Of the costs of administering and maintaining the Australian patents system, how much is attributable legal cost incurred by IP Australia in the defence of and/or in the support of decisions made by its examiners and officers in accepting or rejecting patent applications?

Mr Noonan—Legal costs for the year to 21 April 2010 were \$158,386.88.

CHAIR—I thank IP Australia for coming in this afternoon.

Proceedings suspended from 1.01 pm to 2.00 pm

CHAIR—The committee will resume with the Department of Innovation, Industry, Science and Research, the innovation and industry section, outcome 1. Minister or Mr Paterson, would either of you like to make an opening statement?

Mr Paterson—I do not have an opening statement but I would like to correct information on two returns to order that have been provided. They were filed by the minister but on the information provided by the department. The latest orders that deal with grants and appointments, which were supposed to be tabled prior to these hearings, were tabled but we have identified 13 errors. It is exactly the same error repeated 13 times in that return to order. A series of grants were listed for \$7,400 and they should have been listed for \$70,400. In each case the minister has provided to the President of the Senate an amended single page for that return, identifying those grants. They are all from the COMET program. That was provided to the President this morning.

I think you can appreciate that there are a number of overlapping obligations that we have here. There is the Murray order 192, the Minchin order 95 and the Commonwealth Grant Guidelines. They all have different reporting times. They report at different stages in relation to grants and they have different thresholds, so the potential for error is high. Our double-checking after we identified the problems we had with the current return identified that there were two grants that fell into the reporting period of 29 September to 18 January—that is, the reporting period for the previous estimates hearings. There are two grants that were not included in that report. They are both grants from the National Enabling Technologies

Strategy. One is for \$137,500 paid to the CSIRO and one is a grant of \$55,000 paid to the Australian National University. They have been reported on our website under the Commonwealth Grant Guidelines but they were omitted from the previous return to the Senate. The department is responsible for that, and we apologise. I want to bring those to the attention of the committee up-front. So that is two from the last reporting period, and a series which were all the same error from the current report. For the purposes of the current report, we have tabled a correcting return.

Senator EGGLESTON—I would like to go back to the IP issue that we raised this morning in order to clarify something.

Mr Paterson—We will have to wait a moment for the officers to come to the table. I am hopeful we will have an answer to your question.

Senator EGGLESTON—This morning I asked about the provision in the new research and development legislation which enables intellectual property rights or intellectual property to be registered overseas. I was curious as to what impact that would have on Australian industry in terms of rights and royalties and so on. This issue was raised by Cochlear Australia who felt that it was all right to trial having intellectual property held overseas for three years and then we should review it. I must say they were the only group that saw intellectual property going overseas as a problem. Could you flesh this out for us and tell us what are the advantages of retaining the primary registration of intellectual property in Australia rather than overseas?

Mr Pettifer—I think you need to understand the context in which this particular provision has been crafted. One of the key things to recognise is the global environment in which R&D is conducted these days. Many companies would do a lot of their R&D here but they would need to do some associated activities like clinical trials, for example in the pharmaceuticals industry, overseas. It is also important to understand that the actual doing of the R&D itself actually generates lots of benefits for the economy. There are lots of spillovers for the economy from having R&D done here. It brings things like technology, skills, finance and those sorts of things which are of very significant benefit to the economy. It can be all part of developing clusters of excellence which are then important in terms of attracting overseas investment. This was something that was recognised quite strongly in the Cutler report—the Review of the National Innovation System. Cutler says:

The Panel has adopted the principle that all R&D expenditure undertaken in Australia should be supported by the non-refundable tax credit. ... The Panel does not consider the focus on IP ownership is appropriate given the global nature of R&D and the movement of global enterprises across continents dependent on where the best environment exists, and in particular to gain access to capability, skills, and markets. Firms undertaking foreign-owned R&D expenditure in Australia would be able to access the non-refundable tax credit.

There are a few more references in there too. A number of other countries also do the same thing. For example, the information that I have here indicates that the UK, Ireland, and Canada all enable IP to be held by foreigners and benefit from domestic support schemes. That is the broader context in which that is crafted. It is a recognition of the significant spillover benefits that such a policy has.

Senator EGGLESTON—I noticed there you did not mention the United States or Switzerland, for example, which do a lot of pharmaceutical research.

Mr Pettifer—One of the things about the United States would be that the economy is so big that the need to do things overseas is probably significantly less than in Australia. There is quite a strong recognition around the world and in terms of the work that we have done that suggests that the benefits that you get from attracting that overseas investment are very substantial in terms of your innovation systems, spillovers, skills and so on and so forth.

Senator EGGLESTON—Do you mean that with a mobile—if I might put it that way—intellectual property right registration you attract more investment? There must be a reason why it was seen previously at least that retaining intellectual property right registration was an advantage.

Mr Paterson—If I could just clarify there is, I think, a continuing area of confusion. This is not about the registration of the intellectual property right. This is about until now the law in relation to R&D tax support has required the beneficial ownership of that IP to be resident in Australia. It is not about registering the right; it is about where the beneficial ownership is held. If the beneficial ownership was held at the head office of a major international corporation headquarters somewhere else in the world then it was not entitled to access the R&D tax concession. Under the changes that the government propose work undertaken in Australia will be able to access the concession notwithstanding the fact that the ownership of that intellectual property is held in another country.

Senator EGGLESTON—All right; I understand that now. In other words, even though it is held overseas, the benefits can still be accessed.

Mr Paterson—The new R&D tax credit will be open to people undertaking work in Australia on that intellectual property, where that intellectual property is held by the corporation offshore. So if they are undertaking research and development in Australia they will be entitled to claim the credit for that work undertaken in Australia, even if the ownership of the outcome of that work resides at head office.

Senator EGGLESTON—I see. Why would you think Cochlear might think it was a good idea to let this happen for only a trial period of three years?

Mr Paterson—We have not had an opportunity to go back over the context in which Cochlear put their position forward. It is interesting that they are resident in Australia, so the change for them, on that particular element of it—there are other changes that they would benefit from—would have no particular consequence for them as a corporation.

Senator EGGLESTON—They were very firm in that point of view. One of my colleagues has sent me an email regarding Singapore Productivity and Innovation Credit. It says:

Currently only research and development qualifies for additional tax deductions of up to 150 per cent of expenditure. The government will introduce the productivity and innovation credit as a major enhancement to spur a much broader range of innovative activities with more generous tax benefits. The credit will cover six activities along the innovation value chain and only research and development done in Singapore. Acquisition of intellectual property, which I presume could be purchased from anywhere in the world, the registration of intellectual property, investments in design done in Singapore, spending on equipment and software to automatic processes and workers training.

That is really not so different from our proposal. Is that the case, in the sense that it enables the acquisition of IP and it gives benefits for research and development?

Mr Pettifer—I am not sure I got the totality of that question; my colleague may have. What we are proposing is a much more attractive incentive to do R&D in Australia. I am not sure I got the thrust of your question though.

Senator EGGLESTON—I was just comparing with this provision in Singapore. In Australia now we are offering increased benefits for research rather than development, I gather.

Mr Pettifer—No, I disagree.

Senator Carr—Senator, I think a number of statements have been made that are not supported by the facts. One of them is the claim that has just been made there. The provisions that we have in the matter that is before the committee are to provide support for research and development. It doubles the level of support for small firms and increases the level of support, by one third, for large firms. This is within the funding envelope of \$1.5 billion per annum. This is the most significant measure of support that we have in an entire innovation arsenal—\$1.5 billion per annum. That is almost twice what we spend on the Australian Research Council. So the claims about reduction in support are not true. We do not support those assertions.

You compare it with the taxation regime in Singapore. You would want to look at the context and you would want to look at the totality of what is being provided here. This is for measures on terms of spending over and above normal everyday business activities. This is the equivalent of 150 per cent under the old scheme, but this is a tax credit—so it is cash. This is going to assist companies dramatically who are facing problems with the banks. I am afraid that the claims that are being made are not borne out by the facts.

Senator EGGLESTON—With respect, Senator, it might be fine to say that but, nevertheless, a lot of the evidence the committee has heard from various industry people—

Senator Carr—Well, a lot of the evidence is also predicated—

Senator EGGLESTON—is that there is an emphasis on research.

Senator Carr—It is generated by a few people who currently do the overwhelming bulk of the claims. At the moment 100 firms are getting around 60 per cent of the total, that equivalent, in this financial of \$1.5 billion. The current scheme, which was a good scheme when it was introduced, is in need of renovation. There are going to be a lot of folk out there—the 100 firms—that have a huge vested interest in keeping the current scheme the way it is. We are actually in the business of helping the 8,000 firms that are currently registered—and I would like to see a lot more firms. Given that we have two million firms in this country, the fact that we have only 8,000 registered for the scheme strikes me as way short of what we need to do as a country.

Senator EGGLESTON—Minister, I think we are pre-empting the inquiry to some degree.

Senator Carr—I am sorry, but that is the nature of the question you asked.

Senator EGGLESTON—It is to some degree—I agree. Nevertheless, there has been a view that the emphasis has been on research rather than development. But where I was coming from in the beginning was to understand this issue about intellectual property. I referred to the Singapore example because it provides for the acquisition of intellectual property and the registration of intellectual property in Singapore. That was obviously seen as a benefit for Singapore.

Mr Pettifer—Our scheme is about doing research and development. It is in the doing of the research and development that you get benefits to the economy.

Senator EGGLESTON—We understand that.

Mr Pettifer—Can I just go back to the issue about it supporting research and not development. If you read the definition for core R&D activities, it includes: ‘That are conducted for the purposes of generating new knowledge, including about the creation of new or improved materials, product, devices, processes and services.’ I would say that is absolutely about doing development, and that is the policy intention.

Senator Carr—If you compare our position internationally, we have a report by KPMG which ranks Australia as No. 1 in the world for incentives to actually foster research and development activity—as a result of this legislation. That is the commentary of someone quite independent from government. They are putting us at No. 1 in the world on the basis of this legislation.

Senator EGGLESTON—That is an opinion. A lot of people thought that a lot of industry research is really related to production and innovation in those areas, and that is excluded under this legislation.

Senator Carr—That is just not true. That is the point I am making to you. Do not buy this con job.

Senator CAMERON—Not even the witnesses were claiming that.

Senator Carr—I understand that.

Senator EGGLESTON—They were in fact, but never mind. They were not speaking with Scottish accents.

Senator Carr—The point is that a claim is different from a fact.

Senator EGGLESTON—We will follow it through and see.

Senator COLBECK—There are claims and counterclaims, and we have to sort that out as part of our process, Minister—which is the point I think that Senator Eggleston is making. It is an inquiry as much as anything else. There is acknowledgment that we are changing the circumstances with respect to holding IP and we recognise, as you quite rightly said, Mr Pettifer, that it is a global circumstance. Perhaps the minister might like to comment on this rather than asking you to make the comment. In the circumstance where Singapore appears to be placing encouragement—and that is what their measures look like they are; they are not regulation but they are actually incentive or encouragement for the IP to be held in their country—I think it is legitimate in the context of this overall debate to question the circumstance where they look like they are trying to encourage more IP to reside in Singapore

and yet the changes that we are making are going in the opposite direction, It is a matter of assessing a balance on that for us. That is why we are asking the question.

Senator Carr—It is a policy question. All I can say to you is that it is the government's intention to improve the level of benefit for small and medium size firms and for firms that are undertaking genuine R&D.

Senator COLBECK—I understand the intention, Minister. I am just asking about the holding of IP. We are often criticised in government, whoever it might be, for allowing our IP to disappear offshore. Whether or not that criticism is valid is another question, but that is a criticism we receive.

Senator Carr—I understand the point you make.

Senator COLBECK—So we are putting you to that this is what Singapore is doing and that we are moving in a different way and we are asking you what the justification is in your sense from that?

Senator Carr—What I am saying is that the KPMG report, *Competitive alternatives 2010*, says:

Comparing the TTI rankings of countries—

Senator COLBECK—When was the report released?

Senator Carr—I will get you a date for that, but we made public comment on it today.

Senator COLBECK—I do not think the committee has seen it.

Senator Carr—We are more than happy to provide you with a copy—

CHAIR—During our public hearing on this bill, it was alluded to. It was mentioned.

Senator Carr—I have been asked a question. I will try to answer it. The report says:

Comparing the TTI rankings of countries in 2010 to 2008, the most dramatic change is for Australia, moving up from fifth place in 2008, to first in 2010. This change is a result of Australia adopting a new R&D tax credit system as of July 1st, 2010, that is refundable for corporations that meet defined revenue limits.

I can cite that study as evidence for my conclusion that our proposals are actually superior.

Senator COLBECK—The analysis by KPMG?

Senator Carr—You asked me what the basis was for my opinion; there it is.

Senator EGGLESTON—It was an inquiry. Cochlear felt it should be a only a three-year experiment. The question was why was this scheme by Cochlear so crucial?

Senator Carr—We will look at that. The question is: will the system be reviewed in three years? Obviously, there will be recommendations from the committee about the need for future review. We will have a look at whatever recommendations the committee looks at. We take these things seriously. We would not be putting a bill of this importance to the parliament otherwise. Given the statements we made in the previous election, given the inquiry that was run which had a massive number of submissions on this very question and given that this is now the third level of consultation—two draft bills and a Senate inquiry—we are determined

to press ahead with this matter. It will be in the Senate, I understand, for the June sittings. We are proposing a start-up date of 1 July.

Senator EGGLESTON—We know that, Minister.

Senator Carr—For individual companies that means a very big increase in opportunities. That is the question the committee will presumably assess when they make the report to the chamber.

Senator EGGLESTON—We will. That question of consultation is one that has been raised several times, and quite a lot of people have in fact complained about short time frames for consultation. That is an issue that perhaps I would like to ask you about. Why is there such a rush? It is important legislation that could be developed over the following year and all those problems could be fixed.

Senator Carr—This is a budget measure. It starts on 1 July this year. It is doubling the benefit to small firms and increasing the level of support for large firms by one-third. The question I put back to you is: why would you delay it?

Senator EGGLESTON—You would delay it because a lot of industries and companies—

Senator Carr—Why would you delay it when it is such a patently good thing for firms.

Senator EGGLESTON—see problems in this legislation.

Senator Carr—The government's position is that it starts on 1 July. We want to ensure that companies have access to that benefit from 1 July. If the Senate committee takes the view that they should not get access to it, no doubt they will explain their reasons. But I look forward to public debate on why you are denying firms opportunities to double their benefits from 1 July.

Senator EGGLESTON—The Senate committee is still considering its position, of course. Nevertheless, a lot of witnesses have made complaints about the lack of time available for consultation. That has been a bit of a characteristic of the Rudd government over a number of pieces of legislation. There has been little consultation and a great rush to get various pieces of legislation in place. Sometimes it is best to make less haste and take a more considered role.

Senator Carr—This was a matter that was committed to at the last election. This was a matter that was the subject of the inquiry—the innovation review—of which, as I said, there were hundreds of submissions. This is a matter that was the subject of draft legislation last year and a subsequent piece of this year. I will ask one of the officers to comment on the number of firms involved. The Senate inquiry provided further opportunity for discussion. The question you would be asking is not, ‘Why has there been so little consultation?’ because that is patently untrue, but, ‘Why is there such a campaign by such a small number of consultancy firms—half a dozen firms—that control claims that are well in excess of \$1 billion per annum?’ The question is: should we cave in to vested interests? I say we should not.

Senator EGGLESTON—I suppose that is one point of view. The other point of view is that we should provide full consideration to the issues involved and the problems that people have seen in this legislation. There really does not seem to be a valid case for rushing such an important piece of legislation against the voiced concerns of industry.

Senator Carr—It is not a rush. You have had 2½ years to implement a proposal, which is hardly what I would call a rush. I will ask one of the officers to indicate exactly what the consultation process has been.

Senator COLBECK—Wasn't it announced in the budget last year?

Senator Carr—That is right.

Senator COLBECK—So it is not 2½ years.

Senator Carr—No, but we announced our intention to do this at the last election. We have had a full-scale innovation inquiry into the matter. We have had two draft rounds of legislation plus a Senate inquiry.

Senator COLBECK—The first one dropped just before Christmas and the second one dropped just after Easter.

Senator EGGLESTON—A few weeks ago, yes.

Senator COLBECK—We understand that; that is fine.

Mr Pettifer—There has been a huge amount of consultation on it. Following the budget announcement, the department and Treasury had preliminary consultations with industry before the consultation paper was even developed. The consultation paper was then put out. From late September onwards, 550 people attended consultation sessions all around the country. There was the first exposure draft legislation, and 131 submissions were received.

Senator COLBECK—Which arrived just before Christmas.

Mr Pettifer—Well, 131 submissions were received on that, and the submission period closed on 5 February. Then there was the second exposure draft, and there have been 54 submissions on that. As well as those formal processes, though, we have had detailed consultations with a number of players in the industry on this. There has been a lot of consultation on this.

Senator COLBECK—There have been a lot of meetings; I accept that, and I will acknowledge that the government made some significant changes—or changes—from the first exposure draft. Changes were made to the legislation following the first exposure draft and the discussion we had here at estimates in February, so I am happy to acknowledge that there has been some movement on the legislation. There are still, though—as you acknowledge, Minister—some concerns within the industry about certain elements of it. I do not think it would be fair of me to say that industry is unhappy with all of the measure in the legislation.

Senator Carr—Some industries, Senator—I think you should be accurate.

Senator COLBECK—There are certain concerns about certain elements of it. Timing is certainly one, particularly when the department told us at the hearings the other week that information and educational information on the program will not be available until July—after the scheme starts. Surely it would have to be a concern to the government—but maybe it is not—if information on the operation of the scheme is not going to be available to industry until after it starts.

Senator Carr—That is not right. The information is available now. I will let the officers speak for themselves, but I do not think that is a reason for delay. Some sections of industry

are going to campaign against what they perceive to be a change in their circumstances. That is not unusual with tax legislation; it is certainly not unusual in this area of R&D policy. A good change does not necessarily mean that every single person has to agree with it. That is not a measure of success of government policy; a measure of success is whether it stands up to the weight of evidence. I think the evidence is very, very strong in support of the government's position, and I intend to pursue it through the chamber.

Senator COLBECK—You are entitled to that view, and the committee obviously will consider its view.

Senator Carr—That is why I ask one of the officers, if you have made assertions about what they have said, to address them.

Mr Peel—As the minister has indicated, it is difficult to provide people with information on the new program until the legislation is actually passed by the parliament.

Senator COLBECK—I accept that.

Mr Peel—That is not scheduled to happen or to come into effect until 1 July. AusIndustry does, however, have a plan for detailed information sharing with potential registrants for the new tax credit. We are already behind the scenes preparing all the documentation for that, which may need to be amended if there are amendments as the legislation goes through the parliament.

Senator COLBECK—I understand that that would be the process.

Mr Peel—They also do not claim the tax concession until 12 months after—or they have 10 months from the end of the financial year to claim the new tax credits—so there is a fair bit of time before they need to put in a claim.

Senator COLBECK—Perhaps my recollection is wrong, but I was certain that we had some discussion, at our hearing a couple of weeks ago, about the desirability or otherwise of not having the information available until after 1 July. I accept the processes that we are talking about. I have no issue with any of that, because that is as it is. The issues is that we are right up against the implementation date, potentially, with the passing of the legislation through the government's processes, and that is one of the issues that makes it difficult to provide the information prior to the commencement date of the measure. We have asked a number of people about this, and they have also expressed their concern, especially about their decision-making processes and what they are going to invest in their R&D. I think that is a reasonable basis for us to ask questions about the implementation timetables.

Senator Carr—If we assume the parliament agrees that this legislation be passed into law and we assume that claims can be made as of the end of the financial year and 10 months thereafter—that is almost two years after the start date of 1 July. In most taxation law changes, there is an announcement and then the legislation is dealt with in the chamber. This is actually most unusual, in the sense that there is so much consultation about changes to taxation law. It is because this is such important legislation that we have given this matter so much attention in terms of our consultation processes.

Senator COLBECK—We might just have to agree to disagree in respect of some of those issues—that is fine; that is part of the deal. Of course, the committee will consider its report in

due course. I just want to go back to you, Minister. You actually have not addressed the issue that Senator Eggleston and I both raised in respect of IP. I accept what you are saying in respect of the overall assessment of the report, but I would like you to respond to specifically to the question of the different approaches that we are taking versus the approaches that another country is taking at the moment. I am just asking you to put a rationale on the table in respect of that specific issue. You have talked about the KPMG report and that is taken—I will have a look through that and I can read that myself—but I am interested in the IP issue. It has been raised by Cochlear, which is quite a prominent company, and we have evidence of different approaches being taken. I am asking you just to—

Senator Carr—Yes. I will try to answer your question. Cochlear have asked for the matter to be reviewed in three years time. That is a matter the committee will make recommendations on and the government will consider their report. In general terms the beneficial ownership test is a change we have made, which I have championed for some time. I used to take the view that you had to have the IP held in Australia otherwise we would be losing something; but, after careful consideration and looking at all the evidence that I could see, I have personally come to the view that, given the nature of international business and international investment, we were actually inhibiting our opportunities for R&D work to be undertaken in Australia by maintaining that old provision. The officers here have referred to the case in the pharmaceutical industry, where it was actually an impediment to the growth of our capabilities in Australia. I think it is more important to maintain and develop the capabilities here—the actual research, the employment of the scientists, the employment of people in the labs—than it is to say, ‘We own the IP.’ On balance, the weight of evidence has come before the committee to sustain that view.

Mr Pettifer—In a sense, there may be a bit of confusion around this. There are very substantial benefits that we have talked about in actually doing the R&D. There are very substantial spillovers from doing that, and that is what gives an economic justification for providing support to it. Another issue is: where do you exploit the IP? If you have to run a competitive economy to exploit the IP, having a strong science and technology base, undertaking lots of research and development activity, developing clusters of excellence are all important in terms of attracting investment to actually exploit the IP and build new businesses. In that sense, it does not matter who owns the IP. The issue is attracting the investment into Australia, because we are an attractive place to do business because you can access skills, you can access networks and all of those sorts of things. A lot of that comes from doing the R&D.

Senator COLBECK—The advantage, though, of owning the IP would be the revenue stream, if there was one, that came from that.

Mr Pettifer—Hopefully, a lot of the revenue streams that come at the end of the day come because we are employing people, we are generating exports, we are generating income and all those sorts of things.

Mr Paterson—The point has been made in passing in relation to the pharmaceuticals sector that there is global consolidation going on, as you would be aware, and that many of those global pharmaceutical companies, headquartered either in the United States or somewhere in Europe, own all of their intellectual property at head office, so they hold all of the intellectual property for the corporation. Wherever it is developed, they hold the ownership of that

intellectual property at head office. If we ignore that reality and say, 'You have to hold it in Australia,' then we will not be encouraging those pharmaceutical companies to pursue research and development in Australia. We will be denying them access to the benefits that would flow. That is one of the reasons that was persuasively put through the review processes, and has been consistently supported since that time, for removing that restriction. Yes, there are strong encouragements in the variety of programs that we support and in the nature of the registration processes for intellectual property to be developed in Australia and held in Australia. So there are dual encouragements. This is not saying we should ignore developing R&D in Australia and holding the ownership of that R&D in Australia; it is saying do not deny yourself access to the research and development that may come because the ownership of the corporation happens to be resident in another location.

Senator Carr—If I can amplify that: the point of our scheme is to actually encourage small and medium sized enterprises to change their habits of thought and their patterns of behaviour.

Senator COLBECK—I understand that is the stated intention that you have.

Senator Carr—But, by the same token, we are not saying to the big end of town: 'Don't do work in Australia.' I think that the present arrangements were actually limiting our capacity. Firms would say, 'We won't do the work there because we can't get any benefit under the schemes; we'll do it elsewhere where we can get a higher level of benefit, such as in Singapore.' That is one of the competitive advantages that Singapore was developing for itself. We are changing the arrangements to actually encourage that capacity to develop here. The whole scheme is about building capacity.

Senator COLBECK—I understand your stated intentions, and I appreciate the fact that you have now actually put something on the record in respect of IP. That is all I was asking for. There are some reasonable rationales there, and now that there is something on the record people can look at it and make a judgment one way or the other. There has been some discussion and some allegation about certain specific projects that were gaining access to the current regime, specifically 'whole of mine'. There was a discussion about a building where an innovative air-conditioning system allowed a significant claim with respect to the rest of the fabric of the building. Of those three or four examples—and they are pretty much on the public record—how many of them were actually disputed or under challenge by the department? The claim has been made by a number of people that those things should not have received support—and I do not think there is necessarily any disagreement about that—and that they did not or should not have fitted within the existing guidelines. I want to get a sense—

Senator Carr—I will ask the officers to comment on the details. Can I say in the policy sense that this is not a case of just one or two. I just make that point to you. This is not just a couple of aberrations. What you have is a very good scheme when it was created but that over time has been altered as a result of a whole series of administrative practices brought on by judicial interpretations. So it has been distorted.

Senator COLBECK—Although there has not been any judicial interpretations for—

Senator Carr—There have been. I will let the officers deal with that in a minute. I am making the point to you—

Senator COLBECK—If they could make a note to really work on that point.

Senator Carr—I do not use the term ‘whole of mine’. There is whole of project. This is an example whereby people are claiming as R&D stuff that is clearly not R&D; it is normal business activity. The case of a road has been used in examples of that type of major project. There have been cases in the financial system of people claiming their normal IT expenditure as R&D. There are a whole series of activities and some of them have involved hundreds of millions of dollars. But it is not true to say that this involves just one or two isolated cases.

Mr Peel—The cases that you are referring to—for example, the building case—are actual cases that we have uncovered through our compliance activities. While we would agree with you that those claims should not be allowed; nonetheless, our compliance activities are undertaken after the company has registered for the tax concession and after it has received the benefit. So what we are attempting to do in those cases is to claw the money back for the taxpayer, but the companies have actually claimed and got the benefit because the tax concession is a self-assessment scheme, just as you do with your own income tax return. If you are unlucky, you will be picked up by the tax office and they will do a check on you. It is the same with the R&D tax concession. We do not have the resources to audit every one of the 7,7800 claims. But we do audit a number—

Senator COLBECK—It is up to about 10 per cent. Is that correct? It is about 700 now, or is it the intention to go to about 700?

Mr Peel—We are doing, say, 300 or 400 at the moment. We are going to increase it to over 700 this year and take it up to over 1,000 the year after that. We have been given additional resources to help us to do that. The claims that you are referring to are actual cases. We have made them anonymous. We have not betrayed any confidences or confidentiality, but people have claimed those things, received the benefit and we are now looking at them to try and get the benefit back. And, of course, they are challenging our challenging of them, if you like.

Senator COLBECK—That was the point I wanted to make. Obviously, they have been discussed as part of the scrutiny process of the legislation. There have been claims about them made from various perspectives. What I was looking to see—and it is one of the issues that has been raised several times—is whether there is general agreement that those sorts of claims should not receive the benefit of these measures, either the current ones or the old ones. I was trying to find out whether a process was going on to deal with them, given that the general consensus is that they should not or do not fit within the principles of the scheme. That, therefore, indicated to me that there was some general acceptance of that. I am interested in the minister’s comments that they have effectively occurred—

Senator Carr—As I say, these are matters that are subject to legal dispute.

Senator COLBECK—That is why I am not trying to go into any specific detail. I am not asking any questions about that.

Senator Carr—I am just making the observation, Senator.

Senator COLBECK—It was purely to establish whether there was some pursuit of these things under the current guidelines. I just wanted it to establish that.

Senator COLBECK—None of us are; I think that is fair enough.

Senator Carr—So the question is: what is a legitimate claim and what is not a legitimate claim? That is the fundamental question that we have to come to terms with. In my view, given the growth in expenditure that has occurred in this particular area—and it has doubled in the last couple of years—you have to make an assessment as to whether or not you think the level of genuine R&D investment has doubled in that length of time. It poses another question: are claims being submitted that are not legitimate? Under the current way in which the law is interpreted, people are able to do this. We want to make some changes because if you do not do the changes then the whole scheme becomes unsustainable, the whole process is brought into disrepute. In my judgement, I would be negligent not to act and take action if I knew this was going on, had responsibility for the administration of this program and held it in the regard that I do. That is what we have done. We have moved it from a system of deductions to a system of credits. We are doing it within a funding envelope, as I say, of \$1.5 billion a year. That is the revenue-neutral arrangement we have struck given the budgetary circumstances. We are not cutting it; we are maintaining it. In fact, we are increasing the level on previous assessments. But we want to do it on the basis that there is genuine R&D undertaken. In that process there are going to be some squeals. There are going to be winners and there are going to be losers. It is the nature of reform that the winners usually say very little and the losers scream like stuck pigs. What we are going to do, though, is press ahead with this. We will put it to the chamber and argue it out.

Senator COLBECK—That is fine, but the point that I was wanting to make is that the whole context of this comes around to definitions. That is what the argument is about and that is why the debate is as it is. I have conceded as part of my commentary, if you want to call it that, during this debate that there are measures within this new bill that almost everyone is happy with, including some who are criticising other specific elements. So it is not a blanket opposition; it is an opposition to certain elements of the legislation from those that are criticising it.

Senator Carr—I am pleased to hear that. It is the first time I have heard an opposition senator say that.

Senator COLBECK—That is how I read the evidence. What I also wanted to clarify was that even under the existing definitions, given that that is what the basis of the argument is about, there is also general agreement about the disputed claims. We have now established they are being disputed—those that are known of and have been audited, and there may be others in the system that have not been picked up, and let us accept that. There is also general agreement across all of those who are supporting and opposing the changes that they should not receive support under the current guidelines. The current definitions should also exclude support.

Dr Edwards—The two that you specifically talked about have claimed and have received the benefit. We are in the process of auditing. Their specialist R&D consultant and the firms believe both those claims meet the definition of R&D and are opposing any move by us to claw the money back.

Senator COLBECK—And of course you will deal with that through the appropriate process.

Senator Carr—This is not the only reason we need to change the arrangements. The draft legislation is being pursued for a range of purposes to actually lead to an improvement. We do want to refocus the effort. We want to change attitudes because the fact is that in this country our R&D performance is bloody awful. We have to double our efforts overall over time. One of the ways of doing that is to change the way in which the incentives are organised.

If we are to maintain our place vis-a-vis our competitors, given that so many countries in the north of Asia and in Europe are outperforming us dramatically, then the policy rationale for this goes beyond just the question of stopping dubious claims. It actually goes to the fundamental motivations about how we develop an innovative economy, how we actually change people's behaviour and how we change their attitudes about making sure that their businesses in this country are able to remain competitive and provide those high-skill, high-wage jobs which I believe everyone in this room would aspire to.

Senator COLBECK—That is all very well, and I know that it is not just about one thing. But the definitions are being considered carefully from a certain perspective. They have been criticised from a certain perspective, including by people who support other elements of the legislation. They form a fundamental part of the disagreement. There has been some very credible evidence given to us in relation to those definitions. Of course, the committee will deal with that in due course, when we hand our report down in the next week or so.

Senator Carr—And that will be the opportunity to discuss amendments.

Senator COLBECK—And then we will deal with it as part of the legislative process.

Senator Carr—That is the normal legislative process.

Senator WILLIAMS—I refer to the line item 'Small Business Advisory Services' on portfolio budget statement page 31. The forward estimates in last year's budget had \$10.2 million expenditure but in this year's budget it is \$5.4 million. Where are the cuts being made?

Mr Peel—There is not a cut being made in that program. What we have done is borrowed some money from another program so we can make about \$4 million or \$5 million worth of payments this year; we then need to repay that money next year. It looks in the budget papers as if it has been reduced, but we are actually paying that money this year, rather than next year. So the same amount of money is going out of the door.

Senator WILLIAMS—I am just concerned about regional offices being done away with. There will not be any closures of regional offices as far as the Small Business Advisory Services Program goes?

Mr Peel—No. We are honouring all of our contractual commitments under that program fully. Really we are funding business enterprise centres under that program. Regional offices of AusIndustry, if that is what you are alluding to, are not affected at all in the budget.

Senator WILLIAMS—What is their forecast in the forward estimates?

Mr Peel—They have been funded till the end of the next financial year. We have just completed an evaluation of those regional offices of AusIndustry, and we will be looking to put some proposals to the government in the next budget as to the future of those offices. But that report has not yet gone to the government, so I probably should not comment any further on it.

Senator WILLIAMS—I ask because I believe they do a good job.

Mr Peel—They are reported quite extensively across regional Australia by a number of their stakeholders as doing a first class job, yes.

Senator WILLIAMS—Wonderful. I would also like to ask about the LPG Vehicle Scheme. The budget this year is \$105.3 million, which I guess is for subsidies for conversion of private vehicles to gas, but in 2011-12 the amount you expect to hand out is \$74.5 million and in the following year, \$50 million. Is it because of the excise tax on LPG that you expect less demand for these conversions?

Mr Peel—We believe there are two fundamental reasons why there has been a drop-off in demand for the program. One is that the petrol prices have stabilised over recent times. When the program was first introduced, petrol prices were very high.

Senator WILLIAMS—So are you saying you are not seeing as many conversions these days as what you did three years ago, when we had the extreme fuel prices?

Mr Peel—That is right. Also, in the early days of the scheme, we brought forward money from future years to the early years. When you look at the budget papers, you can see those amounts are decreasing because we have already spent it earlier on. Fundamentally, we are seeing a drop-off in demand, and we believe that is essentially due to the relative price of petrol compared to when the scheme started off. Also in the budget before last, the government introduced some reductions in the benefit that is available for conversion to R&D, so that is probably playing apart as well, although we think that is probably playing a very small part in the demand.

Senator WILLIAMS—Looking at the price of fuel, I think we saw a peak of about US\$138 a barrel during the so-called boom time, down to around US\$72, US\$73, and basically fluctuating between US\$70 and US\$83 a barrel. If we see the world come out of the global financial crisis and things start to move along again, wouldn't you expect the price of oil to go up substantially?

Mr Peel—I am not really qualified to comment on that; I am sorry.

Mr Paterson—I was just going to say the same thing. We do not make comments or predictions in relation to the price of oil.

Senator WILLIAMS—If we see an increase in the price of oil and hence the price of petrol and diesel in the forthcoming years, have you budgeted at all for perhaps more people to go on to conversions to gas?

Mr Paterson—We are administering this program within the overall budget profile from end to end. As Mr Peel has already indicated, the early demand in the scheme meant that we brought money forward from the out years to pay for the demand at that time, and we are managing the program consistent with the profile that remains within the program.

Senator WILLIAMS—Wonderful.

Senator PRATT—I want to return to the topic of R&D tax credits, because I think what the minister outlined was a movement in Australia's place in R&D tax competitiveness. I also

want to know what the implications of this move might be for Australia's overall tax competitiveness.

Mr Pettifer—I did not get all of your question. Were you asking about our more general situation in terms of competitiveness in relation to tax in the KPMG report?

Senator PRATT—No, because that would not necessarily be a question for this department. As I understand it, this tax credit has some influence on Australia's overall standing in tax competitiveness in broader terms.

Mr Pettifer—Yes.

Mr Paterson—The KPMG report, of which we provided a copy to Senator Colbeck earlier, concludes on page 4:

Australia's rank does not change—remaining in fourth place—but it sees the second largest decrease in TTI among the countries studied. This improvement is largely due to changes in Australia's R&D tax incentives in 2010 ...

So the overall ranking on the KPMG analysis was that our overall tax competitiveness remains the same but the single biggest change in the whole report was their change in relation to assessment of Australia relative to the changes in relation to the R&D tax credit.

Senator PRATT—Thank you. What are the implications of attracting international investment based on these kinds of findings, noting of course the changes in IP where that intellectual property can also be held overseas?

Mr Pettifer—Was your question: what are the implications of being able to attract that investment?

Senator PRATT—I would assume that they are positive—

Mr Pettifer—Yes, absolutely.

Senator PRATT—but I want to know what the department's understanding of that is.

Mr Pettifer—Yes, there are two implications, I suppose. There are the ones we have talked about already in terms of being able to attract skills, finance and technology as part of those research and development efforts. It helps then to create clusters of expertise in the economy, which can be a very attractive influence on securing new investment. That is the R&D. Then, to the extent that you can secure the investment and generate new business, if you like, from the commercialisation of the R&D, that generates itself—jobs, exports, new income for the country—so there are very significant benefits.

Senator Carr—Senator Pratt, the assumption that has been made here is that, because it is more consistent with international best practice, it should attract additional support from international investors because they are dealing with a scheme they are much more familiar with.

Senator PRATT—Okay; that makes sense to me. I wanted to ask about a specific project relating to assisting the Australian book industry to adapt to the changing digital age. I understand that a Book Industry Strategy Group has been established. Could you give me an update on that group's purpose, activities and where it hopes to be at the end of its program?

Mr Fearn—The Book Industry Strategy Group was announced on 9 April and we will be having the first meeting of that group on 1 June—tomorrow.

Senator PRATT—What are the objectives of the group in terms of where you might hope to be in 12 months time?

Mr Fearn—Essentially presenting a report to the minister on strategies to look at the efficiencies and opportunities of the book supply chain.

Senator PRATT—What are the current challenges that need to be overcome which this group is seeking to address?

Mr Fearn—The challenges relate to the impact of the digital book industry on our book production industry and certainly on the opportunities that could arise out of that for us and how we address those challenges, particularly the implications of e-books.

Senator PRATT—So it is an issue of getting books to market and Australian—

Mr Fearn—It is much broader than that, certainly looking at a whole range of areas along the book supply chain, from authorship all the way through to retailers. We have members from all aspects of the book supply chain on that group, including printers, authors, retailers and publishers. The idea is to look at the efficiencies of that supply chain and how it may take advantage or address the challenges of the digital books that are coming in through platforms such as Amazon and e-books.

Senator PRATT—It is pretty apparent that that supply chain is evolving pretty quickly in the current climate. Are we confident that we can get through these changes keeping the Australian book industry in tact and growing and thriving?

Mr Fearn—That will be the aim of the group. It is certainly a challenge in the program over the next 12 months. We have done a fair bit of work in the secretariat to look at a clear program of activity to try to ensure that we do cover all aspects of the terms of reference.

Senator PRATT—Can I ask how Australians and stakeholders with an interest in the work of this group can be involved?

Mr Fearn—There are several aspects to that. We will be looking at putting to the strategy group for agreement tomorrow the issue of using workshops as a mechanism. We will be looking at submission processes for people who have interest and we are going to go and do some direct consultation with key players in that area.

Senator PRATT—Will you be visiting all states?

Mr Fearn—We are currently looking at where the series of workshops will be held. That is to be confirmed at this stage, but we are looking at visits along the east coast as a minimum.

Senator PRATT—I have got another set of questions relating to the Steel Supplier Advocate and I wanted an update on the progress of work there.

Senator EGGLESTON—I just wondered if the minister might assist us by letting us know how much is being spent to establish the Book Industry Strategy Group.

Mr Fearn—At this stage we have four officers as part of the secretariat that has been engaged to look at the strategy group. Funding for consultancies and other arrangements will

be considered by the meeting of the strategy group tomorrow. But we have actually done one contract for \$15,000 to look at digital platforms.

Senator EGGLESTON—What was the composition of the group? Who is represented on it?

Mr Fearn—The composition is posted on the department's website and consists of people from Melbourne University Publishing, the Printing Industries Association—

Senator EGGLESTON—From which association?

Mr Fearn—The Printing Industries Association of Australia; also, the Australian Manufacturing Workers Union, the Australian Campus Booksellers Association, Tantalus Media, McPherson's Printing Group, REDgroup Retail, Gleebooks, Macmillan Australia Group, Copyright Agency Limited, Australian Society of Authors, the President of the Small Press Underground Network Community, McGraw Hill, and Media, Entertainment and Arts Alliance.

Senator EGGLESTON—So that is quite a broad group. How long will they have to make their recommendations?

Mr Fearn—Twelve months from the first meeting, which is tomorrow. So in 12 months it will be 1 June 2011.

Senator EGGLESTON—Who is the chair?

Mr Fearn—Barry Jones.

Senator EGGLESTON—What is he being paid? Or is he on a retainer for this?

Mr Fearn—\$615 a day, exclusive of GST.

Senator EGGLESTON—Is this for the whole of the year or is it just when he is engaged in work or associated with it?

Mr Fearn—He will be engaged on the basis that we are planning about six meetings. It is likely to be six meetings plus a day's preparation and there may be some ad hoc requirements for workshops or other consultations.

Senator IAN MACDONALD—How many are in the total membership of that group?

Mr Fearn—Fourteen, I understand, plus the chair.

Senator IAN MACDONALD—How many of them are representing unions?

Mr Fearn—Two.

Senator IAN MACDONALD—Can you just repeat those?

Mr Fearn—The Australian Manufacturing Workers Union and a representative from the Media, Entertainment and Arts Alliance.

Senator IAN MACDONALD—Are the board members paid a per diem amount as well?

Mr Fearn—No, they are covered for reimbursement of reasonable travel expenses to attend the meetings.

Senator IAN MACDONALD—Where does the council normally meet?

Mr Fearn—Tomorrow's meeting will be in Canberra and then it is likely to be either Melbourne or Sydney.

Senator IAN MACDONALD—Do they change it around, do they?

Mr Fearn—That is right. We will have a schedule that will probably rotate between the two locations since most of the members are based in either Melbourne or Sydney.

Senator IAN MACDONALD—Is it always in Australia?

Mr Fearn—That is right.

Senator IAN MACDONALD—Does the council involve any overseas work at all?

Mr Fearn—Not at this stage.

Senator IAN MACDONALD—Not at this stage but it could, though?

Mr Fearn—The meeting tomorrow will determine the work program and agree to it. It may change over time as people decide they need to look at other issues or consider other elements of the book supply industry.

Senator IAN MACDONALD—There was a very well publicised cabinet decision on the book industry. I think it might have been before the last estimates committee. Was this dealt with then?

Senator Carr—Sorry, what was the question?

Senator IAN MACDONALD—I said there was a well publicised cabinet meeting on the importation of books.

Senator Carr—I don't know how publicised the cabinet meeting was. What do you want to discuss?

Senator IAN MACDONALD—My first question was whether this was dealt with at the last estimates.

Senator PRATT—This is unrelated to that decision. I do not quite understand the connection.

Senator Carr—I do not recall a question on it.

Senator IAN MACDONALD—The first question was: was this issue dealt with at the last estimates?

Senator Carr—I have just said to you that I do not recall a question on it at the last estimates.

Senator IAN MACDONALD—Could you repeat what the role of this council is?

Mr Fearn—It is to facilitate the adjustment of the Australian book industry in the digital environment. Digital e-books are certainly a major challenge for the printed book, and we are looking at the efficiencies and what strategies may need to occur for the whole book supply chain with the increasing presence of digital—

Senator Carr—Would it be helpful if we tabled the terms of reference for you?

Senator IAN MACDONALD—No, that is fine, thank you.

Senator Carr—The aim of the group is to work with industry and the government to develop a comprehensive strategy for securing Australia's place in digital books, and also to ensure the Australian book industry is more efficient and globally competitive. So it goes beyond just the question of digitalisation; it goes right through the whole supply chain.

Senator PRATT—And the viability of our creative industries.

Senator IAN MACDONALD—Do I understand correctly with digital books that they are books which are available electronically as opposed to in hard print? Is that correct?

Mr Fearn—That is correct.

Senator IAN MACDONALD—What strategies does the government have to ensure that Australian authors are not swamped by international authors? Or is there a strategy?

Mr Fearn—The aim is for the strategy group to come up with the strategies and to provide a report to the minister.

Senator IAN MACDONALD—Okay.

Senator Carr—Perhaps if we table the terms of reference they will cover your inquiries?

Senator IAN MACDONALD—If you are keen to do that, that may help me, and shorten the—

Senator Carr—Chair, we table the terms of reference.

CHAIR—That would be very helpful, thank you.

Senator IAN MACDONALD—While that is coming; I do not want you to pre-empt the work of the committee, but how do you ensure what Australians read electronically, when the world is such a small place these days? How do we support the Australian writing industry when there is—

Senator Carr—The terms of reference go to:

6. (a) How business models are likely to change in the digital environment; (b) how this is likely to affect business models for printed books; and (c) what can be done to facilitate these changes.

The committee will also be making recommendations to government on:

7. Opportunities for the Australian book industry to participate more actively in the global marketplace for printed and digital books over the next decade, including by creating, adopting, and using new technologies.

So there is ample scope within the work of this committee.

Senator IAN MACDONALD—What you are really saying is that I am asking you questions now that are the role of this committee to have a look at.

Senator Carr—The purpose of the committee is to provide advice to government on what policy framework we can develop to meet the emerging environment.

Senator IAN MACDONALD—So there is not a policy position of the government at the present time?

Senator Carr—There is a range of issues that we are taking at the moment. This is an evaluation of the current circumstances that we find ourselves in, and what actions can be

taken to facilitate the growth of this industry. At the moment estimates on the growth in the market for digital books vary, but as I understand it they are less than one per cent of sales in the United States and considerably less than that in Australia. Nonetheless, we are in a position of looking at what new technologies are likely to do to the way in which this industry develops. This is an important industry for Australia, and important insofar as many tens of thousands of Australians are part of the creative process and the production process to actually ensure that this important industry is sustained into the future.

Senator IAN MACDONALD—Thanks, but until this committee does its work, what is the government's current position on helping the Australian industry against competition from—

Senator Carr—In itself, I would not put the formulation in those terms. It is not about helping against competition, it is about how we more effectively share in a global marketplace. How do we ensure that Australian businesses are internationally competitive? How do we ensure that our industries are as productive as possible? How do we ensure that opportunities exist for Australian creativity to be able to be reproduced as widely as possible? I could speak at length about all of those things and what we are doing at the moment. There is a range of programs that we operate through this department alone, not to mention what occurs in other departments. The question, more specifically, goes to: what do we anticipate are the likely changes to the industry over the next decade, and how do we adapt to those perceived changes? That is the work the committee is designed to produce.

Senator IAN MACDONALD—I am digressing slightly, Minister. You have said you could speak for hours on what the government is doing. Rather than taking up the committee's time to allow you to tell us for hours what is happening, could I get from you on notice a short summary of the things that you just mentioned that the government already has in place?

Senator Carr—Let's take Enterprise Connect as an example. Some 2,000 individual firms already have received assistance in terms of improving their capacity to manage a changed economic environment. There are some 35 programs that AusIndustry is currently operating—

Senator IAN MACDONALD—Sorry, Minister, but I was confining it to books. I was wanting to know, on notice—I do not expect your department to have all this at their fingertips—in relation to books, what programs, paid for in the current budget, which is why it is relevant to estimates, does your department or the government have to enhance the 'book' industry at the present time. If you could give me a list of the different programs.

Senator Carr—We will come back to you.

Senator IAN MACDONALD—Thank you, Minister.

Senator PRATT—I was about to ask a question in relation to the Steel Supplier Advocate, who I think was appointed late last year. I would really like to know what progress Mr Benjamin is making. I have a particular interest in Western Australia and the fabrication industry there.

Mr Fearn—Mr Benjamin has been conducting a fairly extensive consultation process with various players throughout the steel fabrication sector and the steel supplier sector. He has made a visit to Western Australia and spoken to a number of fabricators, and also spoke to

Chevron Australia in relation to Gorgon issues. He is expected to provide a report in the near future to the minister in relation to his activities over the past six months.

Senator PRATT—So it would be expected, for example, that that report would cover the reasons why local fabrication firms failed in their bids for some of the fabrication work that went offshore in relation to some of the big oil and gas developments that are currently taking place there?

Mr Fearn—Yes, that is correct.

Mr Paterson—Senator, if I could add to that. I am the Chair of the Steel Industry Innovation Council. I met with the steel advocate recently. He outlined at least some of his initial conclusions to me in that conversation. I do not want to pre-empt his report to the minister, but certainly he has discussed with a variety of players the issues that impact on whether companies bid for some of those projects, because in some cases Australian companies did not bid for some of those projects. So it is not so much providing an explanation as to why they did not get there. It is a bit hard to win the work if you do not bid for it. But there are a variety of considerations that influence behaviours, and he has examined the full suite of those issues. As Mr Fearn has indicated, he will be providing a report to the minister on that in the near future. My conversation with him went to his initial observations. He is doing some further work, and having some further consultations, before he finalises his report to the minister.

Senator PRATT—Can I ask if that report will cover questions of skills shortages, based on your current knowledge?

Mr Paterson—It will address the issues from his perspective. I cannot say what will be in the report or not in the report at this stage. As I said, it would be unfair to pre-empt what he says to the minister. He has had some initial thoughts; he has met with a variety of people. But he will be firming up in his conclusions and will then provide the report to the minister. So we will wait and see what that says.

Senator PRATT—Thank you.

Senator CAMERON—I want to come back to the R&D tax credit. There has been plenty of discussion here about what was said at the economics committee and the inquiry into the R&D approach. We have had evidence from the Property Council of Australia to say that they would need research and development funds if they were conducting research and development while building a project. The example they used was of a 75-storey building with a small footprint. They argued that they would need to maybe go 12 storeys high and then conduct a whole range of tests and research just to see whether this building would be able to be built to 75 storeys. I do not suppose you can answer this. Firstly, I do not know anywhere where experimental buildings of such a size are funded by venture capital or super funds or anything else. I am just wondering whether you have examples where venture capital is put in on the basis of not knowing what the building is going to be like. Secondly, if that occurs, how do you control how much research and development takes place? If you have to do it at 12 storeys, do you do it on every storey? What could be involved? Maybe you could start with that. It just seems to me that that is a perfect example of one of the conundrums we have got with the research and development issue, when these sorts of claims can be made. If you had research

and development claims coming in on every floor, it would take a huge cut out of that \$1.5 billion that is available for industry.

Mr Weber—The question you have asked goes to the heart of a lot of the issues with the R&D tax concession. The question is: where does research and development start and finish, and where do things become normal production? I cannot answer your specific question but what I can say to you is: where the department, through AusIndustry, would have expertise they would obviously make a decision, but where that expertise was outside their bounds they would bring in an international expert. That is the way in which the new system is designed. So you would ask the question: ‘What is the experiment being undertaken, and what is valid as part of that experiment? How much of that can be done in a production phase and how much of that production phase just turns into normal, commercial production?’ What we do not want to fund is that normal commercial production.

Senator CAMERON—Mr Weber, are you aware of any proposed buildings that have been commenced and then stopped after research and development has been undertaken on the building because it was not feasible?

Mr Weber—Any things like that might come through Dr Edwards at the main AusIndustry, but I do not see them.

Dr Edwards—As you know, we only look at a small percentage of the claims, but I do work in Sydney and I have not seen too many buildings stopped in my time.

Senator CAMERON—That is right. The other discussion that took place in the committee was the example I used of a food factory processing peas, where the company develops—and this is a practical, real example—innovative technology, using computer technology and pneumatic technology, to blow black peas off a production line. That technology is done in a back room. It is then brought on to be fitted to the production line. The production line stops to allow the technology to be fitted. It could then take a day to prove it; it could take a week to prove it; it could take a month to prove it. This, I think, was the perfect example of the concern that some were raising with the committee in terms of being able to get the go-ahead to extend the funding to make such a complex change to the production line. Can that be handled under the proposal that we are putting forward?

Mr Weber—That is a pretty good example of where you might be able to use the production line to actually test your experiment. I am no expert in black peas, but I would have thought—

Senator CAMERON—Maybe the Black Eyed Peas?

Mr Weber—If that was something that was a new development around the world and could not be easily accessible and you could get an expert in to say that for a period the experiment was part of the research and development, I would have thought that was the kind of activity that would be theoretically covered by the scheme. So that is the kind of activity that would be rewarded.

Senator CAMERON—One of the arguments that was put up from Cochlear was that there should be so much allocated to the backroom research and a percentage to the production process. I must say that when they put that forward there were groans coming from the rest of

the audience. It did not seem to me to be that practical. From your perspective, is that practical?

Mr Weber—We hear examples like this all the time but the problem is that you hear an example from one sector and how long you allow the production trial to run for might be substantially different to what another sector might need the production trial to run for in order to prove your experiment. So it is very hard to put in these arbitrary caps or ratios into legislation that covers all the sectors of the scheme and, as an entitlements based scheme, it goes across all sectors of the economy.

Mr Pettifer—We have thought very carefully about all those particular options and have reached the view that they are very much B-grade policy solutions because you introduce complexities and rigidities in the system which might be okay for one sector but will not work for another. You then have a lot of problems.

One of the key principles about all this that I think is really important is trying to craft something that is simple and easily understood in terms of having an attractive and well-understood incentive. The moment you start putting thresholds or caps or ratios into it then you move away from that and it becomes much less easily understood and therefore a less attractive incentive.

Senator CAMERON—One of the other issues I would like you to comment on is this industry that seems to have developed around the R&D support packages that have been put in place by various governments. For instance, Deloitte have got 60 people employed giving advice on R&D, and they are one company. I am told that there is something like 50 or 60 companies out there giving professional advice.

There was this polemic at one stage in the debate, I think, where some companies were arguing that you should not change anything because there was 25 years of corporate knowledge on how these things work. Then when I asked the question of one of the presenters they said: 'No. We have been using it for 25 years but we always employ an expert.' It seems to me that this is one of the issues—the complexity of these schemes and whether people can actually make an application, use the funding and do this separate from this industry that is clinging on to the R&D investment program.

Senator COLBECK—More reason for the consultants.

Mr Peel—You are right. There are a number of companies out there that earn their living from helping people through the current R&D tax concession. The legislation the government has put forward is going to change the rules if it is passed, and of course they have got, I guess, all of their systems and processes and advice in place based on the current tax concession. If we change it, that will mean they will have to change the nature of their work and the approach that they take to their work. So if all things stay the same then it is of obvious benefit to those companies.

Senator Carr—The whole point of this is to actually reduce the level of red tape. We want it to be simple so that people can apply and not be terrified by it. They should not have to be captive to a handful of consultants. They should be able to approach the department, put a claim in, have it assessed quickly and get straight answers from people. I cannot see anything wrong with that. People will no doubt say, 'I have been doing it for 25 years. I built my

business on doing it this way for 25 years.' I am afraid we are not there to cater particularly to a group of accountants. This is designed to change the way in which this economy operates.

Senator CAMERON—This is my last question. Professor Roy Green gave evidence. He spoke about two reports that have been presented in the UK. One is the Dyson report called *Ingenious Britain: making the UK the leading high tech exporter in Europe*, and the other was a report that came out of the Imperial College London by Professor Jonathan Haskel which is about the public support for innovation. I think both of those reports said that 25 per cent of government R&D should go to early stage, high-tech small and medium enterprises. That is where you get the biggest spillover and benefit. Is that consistent with what the government is trying to achieve?

Mr Weber—The OECD has also done a lot of work on where the greatest benefits from research and development incentives are based. Their research also points to the fact that greater benefits are derived from providing incentives to smaller businesses. That is at the heart of where our policy of having a dual-rate system with a higher rate for small to medium enterprises comes from.

Senator Carr—I met with some senior executives of a very large corporation and they explained to me, 'We do not make our decisions based on whether or not we are going to get a tax benefit. We make our decisions on a business case, given the scale of the projects that are involved. Once we have made the decision, we send the claim down to our accountants to clean up and submit to the government for a benefit.' Under the present regime, why wouldn't you? What we are trying to do is directly affect the way in which decisions are made. That is why we have tailored it to be of direct benefit to those companies where the sort of benefit that we can provide through the scheme will make a substantial difference to the companies as to whether or not the work is undertaken. That is the philosophy behind this. We want to make a big difference, we want to change behaviour and we wanted to change attitudes. The judgment call that I have made, based on the evidence that I have seen, is that this is the sort of thing that can affect the way companies do business.

Senator CAMERON—I am not sure if you want to comment on this, but a proposition has been put here that there was all this huge opposition. I attended both the hearings myself. Sure, there was opposition, but the opposition was very strong from the industry that is hanging off the R&D system. That is the consultants. There was very strong opposition from them. From many of the people who are actually out there doing the work, the argument was that we are pretty close and we can get this fixed with some minor changes. Where do you see the situation is up to at the moment?

Senator Carr—I share your view about this. This proposal has been subject to a campaign by a relatively small group of people. They are very vocal, very well organised and have the ear of a couple of financial journalists. It does not surprise me that that would occur. Equally, I have said from day 1 that if people can show me and the Treasurer—because he is the joint sponsor of this proposal—any initiatives that we have taken do not respond to our stated policy objectives we are prepared to look at changes. We have done that.

I have said that there has to be a genuine process of consultation. I know the Treasurer has said similar things. I think we can demonstrate our bona fides by the changes that we have

already proposed. We will examine the committee's report seriously. We want this legislation. This is not just a statement of intent; this is a determination by us to pursue this question. I genuinely believe this is going to make a big difference, so we will look carefully at any suggestions that are made. As you say, I think we are very close.

I am going to read your report with some care. I hope you will be able to come forward with some suggestions that we can work within. We have a set criterion—that is, we have to have this being revenue neutral, given the budgetary circumstances, in terms of my responsibilities to the government as a whole. If you can demonstrate to us that there are things we can do consistent with our policy objectives to improve the bill, then it is our job, it is incumbent upon us, to have a dialogue about that, and I will talk to other senators, no matter where they are in the chamber, about securing passage of this legislation within those principles.

Senator IAN MACDONALD—Is it correct that the leading manufactured goods export industry in Australia at the moment is pharmaceuticals?

Senator Carr—In exports?

Senator IAN MACDONALD—Yes, the manufactured goods export industry, ahead of cars—

Senator Carr—Just a moment, Senator. I want to be absolutely accurate about any information we give you. Could you just bear with us until we get the right officers at the table, because these figures do jump around a bit.

Senator IAN MACDONALD—I am told it is ahead of cars and wine.

Senator Carr—I know the claim, but I would like the relevant officers, who have the paperwork in front of them.

Mr Chesworth—It fluctuates on a year-to-year basis, but it is usually in the top one or two. That is correct.

Senator IAN MACDONALD—I am told it brings \$4 billion a year into Australia. Do you perhaps have more accurate figures than that?

Mr Chesworth—That is certainly a figure that associations such as Medicines Australia and the Generic Medicines Industry Association use. I suspect that we would probably rely on the same sources as they do.

Senator IAN MACDONALD—Are you a branch in the department? What is your status in the department?

Mr Chesworth—We are a branch.

Senator IAN MACDONALD—Is it the pharmaceuticals division?

Mr Chesworth—No, it is the innovation division.

Senator IAN MACDONALD—But you mentioned pharmaceuticals when you started.

Mr Chesworth—That is correct, but my branch is pharmaceuticals, health industries and enabling technologies.

Senator IAN MACDONALD—Okay. I am really concerned about the health of what is if not the best then one of the best export industries in Australia. Are you able to tell me what

assistance is given to this industry in the form of research grants or in any other way? Is anyone at the table able to do that?

Mr Paterson—I will make an observation at the outset. One of the industries that I think has already expressed public support for the change to the R&D tax credit is the pharmaceutical industry. The changes to the beneficial ownership test in the R&D tax credit are designed to assist a range of industries, and the pharmaceutical industry is one of those. We used that as an example earlier today. The nature of the pharmaceutical industry means that quite often the companies that operate in Australia are headquartered elsewhere and they own their intellectual property at head office, so the changes in relation to the R&D tax credit are explicitly designed to address those sorts of challenges. That is a very tangible example of a proposed change in policy that is designed to directly assist the pharmaceutical industry and a range of others.

Senator IAN MACDONALD—Do you know how many people are employed in the pharmaceutical industry in Australia?

Mr Pettifer—It is about 40,000.

Senator IAN MACDONALD—Is that in manufacturing or is that in pharmacy stores et cetera?

Mr Chesworth—Senator, it is across a range of those sectors within the pharmaceuticals industry. There is a manufacturing element. There is also a research and development element, a significant element in clinical trials, as well as sales and marketing.

Senator IAN MACDONALD—Do you have a break-up of figures in the manufacturing and R&D?

Mr Chesworth—I do not have those, Senator, no.

Senator IAN MACDONALD—Is it available, do you think?

Mr Chesworth—I could try to get that for you.

Senator IAN MACDONALD—I am told that there are 5,000 people employed in the generic medicines sector. Are you able to comment on that claim?

Mr Chesworth—That is certainly the figure that has been put to us by the Generic Medicines Industry Association.

Senator IAN MACDONALD—So I am obviously at the right place if the Generic Medicines Industry Association has been approaching you in relation to recent proposed changes in their industry. Have they been talking to you about this?

Mr Chesworth—We have ongoing interactions with the GMiA.

Senator IAN MACDONALD—They tell me that a recent MOU signed by the government with the industry will have a big impact on the industry. Was your department in any way involved in that MOU?

Mr Chesworth—The answer is no.

Senator IAN MACDONALD—Perhaps this is a question for the secretary or the minister. It is claimed that recent government initiatives within the MOU and the PBS will devastate the

generic medicines industry. This is obviously a matter for the Department of Health and Ageing and we will be pursuing it there. Is that something that the department would have been involved in in its industry promotion capacity?

Senator Carr—Devastating an industry?

Senator IAN MACDONALD—Yes.

Senator Carr—I do not think that we would, Senator.

Senator IAN MACDONALD—In the same way that you are very involved if the car industry is in difficulty.

Senator Carr—I think the officers have indicated to you that in terms of the MOU it is a matter for the health department.

Senator IAN MACDONALD—I understand that, but my question was: if the motor car industry, for example, sneezes then your department is involved.

Senator Carr—I take a serious interest in the health of the automotive industry, but I also take a serious interest in the health of the pharmaceutical industry.

Senator IAN MACDONALD—That is why I am raising this question.

Senator Carr—The statement you have made as to the effect on the generics industry, we have not had representations on that, Senator.

Senator IAN MACDONALD—I am asking your department, Minister, or you.

Mr Pettifer—The generics industry has made some broad statements in the media that the reforms might have a significant impact on them. One of the manufacturers, Alphapharm I think, has attributed some job losses in the past to PBS reforms, but we have not had an overwhelming reaction, or any official reaction, in relation to the reforms.

Senator IAN MACDONALD—Why I am asking these questions of your department is that, as I say, if there is a problem in the motor vehicle industry you are rightly concerned and involved. I am told and then asking you whether you are aware of this concern in the pharmaceuticals industry, which we have already established as one of the big manufacturing goods exports, if not the major one, in Australia at the present time—bigger than cars.

Mr Pettifer—We are aware of it. We are all aware of the statements that have been made on it.

Senator IAN MACDONALD—Is it your department's role in relation to the motor vehicle industry that, if there is an issue involved, you are in there supporting it and trying to get government to be aware of the difficulties and perhaps look at solutions? In the same way, are you aware of these difficulties in the pharmaceutical industry and are you the advocate for the industry in a business and industry sense, not in a health sense—we will deal with that elsewhere.

Mr Paterson—I think it is important that we do not confuse our roles. No, we are not the advocate for the pharmaceutical industry—

Senator IAN MACDONALD—Or the car industry.

Mr Paterson—Nor are we the advocate for the car industry. In fact, both of those industries engage industry-specific organisations that represent their interests and advocate to government. We provide advice to government on the range of issues that we have policy responsibility for. We were not involved in the development of the MOU that you referred to, but the stability, investment, growth and employment prospects in the pharmaceutical industry are matters that we take an active interest in and provide advice to government on. We are not an advocate for the industry, and it is important that we are not represented as being an advocate for the industry. We certainly provide policy advice to government about the current state of play in the industry and future prospects.

Senator IAN MACDONALD—Perhaps my choice of ‘advocate’ was incorrect. But, as the minister has quite honestly and factually indicated, when the car industry is under attack, he is an advocate for the industry.

Senator Carr—What I said was that I am very concerned about the health of this industry and all industries.

Senator IAN MACDONALD—Absolutely.

Senator Carr—I am not denying that; I am just saying to you that we do not have the role of being advocates for the industry.

Senator IAN MACDONALD—Well, let us not have an argument about ‘advocate’. I will change the word. Here is one of Australia’s best—if not Australia’s best—manufacturing industries, which is, according to representations made to me and others, is in real danger. When the motor vehicle industry is in trouble, it is all systems go in your industry—and so it should be. I am just trying to work out whether you have had any involvement in these suggestions. I am not saying they are correct. These things are brought to me as they are brought to all of us. That is why I am asking you.

Mr Paterson—We are aware—and the evidence is already before the committee—of the assertions that are being made by parts of the industry. Clearly, the MOU was with the pharmaceutical industry, represented through Medicines Australia. So at least part of the pharmaceutical industry is a party to that memorandum of understanding. There certainly have been some claims made by other parts of the industry who are not parties to that agreement that it has potential consequences for them. We provide advice to government on the health of the industry and matters that might affect them. We are not here to provide the nature of the advice that we provide to government, but certainly this an area of active interest to us.

Senator IAN MACDONALD—Mr Paterson, you are talking to me in pejorative terms regarding the industry. You are saying ‘it is alleged’ and ‘there are allegations’. It sounds as if you do not believe them.

Mr Paterson—No. I am merely saying that they have alleged that there are consequences; they have not taken action to give effect to those consequences. They are saying that there are potential consequences for them. If they were to assert that this is going to shut down the industry, I would say, ‘It is alleged that it is going to shut down the industry.’ If they had shut it down it would be difficult for me to say ‘alleged’. Many claims are made in the cut and thrust of these sorts of situations, and we have to in a somewhat dispassionate but interested way make an assessment of the claims that are being made in the marketplace—

Senator IAN MACDONALD—That is what I am asking you. Are you doing that? I am not asking you to tell me what your conclusions are, but are you making those assessments?

Mr Paterson—The fact that we have a branch within the Innovation Division focused on the pharmaceutical industry indicates to you that both in the structure of the department and in the interests of the government we play a very active part and have a very active interest in the claims that are being made and what the policy drivers and influences might be affecting that industry, and we would be providing advice to government to that effect.

Senator IAN MACDONALD—I understand that \$6.2 billion is spent over 13 years for the car industry and there is \$14.5 million to Pacific Brands and \$1 million to Zeiss to encourage them to expand and remain manufacturing in Australia—all of which, of course, is something your department would be involved in.

Are you aware that recent budget initiatives, according to my constituents, will cause the jobs to be removed, rather than remain in Australia. These budget measures are exporting jobs from Australia overseas. The Australian taxpayers have spent \$6.2 billion, \$14.5 million and \$1 million on other companies and industries to get them to stay in Australia and here is a government initiative that is going to do the exact opposite. I am putting that to you on the basis that if this is even half right it would be something that your department would be working on, would it not?

Senator Carr—What we can say is that the government and Medicines Australia reached an agreement to deliver an additional \$1.8 billion in savings to the PBS over five years. This was an agreement which was announced in the 2010 budget. That is a matter of public record. What we have also said to you is that this department was not involved in the negotiations concerning the construction of that MOU.

Senator IAN MACDONALD—But, Minister, that is my exact point.

Senator Carr—You mentioned a number of other industry programs. We have sectoral programs, particularly with regard to the automotive and textile industries. However, the pharmaceutical industry program ended on 30 June 2009 and currently there are no sectoral programs operating in the pharmaceutical industry. I did establish the Pharmaceutical Industry Strategy Group to look at this issue and to look at the ways in which the government can work with the industry to ensure its long-term sustainability. In fact, that group did not recommend support for a program for the pharmaceutical industry. Instead, it argued for economy wide programs that pharmaceuticals, biotechnology, medical devices and other innovative companies were able to use. So, when you look at the support that goes to pharmaceuticals, you actually have to look at the range of programs that are delivered, including programs in the biotech and nanotech areas. You have to look at the support for medical instruments. You have to look at the support that is rendered through the Australian Research Council and the NHMRC and the support that is rendered for clinical trials.

What you can say specifically is that, with regard to the R&D tax credit, this approach is absolutely consistent with the recommendations of the Pharmaceutical Industry Strategy Group. That is the approach that we are adopting at the moment. As to the specifics of any claims about the adverse effects of the MOU, I am not aware that there have been approaches directly to the department. I will double-check that.

Senator IAN MACDONALD—Just double-check it. I thought department said—

Senator Carr—I am not aware of any representations directly to me on the matter. We have very good relations with the industry.

Senator IAN MACDONALD—I thought one of your people mentioned the same submission that was made to me. They mentioned that your department was aware of it.

Senator Carr—There is a difference between that and public comment, of which I am aware. Like you, I read the papers. But I am not aware that there has been specific correspondence to us on these matters. However, we will obviously work with the industry to do all we can to ensure that employment and investment is renewed.

Mr Pettifer—We mentioned early on that we do meet with the industry associations, such as GMiA, the Generic Medicines industry Association, and Medicines Australia, and these issues have come up in those discussions.

Senator Carr—We also have a regular series of consultations with the industry, in joint collaboration with the ministry of health. But have we had any specific correspondence on the MOU?

Mr Pettifer—Correspondence?

Senator IAN MACDONALD—What about contact, in your regular meetings?

Mr Chesworth—The GMiA has raised that with us. The current president of the GMiA is Dr Martin Cross, who is also the CEO of Alphapharm, and he has raised those issues with me, yes.

Senator IAN MACDONALD—And how recently was that?

Mr Chesworth—GMiA, in the past 10 days, and Dr Cross, I would suggest, in the past eight weeks or so.

Senator IAN MACDONALD—Okay. Minister, you mentioned you set up a Pharmaceuticals Industry Strategy Group. When did you do that?

Senator Carr—In the first year of the government.

Senator IAN MACDONALD—Good. That is close enough. It was not in recent times, obviously, from that answer.

Senator Carr—We did a report.

Mr Pettifer—Yes, it would have reported in January 2009.

Senator IAN MACDONALD—So it is not still current?

Mr Pettifer—It is a pretty current assessment of the state of play.

Senator IAN MACDONALD—Who is on the strategy group? Is it just a group in your department?

Mr Pettifer—Brian McNamee from CSL co-chaired it with a departmental officer.

Mr Chesworth—The strategy group was co-chaired by a departmental officer and Dr Brian McNamee of CSL. It also comprised representatives of the pharmaceutical industry, the

biotechnology sector—both actual companies and industry associations—and in addition there were representatives from the union movement.

Senator IAN MACDONALD—And it has finished its work, has it?

Mr Chesworth—Yes. The strategy group ran for a particular period—my recollection is that it was from about April to November in 2008. It had specific terms of reference which it was required to fulfil. It met formally on six occasions and a report was released in January 2009.

Senator IAN MACDONALD—So it is not current at the moment.

Mr Chesworth—Whilst the strategy group does not sit, the recommendations remain with us, in a sense.

Senator IAN MACDONALD—Sure.

Mr Pettifer—And, Senator, if you were to look at the recommendations, you would say there has been action on them. One of them was to improve the environment for clinical trials. The minister has established a clinical trials working group, and the report has come forward on that, I think. The strategy group was very strongly supportive of moving to an R&D tax credit and reducing the corporate tax rate, which is another proposal which is currently being pursued. So, if you look back at the recommendations—

Senator IAN MACDONALD—You told me as much—

Mr Pettifer—But I just want to say, Senator—

Senator IAN MACDONALD—No. You are answering my questions, please. You have told me all I need to know about the strategy group: it is not now operating. That was all I needed. Thank you for the rest of the information. It is very interesting.

Senator Carr—We are implementing recommendations that have been made.

Senator IAN MACDONALD—Yes, okay. My concern is about a group that you are aware of—I am talking about the industry aspects of this; do not talk to me about the health aspects—which comprises a very substantial part of what we have established is Australia's biggest manufacturing export industry, bigger than motor vehicles; yet the government has recently signed an MOU with only one section of it, a section that does not involve the Generic Medicines Industry Association. Why that happened in a health sense, we will ask somewhere else. What I am really asking you as the industry department is how the government could make a deal in this area without consulting a substantial part of the industry which, I am told—and it makes sense—will be seriously impacted upon by the import of cheaper generic drugs.

Mr Paterson—You know we cannot respond to that question. We are not in a position to pass observations in relation to government policy or decisions taken by government. Neither my officers nor I are in a position to respond to a question which leads us to comment in relation to government policy choices.

Senator IAN MACDONALD—I certainly do not want you to do that. Let me establish this: you were not involved in those MOU decisions?

Mr Paterson—We have already established that.

Senator IAN MACDONALD—Does it concern you—

CHAIR—Senator Macdonald, we are at afternoon tea time.

Senator IAN MACDONALD—The officials can come back at quarter past if you want to go now, Madam Chair. I will be another five or 10 minutes on this, if you wanted to continue.

CHAIR—In that case, we will break for a short afternoon tea and come back at 4.15.

Senator IAN MACDONALD—Thank you.

Proceedings suspended from 3.59 pm to 4.17 pm

CHAIR—The committee will resume with the Department of Innovation, Industry, Science and Research. Senator Macdonald is continuing with his line of questioning.

Senator IAN MACDONALD—I understand that the recent memorandum of understanding includes some government spending on the industry to, what is said, assist the industry. Is your department aware of that? Are you administering that or is it being done somewhere else?

Mr Chesworth—No, that is not being administered through this department.

Senator IAN MACDONALD—In your dealings with industry sectors do you always ensure that all sections of the sector are involved? For example, if you are doing a car industry thing you deal not just with Ford but also with Toyota and others.

Mr Chesworth—Certainly the sector is very broad. You have what would traditionally be called big pharma, which broadly coalesces around Medicines Australia. You have GMIA, which I have already mentioned, which represents six generics manufacturers. As well as that, there are other parts of the sector which you may not regard as being traditionally pharma, in particular the biotechnology sector, which, probably with the exception of CSL, is characterised by about eight good sized companies and an awful lot of very small ones which straddle that area between research and commercialisation. In our discussions we consult with them broadly and on a regular basis.

Senator IAN MACDONALD—Medicines Australia is only about 30 per cent of the total pharmaceutical industry in Australia; is that correct?

Mr Chesworth—My understanding is that it is a bit more than that. I think the GMIA members might be about 30 per cent. Once again, it does often come down to questions of definition. There are some therapies, medicines and pills that are regarded as pharmaceuticals in some circumstances but not in others.

Senator BARNETT—The industry says that they are responsible for 70 per cent of the market for GMIA. I just want to put that on record. That is their advice.

Senator IAN MACDONALD—Of the off-patent market?

Senator BARNETT—That is right.

Mr Chesworth—That is a separate market and will probably change significantly in the next couple of years as a very large number of drugs come off patent.

Senator IAN MACDONALD—As industry policy, I assume it would be your department's role to try to lessen the regulations and the paperwork, not the safety standards.

In industries across the board your department's role is to try to make things easier to do business more efficiently and with more productivity; would that be right?

Mr Chesworth—That is correct, but that is probably a priority for a few departments at the moment. Issues of paperwork and compliance burden probably fall predominantly to the Department of Finance and Deregulation.

Senator IAN MACDONALD—I am told that this new MOU signed between one part of the industry and the government applies extraordinary administrative burdens on non-signatories—that is, the 50 or 60 per cent that are not part of the MOU. The MOU with, let us say, 50 per cent of the industry imposes burdens on the other 50 per cent that were not consulted. In relation to disclosure price, which applies currently to 160 items, I am told that this MOU extends the policy to 1,600 items, a tenfold increase, and that the majority of these new administrative burdens will actually fall upon that section of the industry that is not part of the MOU. Is that something your department would be concerned about?

Mr Chesworth—The issue might be slightly more complex than that. There are a number of what we would regard as originator companies which also make generic medicines. As a result, for all elements of the pharmaceutical sector, both originators and generics—to the extent that they believe it imposes significant paperwork or compliance burdens on them price disclosure would apply to all of them rather than to one part of the industry over another.

Senator IAN MACDONALD—You have always been aware of the same concerns that have been raised with me; they have been raised with you and with others. Without going into the advice you are going to give them, what are the processes from hereon for your department as the industry department, not as the health department, in investigating those concerns with what I again emphasise we have established is Australia's biggest manufacturing export industry?

Senator Carr—I would like to correct one thing. I am advised that Medicines Australia represents 50 member companies that account for 85 per cent of the total cost of the PBS medicines and nearly 60 per cent of the sales of off-patent medicines annually.

Senator BARNETT—That is a very high figure.

Senator Carr—I am just indicating to you that the figures that have been quoted here, I am advised, are not accurate.

Senator HEFFERNAN—Isn't it 30 per cent of the post-patent?

Senator Carr—I am advised that it is 50 member companies that account for 85 per cent of the total cost of PBS medicines and nearly 60 per cent of sales of off-patent medicines annually.

Senator BARNETT—They are very high percentages indeed.

Senator HEFFERNAN—One in five prescriptions is written to one company that has not been consulted.

Senator Carr—In terms of the MOU, it is clearly a matter for the health department. If you are challenging those figures, I suggest that you take it up with the officers responsible for the PBS.

Senator IAN MACDONALD—Thanks for that information. I can only pass on what people say to me. I guess, if you got the different sectors in, they would have an all-in barney on who has got what but that is not the point of the—

Senator Carr—We have already indicated to you that we were not involved in the MOU.

Senator IAN MACDONALD—That has never been the point of my questioning. I have acknowledged that about five times. I am not asking about the health aspects; I am asking about the industry aspects that could have a substantial part of the biggest manufactured goods industry in Australia going overseas. If it happened in the car industry, you would rightly be on your feet shouting about it. Good on you; so you should. I am relieved now to know that the industry department is on the case, whether what I have said is 100 per cent truthful or not. I am just putting these things to you. I am really asking, now that you are aware of it because I have raised it with you and others might raise it with you, what the process is from here for your department on these issues?

Senator Carr—Officers have already indicated that they have had a meeting with the generics industry and that there are formal processes which the health minister and I are represented on. We will have an opportunity to discuss this with the full industry present. We will do what we can to implement budget decisions of the government.

Senator IAN MACDONALD—There are no tricks in this and not much politics. What I am just asking now is: what is the process going forward? You just mentioned that you have regular meetings with the health minister on these issues.

Senator Carr—On PIWG, which is an organisation that meets three or four times a year. We meet on several occasions with the health minister and the whole industry present to discuss matters of mutual concern. Presumably that will be a forum in which these questions will be pursued, as I would expect.

Senator IAN MACDONALD—That is what I was after. What is the process? It will go to this ministerial group that meets—

Senator Carr—The process for these industry groups is that the government has agenda items and the industry has agenda items. People who are present at the meetings will raise whatever issues they feel appropriate. Clearly the officers will be meeting and discussing these questions.

Senator IAN MACDONALD—Has the next meeting date been determined yet for this group?

Mr Pettifer—There is no date set for the next one.

Senator IAN MACDONALD—When would you expect it? I think the minister said four times a year.

Senator Carr—I may have been a little extravagant in that claim. There will be another meeting in the second part of this year.

Senator HEFFERNAN—Is GMiA on there?

Mr Chesworth—Yes, they are one of the members.

Senator HEFFERNAN—Minister, would you be supportive of this going to a Senate legislation committee with the—

Senator Carr—I am supportive of the government decision.

Senator HEFFERNAN—So we could examine this in the Senate inquiry on this legislation.

Senator Carr—I am supportive of the government decision. That is all I can say to you.

Senator BARNETT—Your department and the minister were not briefed with respect to the MOU signed with Medicines Australia and the health department. Is that correct? Mr Pettifer, you are nodding your head. Is that a yes from your perspective?

Mr Pettifer—We were not briefed on the MOU.

Senator BARNETT—Minister, do you want to add to that?

Senator Carr—I think officers have spelt out what the department's position was.

Senator BARNETT—So we know that the GMiA was not briefed in any way, shape or form or consulted prior to that MOU being—

Senator Carr—We are not responsible for the MOU. It is not up to us to—

Senator BARNETT—Let me just finish the question. I am advised that the GMiA was not consulted, briefed or discussed in any way, shape or form prior to that MOU being announced on budget night. With that in mind—

Mr Chesworth—You will have to raise that with the department of health.

Senator BARNETT—Of course we will. That is my understanding and I am sharing it with you. If you have a different view, please advise. We have got a major portion of the industry—and the minister has indicated their significance to the Australian economy: 5,000 employees and \$470 million in exports providing affordable medicines around Australia—that were not consulted prior to that decision. That is the advice that we have received. You have been briefed by the GMiA and you have had a discussion with the GMiA since the budget decision, but only one meeting with them. Is that correct?

Mr Chesworth—I will have to check my records. I think I have had two meetings with the GMiA.

Senator BARNETT—Could you please take that on notice, and advise us of the dates of those meetings and the thrust of those discussions. Do you consider this as in any way similar to the consultations with the mining industry prior to the mining industry tax being introduced on Wednesday?

Mr Paterson—Senator, you know we will not be responding to that.

Senator BARNETT—It sort of has a similar ring to it. That is my final question on that matter.

Senator IAN MACDONALD—I was talking about this cabinet decision on books before, Minister, and you were uncertain about it.

Senator Carr—I was not uncertain about the cabinet decision. You wanted to know whether or not you had asked any questions about it. I thought you would be more certain than perhaps I was about the questions you asked.

Senator IAN MACDONALD—You were widely reported—and I know you do not comment on cabinet decisions—as having overruled your colleague the small business minister on the basis that you wanted jobs in the book industry to stay onshore rather than being exported. I am only raising that in the context of the current decision, which could have the same impact on the pharmaceutical industry. I am saying to you, in a policy sense and not to your officers, would that be of concern to you as it was in the book industry if jobs in this industry were exported overseas because of decisions made by government?

Senator Carr—As I have indicated to you, we take an interest in the health of all industries.

Senator IAN MACDONALD—If what we are saying turns out to be correct—that is, that this new MOU leads to the loss of jobs offshore, as would have been the case, according to you, in the book decision had it gone ahead as proposed by the relevant minister—then that would be of concern to you.

Senator Carr—You are now moving from the point where you are reporting comments to the claims of supporting those comments. Is that proposition?

Senator IAN MACDONALD—No. Our role here is only to ask questions. We never make a political statement; we know you do not, either.

Senator Carr—I am sorry; I cannot add anything further to what has already been said.

Senator IAN MACDONALD—Okay. That is all I have.

Senator COLBECK—I have some questions in relation to grants from Commercialisation Australia, in particular, one that was made to allhomes.com.au. The basis of the question goes to what role the department plays in following up the activities of grant recipients. In this circumstance there have been allegations of infringement of copyright that come directly from the allocation of this grant. Is the department doing anything down the track with respect to that, and what might the follow-up be?

Mr Peel—In relation to grants generally, grants of the sort that have been approved for allhomes are funded on a milestone basis. They are not all paid upfront; they depend on the recipients reaching certain points in their projects. We monitor how those projects are proceeding through the term of the grant contract. We authorise payments as appropriate, should the company be meeting the milestones.

Senator COLBECK—What would those milestones include?

Mr Peel—They would be different for each grant. The grant is for a particular project. In this case allhomes wants to expand the current business it has in the ACT to other areas of Australia, and it is starting off in Tasmania.

Senator COLBECK—Does the department look at any of the practices that are observed by the grant recipients as part of that process? Would that be something that was part of the consideration at each of the various milestones?

Mr Peel—Certainly, if any allegations are made about inappropriate behaviour by a grant recipient, we would have a look at it but, generally speaking, we monitor how they are going in achieving their project milestones and if they achieve those milestones—

Senator COLBECK—So your concern is generally more about whether or not they are achieving the aims that they set out in the application for the growth of their business which is what?

Mr Peel—For the grant project.

Senator COLBECK—That the grant project is allocated to, so it would not necessarily look at issues of business practice within that specific process?

Mr Peel—But, as I say, if someone made complaints to us or made allegations to us, we would be obliged to follow them up.

Senator COLBECK—Have you had any specific complaints with respect to this particular grant?

Mr Peel—Not to my knowledge.

Senator COLBECK—You have not had any direct approaches?

Mr Peel—Not to my knowledge. I have read press articles I think in the *Launceston Examiner*.

Senator BARNETT—And many others.

Senator COLBECK—There are a number of them about in several publications that I am aware of. The *Launceston Examiner* is one, there is the *Business Spectator*, the *Sydney Morning Herald*, the *Age*—there are a number of them floating around. What process would someone who felt aggrieved by such a circumstance go through to make a representation to the department?

Mr Peel—As I understand it, in this case, the Real Estate Institute of Tasmania has an issue with allhomes. One would have thought that they would at first try to sort that out between them. If there were some allegations of the misuse of grant funds then whoever had a complaint about that should approach AusIndustry and we would have a look at it.

Senator COLBECK—Okay.

Mr Paterson—When it is about the ownership of intellectual property there are other means of people enforcing their rights in relation to ownership of intellectual property. If it is asserted that there is a breach of ownership of intellectual property then there are other mechanisms to be able to prosecute. This would not be the first case where allegations of breach of intellectual property have been made. It is not an uncommon thing for people to assert that. It is another thing for them to be willing to prosecute those assertions and to support their own intellectual property ownership if that is the case.

Senator COLBECK—Okay.

Senator BARNETT—On that point I have read through the guidelines for applicants for these grants and under the access to intellectual property section 2.3 it specifically states that an applicant must be able to demonstrate that it owns or has access to or beneficial use of any

existing IP needed to carry out and all commercialise the project. Applicants are not eligible for assistance if the IP is in dispute or ownership has not been clearly established. We could only assume that the department would have done due diligence to ensure that they were satisfied that that was the case. Is that correct?

Mr Paterson—You could expect that we would have made the assessment of the application against the guidelines. There is an element of the question about the extent of due diligence that can be undertaken in relation to any grant application. If there is an implication in your question do we follow all the entrails in relation to intellectual policy ownership in relation to every grant application we receive then I would probably say no. If your question is: do we satisfy ourselves that the guidelines that are published in relation to these guidelines and the application adequately deals with that matter and satisfies us on the basis of the application that they have the intellectual property ownership of the matters that they wish to exploit then the answer is yes.

Senator BARNETT—The criteria say that the individual must be able to demonstrate that they have necessary rights to the IP. That is part of the criteria. It is normally expected that, if the project succeeds, the participant will own any IP resulting from the project.

Senator COLBECK—This particular project is about expanding its website nationally and access to information. As I recall the documentation that approved the grant, the project is about an innovative new way to harness information. Surely that is a key criterion given what it was talking about, because the implications and the impact of that, particularly as put to me by some players in the real estate industry, are that if the information harvested is not updated it could very well provide a circumstance where it is misleading customers as to certain conditions with respect to a certain property sale. In this particular circumstance, the issue of the ownership of the IP, given what the planned project was doing, was very fundamental to the application.

Mr Peel—We are satisfied that allhomes owns the intellectual property connected with this project, which is essentially an extension of its current website throughout Australia. The allegation, as I understand it, that has been made by the Real Estate Institute of Tasmania is that, by putting on that website properties for sale, for example, that have been advertised for sale by a particular real estate agent in Tasmania, that is somehow in breach of copyright for those real estate agents. I am also aware that allhomes has written to the real estate agent community in Tasmania and has said that it believes that the allegations that have been made are incorrect and misleading and that it has a claim for damages against the Real Estate Institute of Tasmania for breaches of the Trade Practices Act and the Fair Trading Act. This is clearly an issue between the Real Estate Institute of Tasmania and allhomes. As far as we are concerned the project that we funded, the intellectual property underpinning that project, is owned by allhomes.

Senator COLBECK—Intellectual property in that circumstance being the IT required to harvest the data that it then displays on the website?

Mr Peel—Correct.

Senator COLBECK—So in fact the allegation that IP, intellectual property, is being breached is a secondary element to that process. I will give you an example from the real

estate agent that I spoke to and that had contacted allhomes demanding that their information be removed. It was not removed immediately, but once there had been legal communication it was. That is an individual circumstances where, as Mr Paterson said, an outcome was achieved between two individuals as part of this process. But it does fly in the face a little bit of an assertion by allhomes. They can make all the assertions that they like, and I understand that.

Mr Peel—With respect, the real estate people in Tasmania are making assertions.

Senator COLBECK—I was in fact about to say exactly the same thing. There will be arguments on each side of the equation and, as Mr Paterson said, there are processes to deal with that. What Senator Barnett and I were trying to get to the bottom of were issues of IP in respect to the application process. You are clarifying that to us by saying, as far as you are concerned in this circumstance, the IP in relation to the application is the IT that harvests the information that they then display on their website.

Mr Peel—Correct. And I think what is being suggested is that putting advertisements on that site for properties in Tasmania that have been advertised by real estate agents in Tasmania is a breach of their copyright. That is an issue that needs to be resolved between allhomes and the Real Estate Institute of Tasmania.

Senator BARNETT—You do not see that as an issue for the department?

Mr Peel—Obviously we will monitor what happens.

Senator BARNETT—Even though your criteria say that if it is in dispute—

Mr Peel—We have not had any approach.

Senator BARNETT—I am just looking at your criteria that say if the IP is in dispute or ownership has not been clearly established then—

Mr Peel—The IP for the project we do not believe is in dispute. The issue that is in dispute is putting the advertisements on the site, and that is really a matter between the Real Estate Institute of Tasmania and allhomes to resolve. Allhomes has one view—it believes that that information is in the public domain and therefore there is not a breach of copyright. But I am not a lawyer, and no doubt allhomes has its lawyers and the Real Estate Institute of Tasmania has its lawyers and that is that.

Senator BARNETT—And you do not have an opinion?

Mr Peel—I do not have an opinion.

Mr Paterson—And if we had an opinion we would not express it. The minister might be asked to say something but the department necessarily could not.

Senator Carr—You cannot ask the officers for an opinion; you know the standing orders.

Senator COLBECK—We can ask you for an opinion but we cannot ask the officers—

Senator Carr—The officers have expressed the situation very clearly. These were not issues at the time at which the grant arose. They are not issues concerning the grant per se. This is not a matter for the department, as I understand what they are saying.

Senator COLBECK—Perhaps it is a consequential one but, as the officers have said, it is not a direct one in relation to the way they have assessed the application.

Senator Carr—I cannot see any problem with what they have said.

Mr Peel—As I said earlier, we have not been approached by the Real Estate Institute of Tasmania or anyone else. All we have done is read articles—

Senator COLBECK—You might like to add the Real Estate Institute of Victoria to the list as well. There is a bit of a pool growing. Anyway, that is fine.

Senator BARNETT—The criteria are set out in the document that the minister released when he announced the 21 recipients.

Senator Carr—It is not for the government to respond to speculation on allegations of all potential legal actions. That is not our role.

Senator BARNETT—Indeed. But you have criteria and you want to make sure that they are properly kept and met.

Senator Carr—No-one has suggested to me that there has been a problem on that front.

Senator BARNETT—That is why I am asking the question about whether you are satisfied—

Senator Carr—I have no reason to doubt.

Senator BARNETT—that the criteria have been met. I have mentioned the IP but there are also eligibility criteria under point 2. If you are saying that they have been met, then that is something that obviously will need to be reviewed and assessed by those concerned.

Mr Peel—It was properly assessed and recommended for approval against the criteria that apply to the grant program.

Senator BARNETT—You have the funding application and the funding agreement between your department and—

Mr Peel—Yes, we execute contractual agreements.

Senator BARNETT—Do you have a standard agreement that you can make available to the committee?

Mr Peel—It is probably available on the website—

Senator BARNETT—Could you forward that to the committee.

Mr Peel—but we could provide you with a copy of a standard agreement.

Senator BARNETT—Thank you.

Senator COLBECK—I want to go to some questions in relation to—and I do not think these are necessarily for the officers; I think they are more for you, Minister—some concerns regarding delays in awarding tenders to supply Defence clothing. I understand that there is an interaction with another agency here, and there will be some questions going to Defence. What I want to try to concentrate on here are the impacts from a manufacturing perspective in Australia, rather than necessarily the issues between Defence and the industry. There are some linkages, so if you could allow me a little forbearance I will try not to stray too much into the other portfolio. It goes to government responding formally to the Lewincamp report, the impact that that is having on innovation here in the country and your interaction with that.

Specifically, Minister, are you aware that several Australian textile manufacturers have notified the Defence Materiel Organisation of potential job losses and delays in awarding tenders? Have you had any conversations with industry about issues surrounding this?

Senator Carr—I do not recall any conversations specifically along the lines you have suggested.

Senator COLBECK—So your department has not been engaged at all by textile—

Senator Carr—The department is in conversations with textile manufacturers on a regular basis. Have you asked a specific question in terms of what the department has done?

Senator COLBECK—There is a concern being expressed to us. I want to know whether that concern is being expressed to you, what your interactions are in moving this issue forward and the potential impacts on manufacturing in Australia.

Senator Carr—I understand your point. I do not have a direct role in clothing tenders for the defence department.

Senator COLBECK—I understand. We hope you have some influence.

Senator Carr—We always have an interest in the health of industries. I have indicated to you that textiles is an area in which we have a special interest. From time to time people will canvass with me matters relating to the general state of the industry. But I do not know if anyone has canvassed specifically the matters that you have put to the committee this afternoon.

Mr Lawson—A few weeks ago Defence run a public session in Melbourne for the TCF sector. In advance of that meeting the Head of Industry Division in DMO spoke to me, and they have a regular process of engagement with the industry. People within my TCF sections deal on a regular basis with companies, but I have not received specific concerns along those lines. There is always the general issue of timing of tenders and things like that. We are always hearing issues about timing of tenders, but I have not had something specific on that.

Senator COLBECK—Okay.

Senator Carr—Are you referring to today's press, which reports that the minister for defence materiel, Minister Combet, has indicated:

... all the uniforms—

will be—

manufactured in Australia, by Australians and using Australian fabric.

A \$30 million contract was signed yesterday. Are you familiar with that material?

Senator COLBECK—I have not been provided with that information and I am not sure whether these questions predate or postdate that. This is the information that has been given to me this morning.

Senator Carr—There was some public comment about questions of contracts going offshore.

Senator COLBECK—Yes, we discussed that last time.

Senator Carr—I can recall there were front-page articles in some tabloids on this matter. Could you at least have a look at this material? I am sure that we are being monitored, so if there is any information that can clarify that—

Senator Carr—I am just wondering if your questions predate this material.

Senator COLBECK—I will have to check that. I am happy to look at something else for a moment while those who are monitoring us check that. If that is the case, we can potentially move on. There might be some other issues that we come back to in relation to that. So we will just put that aside for the moment and get back to it before we finish. I would like to move on to the Green Car Innovation Fund. To go over a little history, the initial Green Car Innovation Fund was \$500 million, and then it was increased to \$1.3 billion, as announced in November 2008.

Senator Carr—Sorry?

Senator COLBECK—The initial Green Car Innovation Fund was half a billion dollars, \$500 million, and increased to \$1.3 billion as announced in November 2008?

Senator Carr—There were comments made in the period prior to the last election that we would establish a green car innovation fund. The figure of \$500 million was mentioned in the early stages. As a part of our New Car Plan for a Greener Future there was a commitment to \$1.3 billion.

Senator COLBECK—Okay. I just wanted to make sure I had my history correct. The government has announced in the current budget a reduction in that fund of \$200 million.

Senator Carr—Yes.

Senator COLBECK—I just want to get a sense of how that changes the nature of funding through the scheme—what the impact is on the scheme.

Senator Carr—What it means is that there is \$790 million available over the remaining nine years. It is a 10-year program. The reprofiling of the fund is such that I am confident we can meet the demands on the fund over the forward estimates period.

Senator COLBECK—Okay. How does that impact on the two streams in the fund?

Senator Carr—It does not affect the guidelines. What it means is that over the 10 years—or 11 years of the program in total—it moves from \$1.3 billion to \$1.1 billion, so there is \$790 million left and grant funding is available for the remaining nine years of the program.

Senator COLBECK—Okay, so how does the government allocate that to the various streams of the fund?

Senator Carr—It is the same basis as the guidelines have indicated.

Mr Peel—It is not an actual allocation to each stream of the fund. There is a limit on grants that members of each stream can get. Under stream A there is a limit of a cumulative \$300 million, and under stream B there is a cumulative limit of \$100 million. But there is not an actual amount set aside for each stream of the fund.

Senator COLBECK—So any applicant under stream A can make as many claims as they like up to that \$300 million over that period of time?

Mr Peel—Yes, subject to available funds.

Senator COLBECK—And under stream B it is \$100 million. But there is no balancing or specific allocation to either of the streams. That will depend on applications and grants approved.

Mr Peel—Correct.

Senator COLBECK—How many contracts under the fund do you currently have signed?

Mr Peel—Five.

Senator COLBECK—Can you give me the dates for each of those?

Mr Peel—I cannot give you an exact date for when the contracts were signed, but I can give you the dates when the grants were announced. There was a grant announced at Toyota on 10 June 2008, a grant to Holden on 22 December 2008, a grant to Ford on 24 July 2009, a grant to Orbital on 11 March 2010, and a grant agreement was executed with SMR Automotive on 23 April 2010.

Senator COLBECK—Can you quickly run down the values of each of those, please?

Mr Peel—Yes. The grant to GM Holden \$149 million. Ford is \$42 million. Toyota is \$35 million, Orbital Corporation is \$440,413, and SMR Automotive is \$2,422,190.

Senator Carr—Perhaps I could help you here, because I know where this is going. The reduction the coalition has announced would reduce the remaining funds by \$35 million. The effect of that would be to reduce the funds available by 50 per cent for the next four financial years. No new grants would be available should that proposition come into effect. In fact, we could not meet existing commitments under the terms of the contracts that we have already issued.

Senator COLBECK—I was just about to get to—

Senator Carr—I just thought I would help you out there with that.

Senator COLBECK—That is all right. It is good to see that you are anticipating where we are going and are aware of what is happening around the place. Can you give us a schedule of the annual payments for each of those grants?

Mr Peel—I can give you a total. I cannot give it to you for each group.

Senator COLBECK—Yes. I understand that there may be some commercial-in-confidence issues in relation to that as well. I am looking for the tail on each of those.

Mr Paterson—I think Mr Peel has indicated that we can give you a total for each of those years but not broken down grant by grant over each of those years.

Senator COLBECK—As I said, I accept that there may be some commercial-in-confidence reasons for doing so. I understand that. So it is the annual figures that I am happy to get.

Mr Peel—Starting in 2010-11—is that what you are after?

Senator COLBECK—Yes, please.

Mr Peel—The total current commitments of those grants that I have mentioned—and I should say that there are some in the pipeline; I cannot count those—

Senator COLBECK—We will come to those.

Mr Peel—As at 30 April, it was: \$61,620,184 in 2010-11; \$45,493,591 in 2011-12; and \$619,499 in 2012-13.

Senator COLBECK—Six hundred and nineteen? Is that thousands? It was \$61 million, \$45 million and the last one was \$619,000?

Mr Peel—I think it is thousands. I might have to check that on notice. Hopefully someone has not left off three zeros!

Senator COLBECK—If you can advise us of that, it might help us all out and keep us all out of trouble!

Mr Peel—That is it. Those are the current commitments for those grants I have mentioned.

Senator COLBECK—So how many contracts are you currently negotiating?

Mr Peel—We have one a grant that is still going through the process.

Senator COLBECK—Only one grant is currently under negotiation?

Mr Peel—That is right.

Senator COLBECK—That makes my next question a bit difficult because if there had been a number of grants I could have asked for a total allocation without breaching any potential announcements the minister might like to have made. So that is the only project that you currently have on the books?

Mr Peel—That is right. It is the only one currently not announced. It is being finalised.

Senator Carr—I think that is a question of grant applications received. We cannot go into the detail obviously, but there are a number of others which different sections of the department have commenced conversations about.

Senator COLBECK—I understand you do not necessarily want to make your announcements about all these things here in this process, but what level of commitment does the government have in respect of the discussions that it is currently having?

Senator Carr—What I have indicated to you is that the forward profile is sufficient to cover our anticipated level of demand.

Senator COLBECK—Didn't you say it was \$10 million short?

Senator Carr—No, in terms of the current year's allocation it is nearly \$11 million. That is for 2010-11.

Senator COLBECK—That is for this year?

Senator Carr—That is what I am saying to you. If we were to take into account the proposed opposition cuts, which are \$52 million, we would be nearly \$11 million short on contracts already entered into.

Senator COLBECK—For 2010-11?

Senator Carr—Yes.

Senator COLBECK—So what is the impact in 2011-12?

Mr Peel—As the minister mentioned, as at 30 April the shortfall for 2010-11 is \$10,878,568.

Senator COLBECK—Okay. So that would take into account the SMR grant which was announced on the 23rd.

Senator Carr—Because this has engaged a political debate concerning a stated policy position of the opposition, it is only reasonable that I answer questions.

Senator COLBECK—That is fine.

Senator Carr—I do not think it is fair to have the officers deal directly with those questions. I have asserted the position that based on what the opposition have said the opposition's proposed reduction of \$52 million this financial year would leave a shortfall. If that were implemented, the department would not be able to implement their existing contracts to the tune of \$10.8 million.

Senator COLBECK—So is there a shortfall the following financial year?

Senator Carr—Because there are a series of other matters—as we have already canvassed, there are a range of applications in various stages of the process—we cannot say that at this stage. What we can say is that in the financial year 2010-11 the shortfall, if this were ever implemented—and you understand I would be doing all I could to make sure it never were—on the basis of what your party has indicated, would be \$10.8 million. I claimed, therefore, that you would not be able to fulfil contracts.

Senator COLBECK—I understand. And you have one contract still in the process, which you obviously cannot tell me—

Senator Carr—I am saying there are a number of applications in various stages of the processes. There is a formal application that is received and processed by the department, but there are other processes in terms of discussions with officers before that occurs. That is why I can say to you that the current profile—

Senator COLBECK—As signed commitments sit at the moment there is a shortfall in 2010-11 but you can meet commitments from there out based on contracts signed?

Senator Carr—No, I am saying to you that on our profile we can meet all contractual commitments. However, you cannot afford to take another \$52 million out.

Senator COLBECK—The question is what a contractual commitment is as of today. At the moment you have five contracts.

Senator Carr—That is why I can say to you that as of today, based on signed contracts, if you were to implement the opposition's policy of taking a further \$52 million out of the fund there would be a shortfall of \$10.8 million. Contracts could not be honoured on the basis on which they have been signed.

Senator COLBECK—Okay, I think we are on the same page on that. So on the basis of signed contracts for 2010-11 your claim is that there is a shortfall of \$10.8 million.

Senator Carr—If your policy was ever implemented.

Senator COLBECK—Okay, we are cool with that. And you cannot say anything on the out years because there are not signed contracts at the moment. You are privy to information that I am not privy to, obviously, and you will make your arguments at an appropriate time about that.

Senator Carr—That is right.

Senator COLBECK—But, apart from 2010-11, based on current contracts there are not issues in the two years 2011-12 and 2012-13.

Senator Carr—I can assure you that by the time we get there there will be new applications and new processes.

Senator COLBECK—You will do your spending and your allocations in that period of time, and then we will have to deal with those issues in that time frame.

Senator Carr—From what we know now, on the basis of signed contracts in 2010-11 if you were to implement the opposition cut of \$52 million there would be a shortfall of nearly \$11 million.

Senator COLBECK—Do you have a budgeted profile for the expenditure through this committee or is that going to be industry driven?

Senator Carr—There is a forward profile on their fund.

Mr Peel—I will give you the total administered appropriation from 2010-11 through. This is for grants. In 2009-10 there is \$133,306,000. In 2010-11 it is \$104,035,000. In 2011-12 it is \$173,044,000. In 2012-13 it is \$156,880,000. In 2013-14 it is \$121,696,000. In 2014-15 it is \$177,469,000. In 2015-16 it is \$105,543,000. In 2016-17 it is \$38,242,000. In 2017-18 it is \$10,592,000. In 2018-19 it is \$391,000,000. All of the numbers I have given you include grants and operating expenses.

Senator COLBECK—What proportion is operating expenses? I did not want to have to ask the question, but I do have to!

Mr Peel—I do not have the figures here. It is a relatively small amount. I can give the figures to you for 2010-11 to 2013-14. In 2010-11 it is \$544,000. In 2011-12 it is \$543,867. In 2012-13 it is \$843,856. In 2013-14 it is \$543,222.

Senator COLBECK—Do those amounts take into account the overall reductions in funding announced to the fund?

Mr Peel—Correct.

Senator COLBECK—Are they net of the \$200 million that has been removed from the fund?

Mr Peel—Yes, that is minus the \$200 million.

Senator COLBECK—So at the moment the only commitments against those years go out as far as 2012-13?

Mr Peel—That is right.

Senator COLBECK—As of today, the only commitments against those funds go out to 2012-13.

Mr Peel—Yes, I gave you those figures earlier, Senator.

Senator COLBECK—With the clarification to come of whether it is \$619,000 or—

Mr Peel—I think it is \$699,000—

Senator COLBECK—\$699,000?

Mr Peel—It is \$619,499.

Senator COLBECK—Okay. Minister, do you expect to be making significant further announcements in relation to expenditure against this fund in the relatively near future? I will stick to this side of the election. We do not need to speculate on the time frame of that.

Senator Carr—We will have to wait and see. I do not know when the election is going to be.

Senator COLBECK—We do not need to go there. But you are expecting to make—

Senator Carr—This is a serious bit of work. This is about—

Senator COLBECK—And I treat it that way, and that is why I am trying to respect the government's confidentiality in the issues it is dealing with, but I am just trying to garner some information for my own purposes.

Senator Carr—We will announce further grants upon receipt of quality applications and the due processes. I am confident that there will be further projects over the forward estimates period. I cannot say to you when they are going to be announced—

Senator COLBECK—No, I understand that.

Senator Carr—This is a fund that is specifically aimed at the transformation of the industry and it is seen as part of a broader package of measures which we have announced which provides support in excess of \$6 billion. The total impact is to see an industry that is sustainable and able to develop new products and new jobs for Australian workers. Now, I am very confident that we can deliver on all of those.

Senator COLBECK—I am trying to frame some questions in a way that I can garner some information. You are happy to talk to journos in the background about this, and that is part of the process—

Senator Carr—No, I said this on the record. I was very, very clear. I have made it very clear that I think the changes that you propose will see us not being able to meet our contractual obligations.

Senator COLBECK—Yes, for 2010-11, and we are not arguing about that.

Senator Carr—I think they were hastily put together and did not reflect an understanding of how the program operates. I have said that on the record. I am not trying to hide from that; I am more than happy to argue that case out, as to why I think that. I am also saying to you that this program will provide a further \$790 million in grant funding over the next nine years and I expect that to produce a very, very big results for the Australian automotive industry.

Senator COLBECK—Okay. You have indicated that the \$200 million reduction in the fund was due to the fact that it had attracted lower than expected interest.

Senator Carr—It was effectively due to the fact that we have a general belt-tightening across the government.

Senator COLBECK—So it is not necessarily due to external factors but to internal government issues?

Senator Carr—Clearly, there are, in part, questions about the take-up as a result of the global financial crisis. This is an international industry, after all, and an industry that has seen the worst crisis that it has faced in 70-odd years—some would say, since its creation. I think we have done remarkably well in weathering that storm. There is no doubt, however, that there has been a huge squeeze on liquidity—a huge squeeze—and, because we run, on a pro-rata basis with the industry, a co-investment scheme, that has restricted the opportunities that some people would have had to participate in the program. Now, that is starting to ease, and I am expecting quality applications to come forward. But there is no doubt, equally, that the changes that we had to make to the fund are part of the general budgetary position the government is pursuing.

Senator COLBECK—Moving on to the Automotive Industry Structural Adjustment Fund, you announced in November 08 that you had \$116.3 million allocated to that. Can you tell us how much has been spent and/or committed to that program?

Mr Durrant—While \$116 million is the total under the scheme, it is broken into two elements. The structural adjustment element, which is administered by the department, is \$78 million. There is a \$36 million section which is administered by the department of employment and that relates to assisting employees who have lost their jobs as a consequence of structural adjustment. In relation to the \$78 million, the 2008-09 allocation has been expended. In relation to the 2009-10 allocation, the balance of the remains at this stage is \$7.523 million.

Senator COLBECK—Are there any further allocations in the out years?

Mr Durrant—Yes, there is one further allocation, of \$43.75 million. There are no commitments against that at this stage.

Senator COLBECK—That is just a block amount not necessarily allocated to years at this stage?

Mr Durrant—That is allocated to financial year 2010-11.

Senator COLBECK—The 09-10 allocation: is that an unallocated amount at this stage? Is that a remaining sum or is it the allocation for the year?

Mr Durrant—At this stage the \$7.523 million is unallocated.

Senator COLBECK—How much is being spent this year on the program?

Mr Durrant—This year \$18.863 million has been agreed or committed or paid.

Senator COLBECK—And the amount spent in 08-09?

Mr Durrant—In 08-09, agreed, committed and paid, \$7.88 million.

Senator COLBECK—Are there any further expected allocations in relation to the 09-10 sum, that 7.523?

Mr Durrant—That is possible.

Senator COLBECK—Any specific contract negotiations in relation to that?

Mr Durrant—No, not contract negotiations.

Senator COLBECK—So potential applications have been discussed, but not necessarily contract negotiations as yet. Okay. As part of the launch of its new car plan in November 2008, the government announced it had allocated 6.3 to the automotive market access plan. Figures in the budget suggest less than that is being devoted to the program between 09-10 and 11-12, and there is no allocation out beyond that. Is there another appropriation for that program?

Mr Durrant—It was a three-year program. Of the 6.3, \$3.7 million over the three years—09-10, 10-11 and 11-12—was allocated to Austrade. That was to expand their adviser network in China, India, Korea and Thailand. So the money available under the program for this department for administration is \$750,000 for the automotive envoys and \$1.5 million for the Team Australia Automotive initiative. That in total, as reflected in the budget statements, is \$750,000 for the next three years.

Senator COLBECK—Can you give us the program for the automotive envoys—what will they be doing?

Mr Durrant—Certainly. I can run through Mr Conomos' program. He has had four overseas visits so far this financial year. In October he was up in Japan speaking to the Australia-Japan Joint Business Conference. Later in November he visited Thailand with an industry delegation. In February this calendar year he also visited India and Malaysia with a delegation, and he is currently in China with a delegation. He returns home on 3 June. Mr Bracks led an industry delegation over to the United States in October. In addition to that, Mr Bracks has been active in a number of domestic initiatives, including working with the Australian banking community to help finance the automotive industry.

Senator COLBECK—Which industry?

Mr Durrant—The automotive industry. He has been working with the banking industry.

Senator COLBECK—Okay. This is to deal with some of the finance issues within the sector?

Mr Durrant—Correct.

Senator COLBECK—Do we have any specific outcomes to date that we can proudly display from those overseas activities?

Mr Durrant—I can just comment that the trip to India was rather productive, however I think there are some negotiations happening between Australian and Indian firms at the moment and to comment on them might just pre-empt those.

Senator COLBECK—Can you explain the significant tapering off in the LPG scheme figures beyond 2010-11 in the forward estimates?

Mr Peel—I think that was a question asked earlier today. There are a few reasons for the tapering off. One is that there was a high level of demand at the beginning of the LPG program, which meant that we brought moneys forward to earlier years from later years. Also, the level of the grant provided for LPG decreases as we go forward. They are the essential reasons.

Senator COLBECK—So is demand capped on the program as it stands now? I understand you are tapering off the amount that is available. Is there a cap on the annual expenditure as far as the number of grants?

Mr Peel—The program has been funded out till 2013-14 and then it finishes. It is not an ongoing program.

Senator COLBECK—Yes, but on an annual basis if you turn up to get a—

Mr Peel—No, it is not capped each year.

Senator COLBECK—So it is demand driven and if the demand is higher the government is either going to have to bring forward funds or find the additional funds to cover it.

Mr Peel—That is exactly what happened in the early years of the program. So we are actually quite a bit ahead of the original estimates of the number of grants that would be paid under the program.

Senator COLBECK—So it is a combination of factors?

Mr Peel—That is right.

Senator COLBECK—And it ends in 2012-13?

Mr Peel—2013-14.

Senator COLBECK—Can you give us a sense of the work you are doing on demand management strategies in working towards making the industry greener—for example, assisting users to reduce private transport fuel use? I suppose that comes to some of the smaller vehicles that you are assisting through the Green Car Innovation Fund but is there anything outside of that?

Mr Peel—Not that AusIndustry administers directly.

Senator COLBECK—There is nothing else that the government is doing to reduce private transport fuel use apart from the work that is being done with smaller and more fuel-efficient vehicles?

Mr Durrant—One of the initiatives in the Department of Infrastructure, Transport, Regional Development and Local Government, the Green Vehicle Guide, provides information to consumers about the fuel emissions and fuel efficiencies of motor vehicles. That is an educative campaign available on the website.

Senator COLBECK—I will leave that at that. What discussions has the department had with the industry in respect of phase-in of Euro 5 and 6 emissions standards? Where are we at with that?

Senator Carr—We have had quite a lot of discussion with industry about these issues, however Minister Albanese has primary carriage of this matter.

Senator COLBECK—So what impacts will that have on this portfolio and the manufacturers?

Senator Carr—There has been no decision taken yet, so it is a bit hard to judge.

Senator COLBECK—There are no decisions at this stage at a whole-of-government level, so the potential impacts of those—

Senator CARR—Who is on the IDC?

Mr Durrant—That is right. For that initiative a regulatory impact statement has been published. Comments have been made to that. The government would like a decision based on that and other issues.

Senator COLBECK—Is any work going on in relation to electric cars?

Senator CARR—What do you mean by ‘any work going on’?

Senator COLBECK—Within the department applications.

Senator Carr—We cannot comment on the applications but I can say to you that we have some real strengths in battery technology in this country. In terms of the road map that has been prepared through the innovation council, it is one of the issues that we are pursuing.

Senator COLBECK—I move on to the Green Building Fund. As I understand it, we are close to expending the full amount allocated under the Green Building Fund—is that correct?

Mr Peel—We have recently closed applications for what we think will be the final round of the Green Building Fund.

Senator COLBECK—That was round 6?

Mr Peel—Yes.

Senator COLBECK—Do we expect expenditure to go out to the full extent of the program which was initially announced at 2012-13?

Mr Peel—It will be. I think it was announced at \$90 million.

Senator COLBECK—Yes. How much have we spent so far?

Mr Peel—It was originally announced at \$90 million. There was a reduction in 2008-09 of \$2.827 million so it is now \$87.173 million. To date we have funding commitments of \$34,586,000 and we have paid out \$19,703,000, which leaves us with close to \$33 million that we have not yet committed to grants, which will be looked at in round 6.

Mr Sexton—Those commitments of \$32 million not yet entered into do not take into account round 5, which was recently announced, about a week or so ago. There is about \$16 million or \$17 million of that which has been allocated. So in effect we are down to about \$16 million left in the scheme.

Senator COLBECK—So there is about \$16 million left for round 6.

Mr Sexton—Yes.

Senator COLBECK—So effectively spent is somewhere in the order of \$70 million so far, committed.

Mr Peel—Committed and spent.

Senator COLBECK—So effectively about \$70 million.

Mr Peel—Yes, about \$71 million.

Senator COLBECK—That is fine. The program was initially set up around grants of about a half million dollars. We talked a little bit about that at the last estimates. Grants are between \$50,000 and half a million dollars. Can I get a sense of what was gone through to allocate some significantly larger grants as part of that process?

Mr Sexton—There are only two grants that have received in excess of \$500,000. They are special projects within the merit criteria. There are a number of criteria—

Senator COLBECK—Can you repeat that last bit. I missed it, sorry.

Mr Sexton—Within the merit criteria.

Senator COLBECK—Within the merit criteria. Okay.

Mr Sexton—There is the possibility of supporting projects above \$500,000 if they satisfy additional requirements—in other words, that they are world's best practice in what is trying to be achieved and that they relate to buildings larger than 5,000 square metres.

Senator COLBECK—So the \$3.042 million grant paid to Commonwealth Managed Investments met that criteria, as did the one for \$2.318 million to LIF Pty Ltd. Can you give us a sense of what those particular projects were?

Mr Sexton—The details are on the AusIndustry website.

Mr Peel—The Commonwealth Managed Investments Ltd project is a wind array scheme. The description on the web states:

Installation of vertical axis wind turbines on the roof of the building to supply carbon free energy to the base building. The array will reduce base building CO2 emissions and improve the energy efficiency of the building.

The description of the one in North Sydney, LIF Pty Ltd project states: 'The project will see the implementation of Australian technology, including the Shaw Method of Air Conditioning and Bennett Clayton engine technology as part of significant upgrades of the HVAC and trigeneration systems. The project aims to achieve post-project greenhouse gas emissions almost 70 per cent lower than that required to achieve a 5 star office building rating.'

Senator COLBECK—These are all effectively retrofitting projects?

Mr Sexton—These are all for existing buildings.

Senator COLBECK—The Commonwealth Managed Investments project was to provide the Wind array Scheme. It is a series of vertical access wind turbines.

Mr Sexton—That was only one aspect of the overall project but it did include those.

Senator COLBECK—Can you give me some more detail to that. The project description which I have from the website basically talks about that. What else was special about the project?

Mr Sexton—I will have to take that on notice. I do not have the full description.

Mr Peel—We have only got descriptions from the web. So we can take that on notice and let you know.

Senator COLBECK—Can you give me any description of the Shaw Method of Air Conditioning and the Bennett Clayton engine technology.

Mr Peel—Yes, we will get that for you.

Mr Sexton—We will take them both on notice.

Senator COLBECK—Are those projects completed or are they underway.

Mr Sexton—They are both underway.

Senator COLBECK—What audit processes and project review processes do you undertake to verify that they are achieving what they are going to achieve?

Mr Sexton—The milestone payments are structured so that there is an amount paid upfront, there is an amount paid on conclusion of the project and then there is a final amount paid 12 months after the project is completed on the provision of a NABERS report, which is intended to demonstrate the savings actually achieved.

Senator COLBECK—A neighbour's report?

Mr Peel—It stands for National Australian Built Environment Rating System.

Senator COLBECK—I had nasty visions of you going to ask the next-door neighbours just to see whether it was working.

Mr Peel—Actually, at the last estimates, in the *Hansard* initially, that is how it was spelt.

Senator COLBECK—I am not on my own then, am I—that is good! I had some frightening visions of some nasty planning issues. Is there a scale to those payments, or are they based on an analysis of each individual project?

Mr Peel—There is basically a payment regime that applies to all projects: it is 20 per cent on execution of the contract, 60 per cent once we receive a satisfactory final report that the project has been implemented and then 20 per cent one year later, provided we get this NABERS assessment to say that the project has achieved the environmental target that was set for it.

Senator COLBECK—Do we get any sense of CO2 emissions saved, for example? Is there any measurement of that as part of this process, or is there—

Mr Peel—Yes, we do. So far—I am not sure that this includes round 5—the figure that I have are about 158 kilotons per annum.

Senator COLBECK—Is that a claimed amount, or is it a measured amount?

Mr Sexton—That is a projected amount, and that is what we measure to see whether or not it has been achieved when we get the NABERS report 12 months after the project has been completed.

Senator COLBECK—Do they have to make restitution of that amount as part of the process? Or is there another scale within? I still have visions of the neighbours coming around with a few cartons to check out the project—sorry!

Mr Sexton—Achievement of the projected outcome is not necessarily a requirement for the amount to be paid. The amount of money that is withheld—20 per cent—is to ensure that we do get that report in order to enable us evaluate the program at its conclusion. There will be cases where they do not achieve those particular projections for all sorts of reasons, including technology and so on.

Senator COLBECK—What action do we take at that point?

Mr Sexton—If they have completed the project successfully at that point, and they have provided the report, the final 20 per cent will be paid.

Senator COLBECK—Can you say that again? Sorry.

Mr Sexton—If the project has been completed, and they then have provided their NABERS report 12 months after the completion, the final amount will be paid.

Senator COLBECK—Regardless of whether they meet their commitment for whatever reason?

Mr Sexton—It is not necessarily a commitment; it is a projection based on an independent rating system where if you were to undertake this level of investment, you should be able to achieve the following savings in CO2 emissions or equivalent.

Mr Peel—If we were satisfied that they did all the diligent things that they could do to prosecute the project to its conclusion, and it achieved a rating of less than what was originally proposed, then we would make the payment. It would only be in those cases where we determined that they had not properly prosecuted the project.

Senator COLBECK—Effectively, they provide you with a plan up-front, they say, ‘We are going to replace our lighting, we are going to double glaze windows, we are going to insulate certain elements of the structure, we are going to reduce draught access,’ and all of those sorts of things. You would go through all of those things, do an assessment against a matrix and say, ‘Okay, we expect that you will achieve a certain saving’. Then you will assess that they have done those things. You might make an assessment against the technology and receive the report for the final payment.

Mr Sexton—The NABERS rating system is independent. It is that report which determines, or projects, what the savings might be.

Senator COLBECK—Are the initial applications assessed against that?

Mr Peel—Yes.

Mr Sexton—The initial application is assessed against that.

Senator COLBECK—You do an initial, and then a final assessment against the same criteria?

Mr Peel—That is right.

Senator COLBECK—Then the final payment is at the end of that process.

Mr Sexton—The main criterion by which these applications are assessed is the amount of CO2 projected to be reduced. It accounts for some 60 per cent of the assessment that we undertake. The important thing is that it is independent. It is not provided by the applicant.

Senator COLBECK—What different state variances, in recognition of different elements of the building envelope and how they might apply—for example, emissions from lighting and things of that nature—are taken into account?

Mr Sexton—The NABERS rating system takes that into account.

Senator COLBECK—So that balances for the different state variations?

Mr Sexton—It balances out and takes into account the source of energy in the particular state.

Senator COLBECK—What is your assessment of the demand for the program and its take-up application rate versus successful applications? Are you being oversubscribed in each round?

Mr Sexton—We have been oversubscribed and. Indicative of that is the last round where we received 197 applications for round 6, which is more than double what we would have received on average for the previous rounds.

Senator COLBECK—What is your sense of the impact of this program on general building value? Is it making the buildings that are being modified more marketable, more valuable, in the open market? Is it creating a demand for these types of buildings that have been modified?

Mr Sexton—The objectives of the program were to do two things: one, reduce emissions—

Senator COLBECK—I understand that.

Mr Sexton—from the commercial office sector; at the same time, to provide a demonstration effect. One of the criteria that was used to assess that is the demonstration effect that might have flowed. In other words, if this particular building were to achieve this level of savings there is a demonstration effect to other property owners that this can be achieved.

Senator COLBECK—Are we at the stage of the program where enough projects have been completed that we are actually getting that demonstrated effect?

Mr Sexton—Not as yet. We are not yet at the stage where we have the 12 months NABERS report. That is some time off.

Senator COLBECK—So we do not have the final report yet for any project?

Mr Sexton—No, we do not.

Senator COLBECK—How far away is that?

Mr Sexton—We are several years away from getting that, to be able to fully evaluate the success of the program.

Senator COLBECK—Do we have any projects that are at completion stage yet?

Mr Sexton—We have some projects for which the investment has been completed, but we still await the 12 months NABERS report.

Senator COLBECK—So we are within 12 months of getting that explanation.

Mr Sexton—On some projects—yes.

Senator COLBECK—What proportion?

Mr Sexton—I do not have that figure in front of me. It would be from probably the first and second rounds, which were in early 2009, when these plans were announced.

Senator COLBECK—The first round was allocated in early 2009. So we are a bit over 12 months into the project—

Mr Sexton—We have got some way to go.

Senator COLBECK—I can understand that a large proportion of projects may not be completed yet.

Mr Sexton—That is correct.

Senator COLBECK—Is there an average time frame on the projects? Some of the bigger ones, obviously—the \$2 million and \$3 million ones—might have a longer time to go. Do you have any stats on how long the projects might run? There are the retrofit projects.

Mr Sexton—I do not have any stats, but some of these projects are running several years. Some of what we are funding are part of a much bigger refurbishment of the activity we are not supporting.

Senator COLBECK—So they are making a contribution to a much larger fit-out—

Mr Sexton—In some cases—yes.

Senator COLBECK—or refit of a project.

Mr Sexton—Not an internal fit-out but a refurbishment of the building fabric.

Senator COLBECK—Lighting could certainly be part of that process.

Mr Sexton—Lighting in common areas, yes, but not tenant lighting.

Senator COLBECK—That level of detail does not fall within the scope of the project?

Mr Sexton—No.

Senator COLBECK—It is effectively the—

Mr Sexton—It is the base building activity.

Senator COLBECK—Without internal fit-outs to—

Mr Sexton—The expenditure is very much directed to things like the heating, ventilation and air-conditioning systems upgrade, and so on.

Senator COLBECK—Going on to a couple of the clean business programs: Climate Ready—how much has been paid out or has been committed for that?

Mr Sexton—The program has been fully committed. There are no more rounds under Climate Ready.

Senator COLBECK—What about Retooling for Climate Change?

Mr Sexton—The expenditure in that program to date is 4,799,000. Commitments are 8,247,000. That program when it was announced was a \$75 million program. In the last budget 19 million was removed and so it is a \$56 million program.

Senator COLBECK—What are the allocations on a year by year basis in the out years for that?

Mr Sexton—In 2010-11 it is 24,045,000 million, in 2011-12 it is 15.856 million.

Senator COLBECK—The program is terminating under current allocations in 2011-12. Okay. We have some clarification on Army stuff, so we can go back to our military questions. I can say that we appreciate the announcement from Minister Combet in relation to camouflage issues. That is fine. We are talking about undergarments just to complicate things a little bit further.

Senator Carr—Do you want to be a more specific!

Senator COLBECK—That is the extent of the detail that I have at this stage. My instruction is to go back to my original question so let's work our way through them.

Mr Lawson—The Defence Force publishes an ADF Clothing and Personal Equipment Procurement Plan. I think the current one is the 2010-14 one. That was the one that did have those other elements. It does not have undergarments on it but that is a publicly available document.

Senator COLBECK—Could we go back to—and perhaps you can clarify for me so that it helps us all through the process—the impact of the Lewincamp report in this process. I understand that it is a report to Minister Combet, I am just trying to clarify something in my mind so that I can try to take this forward.

Senator Carr—Could you just be a little bit more precise. If it is about body armour then it is a different question from jocks.

Senator COLBECK—I am not sure that it actually gets down to that level, Minister. The information that I have is that it relates to undergarments and I do not know at what level of cladding.

Senator Carr—I do think this is a matter for the Defence—

Senator COLBECK—We will be putting some stuff to Defence.

Senator Carr—We will not be able to help you with that. It would be better to go to Defence direct.

Senator COLBECK—It relates to some wool-blended products, particularly in relation to a flame-retardant wool blend. Does that ring any bells with you?

Senator Carr—Is it with Bruck Textiles?

Senator COLBECK—I have a suspicion that it may be.

Senator Carr—I have enormous suspicions that it is. But, again, I think you are going to have to take this to Defence; DMO might be the place to put those questions.

CHAIR—Loath though we are to leave that topic!

Senator COLBECK—It appears that there are some concerns about the technology involved—potentially, the exportation of the technology.

Senator Carr—Yes. I think these questions are quite old.

Senator COLBECK—It does go back a little way, but there are some current issues in relation to that, including some issues of delivery of the product being late and impacting on other things.

Senator Carr—Again—

Senator COLBECK—Let us ask a simple question, Minister. You are obviously aware of this issue?

Senator Carr—I have had a conversation with the company some time ago, but I think you will find that your shadow minister has also had some conversation with—

Senator COLBECK—There is a fair possibility.

Senator Carr—If that is the issue—

Senator COLBECK—Are there any concerns that you have in relation to where this particular matter is at, at this point in time?

Senator Carr—All I can say is—

Senator COLBECK—I am asking you rather than the agency because I do not think it is fair to ask them the questions.

Senator Carr—I understand. In the light of developments concerning the announcements yesterday—

Senator COLBECK—Which relate to uniforms, not these particular products, as I understand it and as has been clarified to me.

Senator Carr—This is not an announcement that this department has made or I have made, so I cannot go to the detail. What I would suggest is that these questions go directly to the DMO or to Mr Combet.

Senator COLBECK—So are you aware of the contracts that the DMO awarded earlier this year for the supply of this fabric?

Senator Carr—I am aware of the issue. However, it is a question that, in general terms, I do believe is more appropriately handled by the officers with direct responsibility for it.

Senator COLBECK—Then I will try one final question. Are there any concerns out of this department that the specifications for the material, that were developed by the Australian company, were supplied in the tender documentation?

Senator Carr—Perhaps I will ask the secretary to answer.

Mr Paterson—I do have a recollection of the interchange that went on in relation to this, and it does go back some time. But, to the best of my recollection, there were some accusations of that nature made and they were emphatically rejected at the time. So it was a DMO issue at the time. But, as I said, to the best of my recollection, it was emphatically rejected that there had been any breach.

Senator COLBECK—If there is anything else that I can bring out of that I will put those questions on notice so that we can deal with them through that process.

Mr Paterson—On a clear understanding, Senator, that we still think all of these issues are associated with DMO. I do not want us to get them on notice when they are DMO questions.

Senator COLBECK—I am sure that they are going to get a visit from one of my colleagues.

Senator Carr—The officers here can only refer them to DMO. So, if they are lodged with this committee, that is what we will have to do, because we do not have responsibility for them.

Senator COLBECK—I will not lodge anything with this committee that can be dealt with or should be dealt with in DMO. If there is anything that relates specifically to this portfolio—

Senator Carr—We will be happy to answer them to the best of our ability.

Senator COLBECK—you can be sure that they will come your way. I want to ask some questions in relation to the Insulation Industry Assistance Package and what elements of that are being dealt with within the department. What allocation has been made to this department to deal with issues arising from the closure and the tail of the insulation scheme?

Mr Peel—There is no specific allocation to this department. The government has identified \$15 million as being available for this program which is within the appropriation of the department of climate change, not this portfolio.

Senator COLBECK—What authority does this department have in relation to management of issues that arise? What role does this department have?

Mr Peel—The department of climate change has asked us to deliver the program on their behalf. When we need to make payments we have the authority to exercise drawing rights on that appropriation within the department of climate change.

Senator COLBECK—What is the specific name of the program we are looking at?

Mr Peel—It is called the Insulation Industry Assistance Package or program.

Senator COLBECK—What is the process by which contractors engage to access the program and what are the parameters of the program as you understand them—or as you are administering them, I suppose, is more to the point.

Mr Sexton—The program is open to manufacturers, distributors, importers and installers of eligible insulation product, those who had product at 30 April this year and are incurring costs on holding that product. They are able to make an application to us in relation to the value of that product and the entitlement relates to 15 per cent of the value of the product that they are holding. There are a number of eligibility requirements that they are required to satisfy.

Senator COLBECK—So manufacturers, wholesalers, suppliers—

Mr Sexton—Manufacturers, importers, distributors and installers.

Senator COLBECK—How was the 15 per cent value determined? Was that something that you were given as a number or one that you determined as a number?

Mr Sexton—The 15 per cent is a generally accepted view of the holding cost of insulation products.

Senator COLBECK—Is that the holding cost of insulation or the holding cost of any product?

Mr Sexton—The holding cost of insulation.

Senator COLBECK—That figure was given to you by or determined by? You say it is a generally accepted figure.

Mr Sexton—Conversations with industry.

Senator COLBECK—So that was an agreed figure, effectively, by discussion with industry on what the holding cost of the product was?

Mr Peel—Actually it came from the department of climate change. We are administering the program on their behalf. If you want to go into detail on that you would have to ask them.

Senator COLBECK—They have designed it; you are administering it, effectively.

Mr Peel—That is correct. We are delivering it.

Senator COLBECK—It is a once-off payment of 15 per cent?

Mr Sexton—It is once-off assistance payment, yes.

Mr Peel—It is a maximum grant of \$500,000 and a minimum of \$750.

Senator COLBECK—How much have you spent, and with how many?

Mr Sexton—The program has only been open for three weeks and as of last Friday we had received 150 applications. We have completed the assessment, as of last Friday, on only 28 of those. We have assessed 17 of those as eligible and we have committed to payments of \$1.3 million in respect of those 17.

Senator COLBECK—Based on your knowledge of the industry, do you have any assessment as to what the reach of that is to this stage?

Mr Sexton—Our planning for this program was around 2,000 to 3,000 applications. With most programs of this nature, the great proportion of applications usually come in in the last few days.

Senator COLBECK—When is D-day?

Mr Sexton—The program concludes for applications next Friday, 4 June.

Senator COLBECK—When was it announced?

Mr Peel—On 6 May.

Senator COLBECK—So four weeks is the application period. That was designed by the department of climate change?

Mr Sexton—Yes, Senator.

Senator COLBECK—What resources have you had to allocate to the program? What is your team?

Mr Sexton—With the agreement of the department of finance we have estimated that the resources required to deliver this program will be just over \$1 million over two years; this

financial year and next financial year. That amount of money will be drawn down from the Department of Climate Change and Energy Efficiency. It is not appropriated to us.

Senator COLBECK—On top of the \$15 million?

Mr Sexton—On top of the \$15 million.

Senator COLBECK—Why over two years?

Mr Sexton—We do not believe we can make all payments this financial year.

Senator COLBECK—You are going to have a physical restraint in actually assessing the claims that are going to come in. It is just a physical constraint of actually getting through all the applications.

Mr Peel—It closes on 4 June. Last Friday we had 150 applications and, as Mr Sexton said, we might get between 2,000 and 3,000.

Senator COLBECK—I was counting the potential other than 1,850 to 2,850 that might be coming down the track.

Mr Peel—If they all come in on 4 June, which quite often happens with programs, we will need a bit of time to assess them. It could well go over into next year.

Senator COLBECK—Is your department responsible for the advertising program?

Mr Peel—We have advertised it.

Mr Sexton—There was general daily media advertising on 8 May. That was followed up again with media advertising on 22 May.

Senator COLBECK—Was there anything direct to registered participants in the scheme? I assume there is a fairly significant database.

Mr Sexton—All installers who were registered with the previous householder insulation program were sent a text message on 6 May advising of the scheme. AusIndustry separately emailed known manufacturers and known importers. And we have had some press coverage in relation to non-English-speaking newspapers.

Senator COLBECK—What was your total communications budget?

Mr Peel—The advertising we have done has cost \$109,195.01.

Mr Sexton—On top of that is the advertising in multicultural magazines et cetera of \$24,000. You asked why expenditure is into the next financial year. Once we have made the payments, and that is not the end of it, we will then be undertaking compliance activities on those payments.

Senator COLBECK—There is a process of follow-up.

Mr Sexton—There are a number of controls we have in place, which are prepayment, but we will also be putting in place a number of follow-up compliance activities following payment, which will include actual site visits.

Senator COLBECK—You may not have this information but you talk about a 15 per cent value of product as an agreed holding cost, is that over a particular cycle or time frame?

Obviously that is something you are going to have to assess as part of your follow-up, is it? Are there any inventory requirements?

Mr Sexton—Applicants are asked to identify the stock holding as at 30 April and we will reimburse, up to \$500,000, 15 per cent of that value.

Senator COLBECK—What are the following requirements of that? You are going to have site visits and things of that nature. Is that part of the compliance?

Mr Sexton—We will be examining the documentation which enabled them to arrive at those figures.

Senator COLBECK—But wouldn't that be something they would need to supply as part of the application?

Mr Sexton—No, we are not asking them to provide all that documentation. They are required to keep them as part of their records for tax purposes and other reasons and we will be undertaking compliance checks on those records at that time. In order to avoid having to receive all that documentation, we are asking for an independent accountant's verification of the figures they supply us.

Senator COLBECK—So there is a process by which you are seeking information to verify the claim at the outset?

Mr Sexton—Yes.

Senator COLBECK—Then there is a spot audit or sampling audit?

Mr Sexton—We will be checking all manufacturers' claims and we will be checking about eight per cent of all other claims, which is a risk management figure we have agreed with the Department of Finance and Deregulation.

Senator COLBECK—Okay. That is fine. What work are you doing on how the particular businesses manage down their stocks—or is that something that you might have to look at again down the track?

Mr Peel—That is not our responsibility.

Senator COLBECK—So 15 per cent up to 500k, minimum of \$750, and that is basically it as far as you are concerned?

Mr Peel—That is right. Once we have done that and undertaken the compliance activities that Mr Sexton mentioned our role is complete.

Senator COLBECK—And that, potentially, you say, could take two years?

Mr Sexton—No, we would expect that this activity that we are involved in would be finished this calendar year.

Senator COLBECK—What activities are you talking about?

Mr Paterson—It was just over two financial years: the current financial year and next financial year. It is not a two-year program; it is just being able to get the applications in and properly assess them in a reasonable time frame and that will cut over—

Senator COLBECK—That is a fair clarification. Is there any other business assessment that goes alongside this process?

Mr Sexton—I am not sure what you mean by ‘business assessment’.

Senator COLBECK—This whole mess has seen the rise of a number of businesses and the fall of a number of businesses. Is there an assessment of quantum that you are looking at as part of that process or it is your function purely—

Mr Peel—We purely deliver this program for Department of Climate Change and Energy Efficiency. Any other issues connected with the Home Insulation Program are matters for that department.

Senator COLBECK—How do you assess business viability issues?

Mr Sexton—We don’t. The scheme design has some fairly stringent eligibility requirements, particularly around installers. Those requirements include that (1) the business has an ABN and (2) it satisfies the eligibility requirements imposed by the Department of Climate Change and Energy Efficiency at 19 February this year for eligible installers, and they relate to their satisfying certain safety requirements, that they are actually providing approved product and that they are not subject to any investigations around safety or fraud issues.

Senator COLBECK—But what about the viability of their business?

Mr Peel—It is not an issue for us. If they met qualifications that Mr Sexton has mentioned, they can claim.

Senator COLBECK—What about the qualification of business existence?

Mr Sexton—One of the eligibility requirements is that the business has an ABN—an Australian Business Number.

Senator COLBECK—So if they are going through the process of winding up, are they eligible?

Mr Sexton—The program is predicated on the fact that businesses were holding stock when the program closed.

Senator COLBECK—I understand that.

Mr Sexton—And therefore the government is providing some assistance to those businesses as a result of that. They have been adversely impacted because of that closure of the scheme.

Senator COLBECK—I have had some of the conversations, so I understand that. Does the department have any assessment of the number of businesses that may close following the closure of the scheme?

Mr Sexton—No.

Mr Peel—No.

Senator COLBECK—Is anyone doing that work? Is anyone assessing that information?

Mr Paterson—We are not.

Mr Peel—We are not.

Mr Sexton—You would have to direct that question to the Department of Climate Change and Energy Efficiency. They were the ones who had information on the installers.

Senator COLBECK—I accept that that is a potential answer, that is fine. I just wanted to know whether you guys were doing anything on that. Obviously you are not.

Mr Peel—All we are doing is delivering this program.

Senator COLBECK—Is the *Australian innovation system report 2010* in outcome 1 or an outcome 2?

Mr Paterson—Outcome 1.

Senator COLBECK—Can I ask some questions about the currency of the information available that went into the innovation system report and whether that is the absolute latest information that is available in providing that document. There is a lot of stuff that goes back to early 2008 and beyond. That is effectively the latest information that we have available in compiling that document?

Mr Weber—That is correct. Where possible we use the latest data available.

Senator COLBECK—So the OECD structural and demographic business stats of 2008, the ABS *Australian system and national accounts 2007-08*, the OECD *Science, technology and industry scoreboard 2007* and the ABS *Innovation in industry* publication for 2003? How does that help us measure our current performance? How do those figures lead into that? How do we get a good assessment of where we are at if we are using figures that are that old?

Mr Pettifer—I think what this report is trying to do is that we have set up a framework, and that framework, set down in *Powering Ideas*, has a number of key themes and targets. What we have done is to report on the latest available information there, and over time, as more recent data becomes available, we will be able to get a trend on what is happening in terms of the particular targets. If you want a report on how much the government is currently spending on science, research and innovation then you would go to the budget tables that have been put out and are on the website. That gives you a snapshot of how much we are actually spending, but the report is using the latest available information and we hope that over time it will give a good time series on whether we are getting better or worse against those particular indicators.

Senator COLBECK—So it is effectively a baseline mechanism upon which you can build to measure over time, even if it is at some delay, the impact of various measures.

Mr Pettifer—Yes, that is right.

Senator COLBECK—What is the cycle that the report is intended to be updated to, and on what cycle do you include new data? Is it as it becomes available or is it an annual cycle on the report?

Mr Weber—We intend to produce the document annually and will update it with the most up-to-date information at the time when we put the publication together.

Senator COLBECK—I suppose some of those are dependent on particular collection cycles.

Mr Weber—Yes.

Senator COLBECK—So, with the ABS business publication of 2003, when that data might become available depends on what the next cycle of that data is. Do you know when that is for that particular dataset?

Mr Weber—Not off the top of my head.

Mr Pettifer—We could take that on notice.

Senator COLBECK—Okay. Some of the others are somewhat more current, but they are only just getting into the term of this particular government. You have some OECD figures from 2008 and the *National accounts* publication from 2007-08, but the ABS stuff seems to be fairly latent.

Mr Pettifer—It is the latest available information, and that is what we have used. As I say, as we produce this report over time and as we get more up-to-date data, that will be included in the report and will give us a trend.

Senator COLBECK—How do we line figures up and get a current balance? If we are talking about Australia's current rate of business R&D, at 1.04 per cent of GDP, and compare it to the OECD figures, how do we do that when the two do not match up as far as currency is concerned—or are we actually aligning them?

Mr Pettifer—For those figures—the business expenditure on R&D—we have comparable figures. We can use the OECD figures and the latest Australian figures, and we are able to compare that.

Senator COLBECK—But at what time frame are we comparing them? Are we comparing them at a comparable time frame, or do we have current date figures that we are putting? The chart that I am looking at is chart 4 on page 17. I am trying to get an assessment and to match the figures up against what is on the graph.

Mr Weber—Chart 4 shows two things: it shows expenditure on research and development in dollars and it shows Australia's BERD-to-GDP ratio and the OECD average BERD-to-GDP ratio. So the bar charts at the bottom show Australia's BERD-to-GDP ratio and the OECD average ratio, whereas the other axis—the line—shows the expenditure on R&D in absolute dollars.

Senator COLBECK—I suppose I am directing this to you now, Minister. You said in your 2007 election policy that Australia's current rate of business expenditure was at 1.04 per cent of GDP and remained below the average, which was 1.53. When we look at the chart, the relevant figures are 1.2 and 1.55. I am accepting that it is still below the OECD, but they do not actually reflect the figures that were being quoted. So I am just trying to get a sense of where the numbers are.

Mr Pettifer—I presume that—

Senator COLBECK—Unless we are looking at an older series of numbers from the document that is the now government's election commitment.

Mr Pettifer—Yes, I think so.

Senator Carr—We said we would do this. It is part of the innovation review findings, if I recall rightly. We have to start somewhere, so we started with this as the baseline. It is not

without risk for a government, but our intention is to publish this on an annual basis and that will provide, for all who are interested, an opportunity to assess performance. As far as I am concerned, one of the ways we can encourage people to reassess what they are doing in this country is to actually get some facts on the table. As you have indicated, by international standards our performance on BERD is below par.

Senator COLBECK—But increasing and increasing even over the cycle that you were talking about.

Senator Carr—I have acknowledged that there are a whole series of ways of looking at the figures. The fact is that it is below par and we have got to lift it if we want to maintain living standards. That is our policy intent and I trust you will be able to measure that performance over time. We have put a lot of money into the system—the biggest increase in the better part of a generation. We will measure the performance of the system as that money starts to cut in.

Mr Weber—There is one other point I would make. When you have a BERD to GDP ratio, you have to two figures changing there. You have the BERD number that changes and the GDP number that changes. So that is why those numbers move around so markedly every time it updates and that is why it changes for different figures at different points in time.

Senator COLBECK—I understand what you are saying. I think the minister got my point and has responded appropriately. I am not going to argue about the fact that we need to continue to lift our game and I appreciate the fact that we have a measurement process and a benchmark in place. My point was that there was a process of improvement in place when we were in government. We can have a political discussion on the rate of that, but the point has been made. With respect to the gathering of the research and the data, acknowledging everybody's frustration in relation to that, is there any work being done to try and make sure that we can access data more quickly? Are we having any discussions or are we effectively captive to the data collection agencies and have to wait for that to arrive?

Mr Weber—We work with the ABS to get the most up-to-date data we can. We work with them to actually identify what data is the most important for our work. We prioritise the collection and we also sponsor innovation data collections across the ABS. Yes, we do work with them, but at the end of the day we are limited by their capacities.

Senator COLBECK—I note that some of them are actually international organisations, so we are actually captive to their reporting processes as far as that is concerned. I will move now to industry innovation councils. Do we have eight councils now?

Mr Payne—Yes, the government has announced eight.

Senator COLBECK—Can you just quickly run through them for me.

Dr Green—There is an automotive council, a built environment council, a future manufacturing council, an information technology council, a pulp and paper council, a space council, a steel council and a textiles, clothing and footwear council.

Senator COLBECK—I recognise that some of them, for example, the pulp and paper one, is a fairly recent announcement in response to the report that was released during April, I think it was. Are we at the stage of actually having any specific recommendations or outcomes coming from the councils?

Dr Green—As you point out, there are various stages of development, some councils being relatively new and some being more established, although they have all been established only in the last couple of years. Those that have been established for a reasonable period of time have generally got various priorities that they have identified for their councils and are working on a range of initiatives to progress those. Many of them have undertaken projects to pursue those and have provided advice on a range of initiatives that government has been undertaking. Those include things like the design of Commercialisation Australia, R&D tax credits, and related initiatives that have been the subject of public policy in the time that they have been established.

Senator COLBECK—You mentioned one thing I was going to come to. They were established, as I understand it, to provide specific advice on innovation to you, Minister—

Senator Carr—They serve a number of purposes, Senator. They provide direct advice to government on specific questions. But they also provide an opportunity for the industry—in some cases for the first time ever—to be able to sit down and work out what their agenda is to be. So there is an ongoing developmental role for them to perform as well as a specific role with regard to special projects. In automotive, for instance, there is the development of the technological road map. I understand that in a number of areas that is the type of activity we are now seeing emerging from these councils. This is a chance for the industry to identify the capabilities where there are particular strengths in this country, and which areas need to be developed further, and the ways in which the industry can move together to address those concerns. It is about people taking responsibility for their own future and as well as being able to have the capacity to work directly with government and to work across the supply chain so that both unions and companies are able to sort out some longer term structural adjustment questions.

Senator COLBECK—You mentioned the R&D tax credits—that was specifically referred across to the innovation councils?

Dr Green—It was not specifically referred to them, but a number of the councils obviously had an interest in the proposals and in that range of reforms and did some thinking about the issues that are involved in that area. They were provided along with a range of other advice through the process that the innovation division has run, and the minister has undertaken with the Treasurer to provide that advice through the consultation process that you have been asking a range of questions about this afternoon.

Senator COLBECK—I am trying to get a sense of how the interaction backwards and forwards works. With those sorts of organisations and the representation that they have around the table, wouldn't you have a referral mechanism for issues of that nature or magnitude? Take, for example, the R&D tax credit. They knew about it so they said something about it. Wouldn't there be a process whereby you refer that sort of information back to them given the role that the minister has just described that they are doing?

Senator Carr—They have the council to initiate their own projects as well as to undertake—

Senator COLBECK—I accept that.

Senator Carr—work specified—

Senator COLBECK—But where the government is undertaking fairly specific significant reform processes, having the resource there of those sorts of organisations across a range of sectors, I would have thought, would have been useful. It would have been of value to say to them, ‘Here is something that we are looking at. What is your view?’ I ask the question in the context of something that I might do in the fortunate circumstance that I was sitting in your chair, Minister.

Senator Carr—Yes, but on occasion we have asked specifically for project costs.

Senator COLBECK—That is why asked about the R&D—because of its significance as a reform, as you have expressed it yourself.

Senator Carr—Sure, but on the question of the R&D, we did not have to ask them; they were very keen to participate, which we welcome. On other matters, for instance, trying to build collaborations between industry and the research sector, that is an ongoing policy objective that we have. We have on all of these councils representatives from research sectors and we do expect there to be a continual engagement on those matters. But we do not sit down and say, ‘This is the agenda for the next meeting.’ I do not have to sign off on the agendas, nor does the department; it is up to the participants. These are the decision makers in the industry—that is the whole point of this exercise—and they will not actually go to meetings if they do not perceive that there is an ongoing value.

Senator COLBECK—I would have thought a real ongoing value would be government coming to them as industry leaders and decision makers and saying, ‘Here’s something that we’re going to put on the table; give us your view.’

Senator Carr—That happens.

Senator COLBECK—Okay, so R&D was not. Give the committee some examples of issues that have been put forward in that process.

Dr Green—We have engaged with the councils collectively on a number of occasions, including with all of the chairs of councils that were appointed at the time we had these meetings. We have provided briefings to them on matters of general interest, including the R&D tax concession, and they have been sounded out in that kind of context about those issues which we know are of interest to them generally.

Senator COLBECK—Okay. What is the general resourcing that has been provided to the councils so far?

Dr Green—I think the total expenditure estimate for 2009-10 for the industry innovation councils is \$3,562,000.

Senator Colbeck—Is there a specific allocation to each one? Can they access funding on a project basis? What is the allocation that is provided to each of the councils?

Dr Green—I can tell you what the actuals are that we expect from each of the councils for the period ended 18 May 2009-10. The Automotive Industry Innovation Council has spent \$397,434. The Built Environment Industry Innovation Council has spent \$236,254. The Future Manufacturing Industry Innovation Council has spent \$181,026. The IT Industry Innovation Council has spent \$260,894. The Pulp and Paper Industry Innovation Council, which was only recently established, has spent \$10,478. The Space Industry Innovation Council has spent

\$98,080. The Steel Industry Innovation Council has spent \$378,453. The Textile, Clothing and Footwear Industry Innovation Council has spent \$154,072. Some \$397,513 has been spent centrally across the various initiatives. That is a total of \$2,114,204.

Senator COLBECK—What activities would they generally undertake in expending those resources?

Senator Carr—There are whole series of activities. I should indicate that I have met with, I think, all of them.

Senator COLBECK—That is good news.

Senator Carr—As well as participation in the councils, they have worked on a number of conferences across the portfolio, so there have been a range of activities for each of those councils throughout the period since their establishment.

Dr Green—Typically the expenditure is in a couple of different categories. One is the costs of the staff that support the work of the councils. Another is the costs of the members' reasonable travel expenses to participate in the process, and the other category of expenditure is on projects that are undertaken in support of the work of the councils.

Senator COLBECK—What is the particular criteria for invitation to membership?

Dr Green—There is a commitment to have a broad range of people from business, from the research community, from unions and from government. That would be key decision makers from those sectors. We undertake a process of gathering evidence about appropriate people and provide that advice to the minister for his agreement and decision.

Senator COLBECK—So the department makes recommendations to the minister in respect of all those things. So Paul Howse, who is a member of three of those committees, would have had expertise or interactions across three of those particular areas of—

Senator Cameron interjecting—

Dr Green—I personally have responsibility for the future manufacturing council, and I am aware of him being a member there. Obviously his union is involved in a range of activities across the councils, which are largely focused on manufacturing industries.

Senator COLBECK—Could you tell us why—perhaps, Minister, you could do that, if the officials do not have any information—Mr Howse resigned from the Automotive Industry Innovation Council? Too busy, do you reckon, Doug?

Senator CAMERON—No, I didn't say that.

Senator COLBECK—So you've judged me prematurely.

Senator CAMERON—No, I know what you are up to.

Senator COLBECK—So you do not know why Mr Howse resigned from the Automotive Industry Innovation Council?

Mr Payne—It was because of the commitments. He made a judgment that he could not give sufficient time to the range of commitments, so he asked the minister if he could leave the automotive council.

Senator COLBECK—And there has been a replacement appointed—

Mr Payne—That is correct.

Senator COLBECK—I presume from the same union—

Senator Carr—The AWU is a significant player in the automotive industry.

Senator COLBECK—I am not disputing that, Minister, and despite what Senator Cameron might like to imply, I am not actually having a crack. I am just asking about the membership.

Senator Carr—So you welcome union involvement in the industry bodies, do you?

Senator COLBECK—I am just asking some questions about the appointments and the process and why one of the members who had extensive involvement across three might have decided to retire, and you have given me a quite credible answer. I am content with that, and you have also told me that someone else from the same union has replaced him. I am not making an issue about it; I am just asking some questions. Is there a reporting process out of the innovation councils that is available publicly rather than just to the minister?

Dr Green—Councils are, under the framework we have established, to report at least annually to the minister. Generally they provide some advice to the minister after each meeting, but there is an expectation that they would report at least annually, and that is a report to the minister.

Senator COLBECK—Is there any process for that report becoming available to broader than just the minister?

Dr Green—The council is engaged with stakeholders fairly extensively, and they have a range of material on the department's website related to the activities. Many of them have the kinds of projects that they have commissioned and they have reports available in that medium and have a range of other information about their activities that they have on the website, so that material is already in the public domain.

Senator COLBECK—But not necessarily anything broader in respect of the reporting.

Senator Carr—Senator, they provide advice to me and I do not intend to make all advice automatically available.

Senator COLBECK—I was not expecting that you did, I just—

Senator Carr—The answer is no, on that basis.

Senator COLBECK—That is fine. That is all I was looking for. The Pulp and Paper Industry Innovation Council has an initial life of 12 months, as I understand it.

Senator Carr—Yes.

Senator COLBECK—How does that stand with respect to the other councils? Obviously you will make a decision about that particular council going forward.

Senator Carr—My view is that councils have to demonstrate that they have an ongoing role, which will be determined by whether or not the participants think it is of value. On the evidence I have seen, I am of the view that this is a useful way to gather information and to ensure that people actually discuss ways in which their industries can be more innovative. We will assess progress on a case-by-case basis from time to time as the need arises.

Senator COLBECK—Do each of the boards have an initial life?

Dr Green—All of the members that have been appointed are appointed for a particular term.

Senator COLBECK—At the moment, are all those terms like in terms of time frame, not necessarily in date—because all the boards have different birthdates, if you like? Is it a similar term for each of the board members of all of the boards?

Dr Green—They all have the members appointed to a particular date in time. It has generally been two years from establishment, but it is not fixed to be that. But they do have a particular term for their appointment. So they are appointed to a particular date.

Senator COLBECK—Depending, obviously, on the life of the boards. So you would not appoint the pulp and paper guys, for example, for a longer period than the initial life designate for the board?

Senator Carr—We are obviously still working on membership of the council. The whole point was that as an industry it had not got around a table prior to the establishment of the strategy group. We will make a judgment call on that when we have finalised the membership and we will make an assessment as to how well it is going.

Senator COLBECK—Can you give us the current life of each of the boards as it stands at the moment, or is there not one?

Dr Green—I will have to take that on notice.

Senator COLBECK—I will move on now to Enterprise Connect. I want to clarify some of the figures that you have given us in answer to question on notice No. AL41, including overall appropriations and staff numbers. The figures for the appropriations seem to differ from what appears in the budget papers. Can you give us the total overall cost for Enterprise Connect and then how that is broken down, please?

Mrs Zielke—Certainly. The confusion might be because the figures stated in the PBS vary depending on whether departmental costs are included in those figures or whether any administered are being referred to.

Senator COLBECK—So how do I work that out?

Mrs Zielke—In relation to the program, for example, for the 2009-10 financial year, the program has \$26 million in administered and \$33 million in departmental, which comes to \$59 million in total. In 2010-11, the administered dollars are \$24 million and the departmental is \$26.8 million, which comes to \$50.8 million. In 2011-12, the administered dollars are \$24.4 million and the departmental dollars are \$26.4 million, which comes to a total of \$50.8 million.

Senator COLBECK—Do the departmental costs align with the staffing for costs?

Mrs Zielke—The departmental costs cover things like staffing. They also cover administrative costs, travel costs—anything that is covered in administering the program.

Senator COLBECK—Can you give me information on the breakdown of that or would you have to take that on notice?

Mrs Zielke—I would have to take that on notice.

Senator COLBECK—If you could do that for me, please, that would be good. I would like to get a precise figure for staffing costs, in particular, if I can, for each of those, particularly years 2009-10, 2010-11 and 2011-12.

Mrs Zielke—I can give you figures for staffing costs to date but departmental is a single allocation, so costs into the future would vary depending on the delivery of the program.

Senator COLBECK—Can you give me the figure on staffing to date?

Mrs Zielke—Not at the moment; I would have to take that on notice.

Senator COLBECK—Okay; fine. Can you give me a sense of the number of SMEs in the country that use Enterprise Connect services? Do you have any statistics on that?

Mrs Zielke—I can give you the number of companies that we are currently working with. As at 30 April, we had 2,706 companies approved to receive a business review through the program. We also have over 3,700 companies so far this year that have been involved in other activities such as workshops or information sessions in relation to various forms of technology et cetera that have been funded under the workshops, industry, intelligence and networking element of the program as well.

Senator COLBECK—How would you say that is in the context of the number of SMEs? In percentage terms what is the sort of connection rate?

Mrs Zielke—I could take on notice the number of firms we expect would be eligible under the program more broadly, but, in effect, any company that has a turnover of between \$2 million and \$100 million—that is, a manufacturing firm or a firm directly assisting manufacturing firms—would generally be eligible under the program to receive Enterprise Connect services. There are some exceptions to that, because some of our innovation centres have additional criteria in that regard, but that is generally the eligibility criteria for the program.

Senator COLBECK—So manufacturing and turnover between \$2 million and \$100 million—they are the parameters?

Mrs Zielke—That is correct—or those firms that directly provide services to manufacturing firms as well.

Senator COLBECK—Are there turnover parameters that apply to them as well?

Mrs Zielke—The same \$2 million to \$100 million turnover.

Senator COLBECK—If you could give us those you see as being eligible by state, that would be good.

Mrs Zielke—I am sorry, Senator; I do not believe I can give you that level of detail.

Senator COLBECK—So you can give me a macro number nationally but not by state.

Mrs Zielke—That is correct.

Senator COLBECK—Can you break down the two figures that you have given me—the 2,706 that have been approved for review and the 3,700 that have been approved for other activities? Can you break those down into state numbers?

Mrs Zielke—I can give you the breakdown now of the 2,706 firms that have been approved for business reviews. In the ACT, it is 35; in New South Wales, 681; in the Northern Territory, 11; in Queensland, 384; in South Australia, 253; in Tasmania, 62; in Victoria, 438; and in Western Australia, 182. I have just read to you the number of completed business reviews, which is 2,045, whereas we have 2,706 that are approved. The gap between those two figures is for companies that are yet to have their business review completed.

Senator COLBECK—Okay. How many places have been taken up through the Researchers in Business program?

Mrs Zielke—Again as at the end of April, we have 30 placements through the Researchers in Business program.

Senator COLBECK—Of the \$10 million allocated to the program, how much has been spent?

Mrs Zielke—Approvals to date are \$967,205.

Senator COLBECK—Does that include all the money that has been committed as well?

Mrs Zielke—That does include commitments as well as expenditure to date.

Senator COLBECK—What is the average length of time that the researchers are contracted to work in the participating businesses? Do we have any statistics on that yet?

Mrs Zielke—Researchers are contracted for up to 12 months to work with companies. However, at this stage, it is still very early days; some projects are being predicted to be completed within three months, for example. We do not have an average across the program as yet.

Senator COLBECK—So it is really business dependent and specific to each particular application?

Mrs Zielke—That is correct.

Senator COLBECK—Can you give me your expected cash flows on that through the relative financial years? You have \$10 million overall.

Mrs Zielke—We do not have a set amount for each element of the program.

Senator COLBECK—So effectively it is going to be demand driven and drawn down as demand for the program develops?

Mrs Zielke—That is correct, yes.

Senator COLBECK—What is the life of the program—three years?

Mrs Zielke—RiB is an element of the program and Enterprise Connect is an ongoing program.

Senator COLBECK—So that is a subset of the overall funding?

Mrs Zielke—Yes.

CHAIR—Senator Colbeck, I have a quick question if you have finished.

Senator COLBECK—Go for your life.

CHAIR—What progress has there been on the small-scale mammalian cell production facility? Is any construction imminent? I understand from the annual report that the construction of the facility was put back a bit because one of the main tenderers was not able to proceed.

Mr Chesworth—That is correct, but a new tenderer was chosen and an announcement about the tenderer was made at Bio International Convention in Chicago on 3 May 2010 by the minister and Premier Bligh.

CHAIR—When is construction expected to take place?

Mr Chesworth—Construction is expected to commence in the next financial year and it is part of a much larger construction. The Queensland government are making a significant contribution and the mammalian cell facility is going to be adjacent to Translational Research Institute, which is a \$300 million plus facility.

CHAIR—Thank you. That concludes outcome 1 discussions. We will begin after the break with the Office of the Chief Scientist and then outcome 2.

Proceedings suspended from 6.59 pm to 8 pm

CHAIR—We will resume the committee. I welcome the Chief Scientist from the Office of the Chief Scientist, Professor Sackett. Good evening, Professor Sackett. Do you have an opening statement that you would like to make?

Prof. Sackett—No. I do not have an opening statement, thank you.

CHAIR—We might start with questions.

Senator EGGLESTON—I have some questions. Professor, were you consulted by the government prior to its announcement on 27 April that it had postponed its planned introduction of an ETS?

Prof. Sackett—You are asking me if I was consulted prior to that policy decision? No, I was not.

Senator EGGLESTON—Thank you very much. In the media release you released after the announcement, you were quoted as saying the following:

Reluctance of nations around the world to implement mechanisms that recognise the cost of greenhouse gas emissions will increase the effort required to manage and adapt to the impacts of climate change, according to the country's top independent science adviser.

Which was you. It continues:

Delays in the reduction of emissions means that the amount of CO₂ in the atmosphere will continue to increase and to continue to compound the greenhouse effect. If no action is taken, this will eventually lead us to a dangerous climate change situation.

Given that that was your press release, since the government's announcement, have you had discussions with Senator Carr or other government officials about the postponement of the introduction of the ETS?

Prof. Sackett—No, I have not.

Senator EGGLESTON—I would obviously draw from that conclusion perhaps you would be a little disappointed that that had happened, though?

Prof. Sackett—My role as Chief Scientist is to advise on the science that may underpin policy but not to have policy discussions, so I would not have expected in fact to have had a discussion around matters of policy with Minister Carr or anyone else in government.

Senator EGGLESTON—You said in your acceptance speech that you wanted to be a strong and continuous advocate of evidence based decision making. Now nearly two years into your job, I think it is, do you feel that you have been able to achieve that goal?

Prof. Sackett—I believe that the Office of the Chief Scientist—that is, me and the good people that support me—has indeed provided excellent evidence based advice to underpin policy and in other matters that relate to science and technology for the good of Australia, yes.

Senator EGGLESTON—You also said in August 2009 in your interview on 2UE that:

I have never seen a peer reviewed paper that supports the anti-global warming position.

Do you still hold that view? Have you never seen a peer reviewed paper which takes that point of view?

Prof. Sackett—I have not seen a recent peer reviewed paper in a major scientific journal that conclusively shows that the globe is not warming and that the bulk of that is not due to human activity, no.

Senator EGGLESTON—Thank you. You are very firm in your views, Professor, so we will leave it at that.

Senator COLBECK—I want to get a sense of how much in the way of government funding is allocated to your office for the overall administration.

Prof. Sackett—Thank you. I will refer that matter to the secretary of the department.

Mr Paterson—Senator, the Office of the Chief Scientist is supported by my department. The overall budget allocation for 2009-10 is \$2.318 million.

Senator COLBECK—Do you have any projections out into the forward years, or do you make an annual allocation?

Mr Paterson—We make an annual allocation.

Senator COLBECK—Out of your budget when you are actually planning each year's activities?

Mr Paterson—Correct. We have not finalised all elements of that yet, but it would be in the same ballpark in the year ahead.

Senator COLBECK—So that is 2009-10. You have not finalised your 2010-11 budget?

Mr Paterson—Not to date.

Senator COLBECK—So that is taken out of—

Mr Paterson—It is funded from the base appropriation within the department.

Senator COLBECK—So what does that provide? What is the basis of what is provided to you out of that budget?

Mr Paterson—About \$1.6 million of that is in salaries. About \$276,000 is the administration, travel and all other expenses associated with running PMSEIC.

Senator COLBECK—Out of running what?

Mr Paterson—PMSEIC, the Prime Minister's Science, Engineering and Innovation Council. That is \$276,000. There is \$127,000 in travel and a bit over \$100,000 in contractors and support services, and then there are other additional ancillary expenses—support arrangements for staff and the like.

Senator COLBECK—Can you just go back to the administration for PMSEIC. Is that \$276,000 or \$2.7 million?

Mr Paterson—It is \$276,000.

Senator COLBECK—So what is the overall staffing of the office?

Mr Paterson—Thirteen ASL provide support to the Chief Scientist. So the Chief Scientist is not an employee but is engaged under a deed.

Senator COLBECK—I see.

Mr Paterson—Then the staff, who provide support to the Chief Scientist in the Office of the Chief Scientist—

Senator COLBECK—So is that 13 full-time equivalents?

Mr Paterson—It is 13 ASL. So it is an average staffing level of 13 over the year.

Senator COLBECK—And the Chief Scientist comes out of—

Mr Paterson—Is in addition to that.

Senator COLBECK—Is in addition to that.

Mr Paterson—The salary for the Chief Scientist is included in the remuneration number that I gave you, but the position of Chief Scientist is in addition to the ASL because it is not counted as ASL.

Senator COLBECK—So the funding is in the \$1.6 million?

Mr Paterson—The salary or the payment to the Chief Scientist is within that \$1.6 million figure that I mentioned.

Senator COLBECK—And a global budget of \$2.318 million?

Mr Paterson—Correct.

Senator COLBECK—So are any of the other elements that are in program 2.3 as per your organisational chart—the mission based compacts, Questacon and the Square Kilometre Array—associated with the office?

Mr Paterson—No.

Senator COLBECK—So they are completely separate?

Mr Paterson—Questacon is a division of the department. The Square Kilometre Array activity is a function undertaken by the department. I do not recall the other one you mentioned, Senator.

Senator COLBECK—I just want to go back, Professor, to your response to Senator Eggleston in respect of peer reviewed journal articles supporting the anti global-warming position. I have been given some examples of articles out of journals that are ranked as asterisk A, which, as I understand it, are the top tier classification scale on the Australian Research Council's official ranked journal list. They include 'Heat capacity, time constraint and sensitivity of the earth's climate system' in the *Journal of Geophysical Research*, volume 112, issued 24—

Mr Paterson—Senator, could you just speak up a bit?

Senator COLBECK—Sorry. My apologies. It is by Stephen E. Schwartz. Are you familiar with that?

Prof. Sackett—There are tens of thousands of articles. I am not familiar with that particular one.

Senator COLBECK—So if we are going to get down to an argument over individual articles in individual publications there may be some that could be found that you have not seen. Do you therefore go back to your response to Senator Eggleston?

Prof. Sackett—There are certainly articles that I have not read or seen. That would be a true statement.

Senator COLBECK—So by going through this list of examples, the reality is that (1) you may not recall them and (2) you may not be aware of them?

Prof. Sackett—That is entirely possible.

Senator COLBECK—I will go through a couple and I will not go through the lot for the sake of the exercise. There is another one here that was issued again in December 2007 entitled 'Quantifying the influence of anthropogenic surface processes and inhomogeneities on gridded global climate data'. It is in the *Journal of Geophysical Research*, volume 112. The authors are Ross R. McKittrick and Patrick J. Michaels. Are you aware of those documents? There is 'Very high-elevation Mont Blanc glaciated areas not affected by the 20th century climate change' in the *Journal of Geophysical Research*, volume 112, dated 9 May 2007 by C. Vincent, E. Le Meur, D. Six, M. Funk, M. Hoelzle and S. Preunkert.

Prof. Sackett—I am sorry. Was there a question to which I need—

Senator COLBECK—Well, are you aware of that paper?

Prof. Sackett—No, I am not aware of these individual papers. I am certainly aware of the journal in which they were published.

Senator COLBECK—You are obviously quite emphatic in your response to that. You made a comment on 2UE that you have not seen a peer-reviewed paper that supports the anti global warming position. That may very well be the case, but you may not have seen papers in peer-reviewed documents that actually do support that case?

Prof. Sackett—That is entirely possible. Certainly when I have conversations with climate scientists I ask them to tell me what they feel is the weight of the evidence on all sides of the argument, and I have not heard from anyone a convincing argument that is backed by peer-reviewed literature against the evidence that the globe is warming.

Senator COLBECK—I am not going to make that one way or the other. I am just trying to assess. So you asked people who you know work in that space?

Prof. Sackett—There are many ways I take advice. That is one way. I read consolidated reports that are put together. I take advice from the CSIRO and the Bureau of Meteorology.

Senator COLBECK—So, unless someone who has an opinion of a document refers you to a document, you may not necessarily see that or become aware of that document?

Prof. Sackett—It is entirely possible. But the way the scientific literature works is that when one puts forward a view one is generally expected to also indicate other evidence that may align or not align with that particular view. So the scientific publication process itself actually references not only work that may support it but work that may not in the peer-reviewed literature. So I am saying that over time it becomes a coherent body of knowledge, which is not to say that there may not be an article that I am not aware of. I would never make the claim that I am aware of every article. But the bulk of the evidence through the peer-review system is very clear in this regard. If there is a particular article that you are concerned about, I would be glad to take it on notice.

Senator COLBECK—I am happy to provide you with this list so you can let us know. We will pass that over to you on notice.

Prof. Sackett—Lovely.

Senator COLBECK—If you could let us know about that.

Prof. Sackett—I would be happy to do that.

Senator PRATT—Professor Sackett, I want to ask you about the preparing a learning society for the future working group that I believe you have been involved in. I want to know the significance of the science of learning, including brain function, motivation and the practice of teaching.

Prof. Sackett—So you are asking about—

Senator PRATT—About this particular idea and program.

Prof. Sackett—I believe the thing you are referring to is a report that was delivered to the Prime Minister at the last Prime Minister's Science, Engineering and Innovation Council meeting. It was prepared by a group of experts—scientists in the fields of brain function and cognitive psychology as well as practitioners in education. This very diverse group of people spent some many months preparing a report for the Prime Minister that indicated, first of all, I suppose, the good news that we as a society of scientists have learned quite a bit about how learning proceeds—how it depends, for example, on executive function in the brain; how it depends on attention span; how it depends on factors in the environment; and how it depends on neural mirroring between the learner and the teacher. That is good news. The thing that is perhaps most compelling is that this knowledge is not in all cases making it into the classroom. It is not a program; it is simply a recommendation. These bodies are advisory bodies.

The recommendation that was put forward was to consider the creation of science of learning centres in Australia that would bring scientists together with the practitioners of learning to speed that knowledge getting into the classroom. Furthermore, the practitioners

would be able to communicate to the research scientists difficulties and patterns that they see as they teach that then could form the basis of further study and understanding from the scientific researchers themselves. So that is the essence of a much fuller report that was presented to the Prime Minister.

Senator PRATT—Good. I will have to look into it. That would coalesce with other research that has been done about early childhood and brain development and all that kind of research that is also happening?

Prof. Sackett—Absolutely. In fact, we had an expert on the group who was in early childhood development, working even with children as small as a few months old. So the expert working group spanned people who work in the science of learning all the way from newborns really to adult learning and training on the job.

Senator PRATT—On a slightly different topic but still, I suppose, on the same train, I am interested in knowing what research you might be aware of that looks into the psychological reasons as to why people are either cynical or supportive of certain scientific theories, be they climate change, or evolution versus intelligent design or our society's capacity to engage with scientific ideas and whether people are engaging in a way that is underpinned by real science or not.

Prof. Sackett—I am aware that there are those who are discussing such research. I am not aware of any particular pieces of research, which is not to say that it might not be being done somewhere. I think this relates to a larger question of, quite frankly, trust and issues of authority and so forth, which is a very rich topic in psychology and sociology.

Senator PRATT—Thank you.

Senator EGGLESTON—I would like to ask you another question, if I might.

Prof. Sackett—Surely.

Senator EGGLESTON—This is about the debate in France on the subject of climate change. I understand that at the instigation of France's science minister, there will be a national debate in that country later this year on the subject of climate change. This follows the incredible success of a book by Claude Allegre, who is arguably France's most celebrated scientist and a former science minister in the government, who has called the global warming theory into question and who describes the UN's intergovernmental panel on climate change as a 'Mafia-like system that promotes a baseless myth about climate change.'

Senator CAMERON—Did Barnaby write that one for you?

Senator EGGLESTON—Well, no, he did not, actually. But this debate is occurring. I wonder if you are following that debate. What implications do you think this French debate on this subject may have for Australia?

Prof. Sackett—I am not following the debate. I am not aware of implications that it would have for Australian science.

Senator EGGLESTON—Since you are something of an international figure, though, and are in touch with people around the world involved in the climate change debate, is it possible

for you to advise us of how the outcome of the Copenhagen conference has been received around the world by persons such as yourself in positions in government as science advisers?

Prof. Sackett—The Copenhagen event was largely a meeting of governments, as you know, to discuss policy. Although individual scientists, as any individual citizen, of course, may have opinions about such things, they do not really fall in the remit of the duties of the Chief Scientist.

Senator EGGLESTON—No. Very well. I might have been asking you for a personal opinion, but there we are. There has been some discussion here today about the state of the climate report from CSIRO. Are you familiar with that document?

Prof. Sackett—Yes, although not in detail.

Senator CAMERON—I ask you for your view on some of the conclusions. In chapter 5, it says:

What it means—

And this is after the debate about increasing CO₂ and temperatures warming. The conclusions are:

Australia will be hotter in coming decades.

... ..

Much of Australia will be drier in coming decades.

... ..

It is very likely that human activities have caused most of the global warming observed since 1950.

And—

Climate change is real.

Now, that is the CSIRO based on their analysis of the department of meteorology reports and the like. What is your view of that conclusion?

Prof. Sackett—Every one of the conclusions that you have summarised there is in accordance with the work of other large scientific organisations and individual scientists that I am aware of around the world.

Senator CAMERON—Thank you.

[8.27 pm]

CHAIR—Thank you. I believe that is the conclusion of the questions. Thank you for coming in this evening. I will now ask the outcome 2 officials of the Department of Innovation, Industry, Science and Research to come to the table. Mr Paterson, are there any opening statements for this section?

Mr Paterson—No.

CHAIR—We will go straight into questions.

Senator COLBECK—I know we are out of the area, but I received further instructions over the tea break. I just want to clarify a comment that you made, Mr Paterson, in relation to an allegation that I made and I think has been made in other circles. It relates to the inclusion

of specifications for fabric in a tender document. Do not get too excited, Minister. I will try to keep this to the point that Mr Paterson made. I want to clarify your statement, which was quite emphatic, that the government denied any allegation of a breach of IP in publishing the specification for a fabric. I want to clarify whether you were talking about in that comment the camouflage material or whether you were talking about the special flame retardant wool blend fabric that we were discussing. I just want to clarify the difference between which one we were talking about. I understand there may be a couple of issues out there and I just want to make sure I am squared off.

Mr Paterson—Senator Colbeck, there may well be a couple of issues around there. I think the *Hansard* will show that I said I recalled that there was a public debate about this issue and there were some public accusations made. I recalled an emphatic rejection of having published any intellectual property in a tender document. I was not specific when I made that comment earlier today about whether it was the wool garment or whether it was the camouflage textile. That is because I could not tell you from my recollection whether it was one or the other. I recall the public debate at the time. I recalled a comment made to the best of my recollection from the Defence Materiel Organisation which emphatically rejected the accusations that there had been a breach of intellectual property. But I did not recall the detail and I certainly did not have a clipping or anything like that. So I was not asserting it was in relation to one or other of those textile products because I did not recall the context. As you will recall from our earlier conversation, we were moving around.

Senator COLBECK—It was free flowing.

Mr Paterson—It got into undergarments and all sorts of things, so I do not—

Senator COLBECK—Well, it is still in undergarments, because I understand the special flame-retardant base material is being used for undergarments.

Mr Paterson—Mine was a recollection. I was trying to assist. As we have said, this is not an area that we have responsibility for. The more explicit questions ought to be put to DMO.

Senator COLBECK—Thank you for that. I appreciate that. That is why I came back to ask the question. When I reflected on our conversation, I was not sure either. We can deal with the specifics of that in Defence later on, as I have promised the minister we will. But in the context of the portfolio that looks after IP, I think it is an issue that we ought to be on top of in respect of those particular issues anyway.

Mr Paterson—But it would be fair to say that whilst the portfolio is responsible both for the registering of intellectual property through IP Australia and promoting research and development and the development of intellectual property in Australia, individual enforcement issues are matters for the owners of them. We do not participate or get involved generally in those interchanges.

Senator COLBECK—Thanks. My curiosity is satisfied.

Senator EGGLESTON—These are some program 2 questions. The department recently issued a discussion paper on the proposed collaborative research networks—the CRN program—and invited submissions on the paper by 22 March. Can you give us an update on

the status of the program and when you are envisaging making available further information about the specifics of how the program will work?

Ms Baly—That discussion paper you refer to elicited a number of submissions, which have been analysed. We also held face-to-face consultations on that program. We have prepared program guidelines, which we expect to be released shortly.

Senator EGGLESTON—Thank you. Can you summarise the views and concerns that were raised through the public submissions?

Ms Baly—As you would probably expect, there were a range of views that were expressed on that program from the different universities. I guess there was probably a majority view, which was that it was a targeted program and that it should remain a targeted program. It is a program that is targeted at those universities that are at the less research intensive end of the spectrum. There was support for that to be the case. That was thought to be appropriate. The broad policy parameters were largely supported in those consultations.

Senator EGGLESTON—So what you are saying, in other words, is that this program will sponsor pure research and scientific research?

Ms Baly—The program is designed to foster collaboration between universities that are less research intensive than others and to develop collaborations with more research intensive universities as a way of building research capacity and building collaborative networks. That is what the program is intended to do. It is not a competitive research grant program like the programs that the ARC runs, which do fund basic research. It is designed to foster collaboration—

Senator EGGLESTON—Between universities to—

Ms Baly—between universities—

Senator EGGLESTON—To promote pure science or—

Ms Baly—to build research capacity.

Senator EGGLESTON—But that sounds like pure science, to me, rather than applied science, does it?

Ms Baly—Well, it is both pure and applied research.

Senator EGGLESTON—Thank you very much. I also want to ask you about cooperative research centres and get some overview from you about the current evaluation process for CRCs. I understand that in Mary O’Kane’s review of the CRC program, one of the key recommendations was that the results should be innovative, of high impact and capable of being deployed rapidly by the end users to good effect. She also said that the CRCs should be of high national benefit with significant spillovers. Following on from that, I wonder if you would like to comment on what sort of benchmarking and evaluations are currently being done for the CRC program and how you go about assessing if individual CRCs have lived up to those kind of expectations.

Ms Baly—Senator, I might just point out that my other colleagues from the CRC program were here for outcome 1 and they have gone because the CRC program is actually in outcome 1. So I will do my best to answer the questions as I can, but I may need to take some on notice.

Senator EGGLESTON—I apologise. I am looking through 2.2, components. But please go ahead.

Ms Baly—As you say, the program was reviewed. Each of the CRCs that is funded enters into a contractual arrangement with the Commonwealth government. Included within that contractual agreement is a set of outcome measures. They are regularly monitored. Each CRC is required to put in an annual report and each CRC has a three-year review of its activities. So they are monitored fairly carefully.

Senator EGGLESTON—Is there still a lot of competition for CRC funding?

Ms Baly—There is a lot of competition for CRC funding.

Senator EGGLESTON—So how many have we got at the moment?

Ms Baly—There are 48 at the moment.

Senator EGGLESTON—That is a lot. I was going to ask you to go through them, but that is too many. So perhaps you could provide a list on notice for us.

Ms Baly—I could provide that for you.

Senator EGGLESTON—If you would. Are any of them in agricultural research?

Ms Baly—Yes. There are a number in agricultural research. There have been a number over the years. Are there any particular ones that you are interested in?

Senator EGGLESTON—I know that one of our colleagues, Senator Back, was quite interested in a hendra virus CRC being set up. I wonder if that has occurred.

Senator Carr—This is on another issue. Hendra virus research is conducted through the CSIRO.

Senator EGGLESTON—All right. I accept that.

Senator Carr—The funding arrangements that were announced last week were \$1 million to fund CSIRO activities. It is not a CRC program.

Senator EGGLESTON—That is fine. I just mention the plan that Senator Back had a year or so ago. Thank you, Minister, for that information. You will provide that list on notice. The other program I would like to ask you about is Excellence in Research for Australia. I wonder what feedback you are getting from universities about the success or otherwise of the Excellence in Research for Australia initiative.

Senator Carr—That is an ARC program.

Senator EGGLESTON—Well, it is actually listed, I might point out to you, under 2.2 in this department, Minister.

Senator Carr—It is administered by the Australian Research Council.

Mr Paterson—I will clarify the issue, Senator. Excellence in Research for Australia is a program under the ARC. There is a small element, which is the IAP component of Excellence in Research for Australia, which is a component piece that has a couple of years of legacy history to it. But the ERA program is run by the ARC. We had questions in relation to ERA this morning with the ARC.

Senator EGGLESTON—All right. Nevertheless, it was there. I have heard that there is some disquiet in some university sectors about this program. I was going to ask some questions about that. But if this is not appropriate, I will not.

Mr Paterson—Thanks, Senator.

Senator EGGLESTON—I would like to ask a couple of other questions. The first is about Commercialisation Australia.

Mr Paterson—That is outcome 1.

Senator Carr—You are doing pretty well there, Senator.

Senator EGGLESTON—Well, these are the notes I have. Do you know whether or not a full-time chief executive has been appointed?

Senator Carr—Correct.

Mr Paterson—A full-time chief executive has been appointed and was here earlier today.

Senator EGGLESTON—What about the SKA program? Does that come under CSIRO?

Senator Carr—It would depend on what part of it.

Senator EGGLESTON—I wonder what progress is being made towards the achievement of its actualisation.

Ms Lansdown—We have responsibility for the SKA program at the moment. CSIRO, as you are probably aware, is building the ASKAP telescope, which is part of the broader SKA bid in Australia. But we are making considerable progress on the bid. As you would be aware, we are investing heavily in infrastructure to support that bid within Australia. We are very actively engaged in the international processes towards decision making with respect to the site and, in fact, the governance mechanisms for the SKA into the future. We are engaging quite actively in awareness raising campaigns with both our international colleagues and our domestic audience. So I am prepared to answer questions in more detail, but there is quite a range of activity within that SKA bid.

Senator EGGLESTON—And South Africa remains our main competitor, does it?

Ms Lansdown—There are only two candidate sites that have been put forward—ourselves and the Karoo region of South Africa, yes.

Senator EGGLESTON—Is there any indication of their relative merits and attractiveness?

Ms Lansdown—There is no doubt that the Australian site offers a superior site for building the SKA telescope, but there is a process underway at the moment to look at a range of issues to assess that site. They have to look at issues such as radio quietness and the terrain—whether you would be able to configure the SKA in the area that has been chosen. There is a process for looking at the suitability of the two sites and then making scientific recommendations.

Senator EGGLESTON—When do we expect a recommendation to be made?

Ms Lansdown—The current timetable says that the site decision will be made in 2012. This is not always a linear process. There are things happening in the process that might speed that up. At the moment the scientific process is up to looking at the masks for SKA antenna configurations. That might bring a conclusion to that debate earlier or it may not.

Senator EGGLESTON—What did you say? The masks? Is that the word you used?

Ms Lansdown—There are some areas in the two sites where you cannot put antennas. That relates to populations, farms and terrain. There is a whole range of issues that mean that you cannot place an antenna in a particular place. Australia is able, with all the masking done in our prospective site, to configure the SKA antennas without any difficulty.

Senator EGGLESTON—That sounds like a positive for us.

Ms Lansdown—Yes. It is a very good story.

Senator EGGLESTON—All right. We will keep monitoring that as it develops, so thank you very much.

CHAIR—Senator Colbeck, do you have more questions?

Senator COLBECK—Yes, I do. Can you give us a sense of what we have achieved out of the International Science Linkages program since its inception, please?

Ms Lansdown—The program has been going for 10 years and has a significant number of elements, so I guess I might defer to my colleague Mary Finlay to talk about some of those elements. Some have been in place for longer than others.

Senator COLBECK—Just give us a very general indication.

Ms Lansdown—I think, if the current House of Representatives inquiry is any indication, most of the submissions to that inquiry suggest that it has been a very successful program. We have a very broad range of statistics that suggest we have a large number of citations from projects that have been funded by the ISL program. We have had large numbers of science exchanges and large numbers of research projects emanating from the initial funding that went to start exchanges with various countries. Basically we funded 600 projects. We have about 3,000 researchers involved in those projects over about 40 countries, so it is quite a broad-ranging program.

Senator COLBECK—How many researchers, did you say?

Ms Lansdown—There have been 3,000 researchers engaged in the various projects. It is a little difficult to be precise, but we know there have been over 3,000.

Senator COLBECK—We are broad brush. I understand that. The budget papers suggest there is no funding for this beyond 2010-11. This falls to you, Minister. Is there a future for this program beyond 2010-11?

Senator Carr—I have indicated on numerous occasions that I am a strong supporter of the program. I think, as has been indicated by the officers, the program has a lot to show for itself. It has been there for 10 years. But the funding does not run out until next year so the government has not made a decision about its successor.

Senator COLBECK—Okay. That is a fair answer. You mentioned the House of Representatives inquiry. Is that specifically into this program?

Ms Lansdown—No. It is into international science engagement more generally, so it is quite wide-ranging.

Senator COLBECK—But some of the elements that have been picked up by this program and potentially some of the achievements I could find by having a look through the submissions to that inquiry which would give me some indications?

Ms Lansdown—Yes.

Senator COLBECK—I think we might have been through the Science Connections Program once before. I have a nasty feeling about it. I think I am going to get the same answer from the minister. Does Questacon's funding come out of this program?

Prof. Durant—No. Questacon was asked to take responsibility for this administered program in July last year. So we look after the program.

Senator COLBECK—Again, the budget papers do not have an allocation for this program beyond 2010-11.

Prof. Durant—That is correct. It is in a similar position to the International Science Linkages program insofar as there is another 12 months.

Senator COLBECK—So my assumption was correct, Minister?

Senator Carr—And the same answers apply, Senator. It is a very good program. It has been well evaluated. But the government is yet to make a decision about its successor.

Senator COLBECK—What about elements such as National Science Week, which are also funded out of that program?

Senator Carr—There are lots and lots of elements to it.

Senator COLBECK—I am raising one example. They fall within that program?

Prof. Durant—National Science Week is part of the Science Connections Program.

Senator COLBECK—Do the science and innovation ambassadors fall within this part of the portfolio? I just want to get some sense of the delivery of that election commitment.

Prof. Durant—The Science and Engineering Ambassadors scheme does not form part of the SCOPE program.

Senator COLBECK—What about somewhere within outcome 2 of the department? I am just going back to your election policy, Minister, which is \$5 million allocated for the innovation ambassador role of the new Innovation Australia board to establish a stronger innovation ambassador program.

Mr Paterson—Outcome 1.

Senator COLBECK—It is outcome 1. So we have missed. I will put that on notice and you can provide me with all the glorious data later. Does the Cairns Institute Tropical Innovation Hub come within this element of the portfolio?

Mr Paterson—Yes, it does, Senator.

Senator COLBECK—You are providing \$19.5 million over two years to James Cook University for the construction of the research facility. Minister, you made that announcement initially on 9 December last year. Has any work actually commenced on that particular project, or is it effectively all future allocation?

Ms Lansdown—Yes, it has. We have signed a contract with JCU for that core \$19.5 million. Of course, James Cook University is co-investing \$15.8 million themselves. There is an amount of \$8.75 million which is coming through the Super Science research infrastructure funding. We are also contributing funding from our tropical marine facilities funding, our terrestrial ecosystems research network funding, our marine observing system funding and our e-research infrastructure funding. They are all going in to support JCU and the surrounding facility.

Senator COLBECK—So how much do you estimate will actually be attracted in with all of those contributions? How much is going to be attracted into that in respect of conducted research?

Ms Lansdown—It is difficult to estimate how much research it will bring in. However, what it does is co-locate a range of things that will actually enhance the possibilities for multidisciplinary and collaborative research. So it brings together JCU's tropical science and humanities researchers. It co-locates the Reef and Rainforest Research Centre. It enhances the links between them and AIMS and CSIRO. So it brings together a range of researchers who have been in disparate locations in order to focus on issues of common interest.

Senator Carr—So there is a total investment of \$44 million.

Senator COLBECK—Yes. I have that.

Senator Carr—The program itself will create some 200 jobs in its construction. It will support 125 research staff when completed. So, on top of the \$44 million, you could make projections as to the future grant allocations, but it would be, I think, a fairly abstract concept at this stage. What you can say is there is \$44 million. It is designed to support 200 jobs in its construction and 125 research staff when it is completed.

Senator COLBECK—So we are expecting a construction period of two years. Have we got a commencement date on that at this stage with the contract signed?

Ms Lansdown—Actually, Senator, I need to correct what I said. We have not actually signed the contract yet. We are developing the contract with JCU at the moment.

Senator COLBECK—So the next question is a bit superfluous in that context, then. The sum for the research facility is \$44 million, with contributions of \$19.5 million from the Commonwealth and \$15 million, you said, from—

Ms Lansdown—It is \$15.8 million from James Cook.

Senator Carr—And \$8.75 million for the Super Science funded research infrastructure projects. The aim is to try to bring together as much as we can in the Cairns region in terms of tropical social science and humanities research and the co-location of the Reef and Rainforest Research Centre. The effort is being made there to enhance the links between AIMS, CSIRO and James Cook and facilitate the development in North Queensland of national collaborative research infrastructure investments through the Super Science initiative. So it is essentially attempting to collocate and improve the level of collaboration between existing research infrastructure in the region.

Mr Paterson—Senator Colbeck, while you are examining other issues, you asked a question in relation to the Innovation Ambassador Program.

Senator COLBECK—Yes.

Mr Paterson—That was not an election commitment of this government but a commitment made by the former Prime Minister in August 2007.

Senator COLBECK—I did not think it was one of ours.

Mr Paterson—The funding for that program disappeared, if that is the technical term, in Budget Paper No. 2 in the 2008-09 budget. It was one of the Responsible Economic Management measures that were announced at the time. So we no longer run the program. It was a commitment of the former government, and the funding was lost to us in the 2008-09 budget.

Senator COLBECK—Well, as reluctant as I may be, I am reading now from a www.kevin07.com.au document. I am not sure that it would have been put out by the coalition. It is a 2007 policy document.

Senator CAMERON—Who knows where you are going at times! We do not know who your leader is anymore.

Senator COLBECK—It is off your website.

Senator Carr—Senator Colbeck, all I can say is that I was not aware that it was one of our commitments. The secretary has advised it was the previous government's.

Senator COLBECK—I am here to remind you and I am reading from your policy document.

Senator Carr—I had something to do with those documents and I do not recall.

Senator COLBECK—It says, 'A Rudd Labor government', and I doubt that John Howard would have written it.

Senator Carr—I had something to do with those commitments and I do not recall innovation ambassadors as part of our list of commitments.

Senator COLBECK—It says:

A Rudd Labor Government will make the office of the Chief Scientist a full-time position.

... ..

Federal Labor will also use the \$5 million currently allocated to the Innovation Ambassador role of the new Innovation Australia Board to establish a stronger Innovation Ambassadors program with a broader remit than that of the Innovation Australia Board.

I am sorry. I am reading from your document. I am happy to table it. This document has all of the identifiers of a Labor Party promise. Look, if you have decided to cut it—

Senator CAMERON—There is not a great chance that you or others have tried to—

Senator COLBECK—No. It has been nowhere near me, Senator. I invite you to come across and verify it.

Senator Carr—Senator Colbeck, all we can say is that in the 2008 budget it was taken out.

Mr Paterson—The \$5 million went.

Senator COLBECK—The \$5 million was taken out?

Mr Paterson—Correct.

Senator Carr—But it was not put in by us, either. That is the point.

Senator COLBECK—Well, you made the promise. I did not make the promise. I will take responsibility for my promises. I do not have a problem with that. But this is your promise, Minister. You can go back and verify it on the website and we can fight about it another day, if you like. But I did not make the promise; you did. What you do with that promise we will all be judged on.

Senator CAMERON—Can we believe anything you say? Have we got to get it in writing from you?

Senator COLBECK—I will give it to you in writing, if you like, Senator Cameron, and you can identify it.

CHAIR—We are doing quite well without this.

Senator CAMERON—I am only asking.

Senator COLBECK—It has Kevin07 written at the bottom of it. We were all supposed to believe your campaign promises. Every day we see what happens to those promises.

CHAIR—Do you have a question, Senator Colbeck?

Senator COLBECK—Yes. I will come to some more. If it is a broken promise, it is a broken promise. We can deal with it in that particular context. I am going to keep you away from the jellybeans at dinnertime next time, Senator Cameron.

I want to go back through some of the announcements that were made in the funding under the 2009-10 budget. A significant dollar amount was allocated to a number of projects. There was \$906.9 million over five years to support a number of projects. I want to get a sense of where we are at in respect of the projects that fall within this part of the portfolio. As I read through them, I see that some of them actually do not fall in here. Is the national network of research data storage and collaboration part of what we are doing? There was \$97 million committed to that. Can you tell me where we are at with that project?

Ms Lansdown—It actually has two elements. There is a data storage element to the value of about \$50 million and a collaboration service element to the value of \$47 million. We are about to sign the contract for the research collaboration service element. We actually have essentially 23 contracts that relate to that \$901 million this year. We have 17 of them signed. We anticipate getting the remaining six signed by the end of the year. The data storage contract will not be signed until the next financial year because there is no funding that relates to that in this financial year. We have staged the contract so that if there is funding in this financial year they are signed first.

Senator COLBECK—So the collaboration infrastructure?

Ms Lansdown—Yes. That will be signed in the next couple of weeks.

Senator COLBECK—What collaboration infrastructure is that funding? What does the \$47 million associated with that go to?

Ms Lansdown—It relates to a whole range of services that the research community uses around the country—grid infrastructure, services to help them to interoperate between each other, a whole range of services for them to access data at the desktop—it is a range of different projects. There is also some competitive element to that money which we call the NeAT projects, where individual discipline areas require research collaboration applications. They can compete for funding to develop those applications. But the overarching theme is to try to ensure that all those products and services as they are developed are interoperable and available to all the Australian research community.

Senator COLBECK—So what you are trying to do is construct one single framework that everybody can access into or network into?

Ms Lansdown—Yes. I guess at it basic level that is the objective. But there is also a range of requirements of individual discipline areas where we actually go down to a deeper layer rather than over the top. So it is a range of different things.

Senator COLBECK—Does it incorporate and bring in existing frameworks and networks so that effectively—

Ms Lansdown—Yes.

Senator COLBECK—To try to build something that is more encompassing?

Ms Lansdown—Yes. There are a number of principles that we employ that include things like open access for all researchers wherever possible but not to duplicate existing infrastructure, to take account of what exists and look at how that might be built upon and built into a system rather than overbuilding or redesigning.

Senator COLBECK—Similarly, the research data storage is providing a space for a framework where information is readily accessible and easily researched. It is trying to prevent duplications or people getting access to issues of similar interest. They can research them and define what they are doing as far as research is concerned?

Ms Lansdown—Yes. We are undertaking a process of consultation at the moment. We actually have had a discussion paper out in the sector to seek advice about how we might arrange the data storage investments. There are probably three different models you could use. We have received 22 submissions from universities and other institutions that have a strong interest in data storage. It is likely that we will go with the distributed model. Not every university needs a mega data store on site, but there are elements like proximity to high-performance computing, which is important. Where there are concentrations of researchers in a particular discipline area is another consideration. So we are working through that process at the moment. We have deliberately left that contract so we could spend a little more time doing some consultation with the sector about what the right model would be for investment.

Senator COLBECK—There are a couple of general questions, but I might put them on notice.

CHAIR—Thank you.

Senator CAMERON—Mr Paterson, can you advise me what total employment is in DIISR?

Mr Paterson—Now or going forward, Senator Cameron?

Senator CAMERON—Now.

Ms Graham—In terms of employment, the average staffing level for 2009-10 is 1,973. That is the estimated average staffing level for this financial year.

Senator CAMERON—What is the turnover in annual terms?

Mr Paterson—We anticipated that all the general corporate questions were going to be dealt with during the day and we had only the science and research elements left, Senator. The people from HR and the like who were here all day departed at dinnertime.

Senator CAMERON—I am happy for you to take these on notice, if you like.

Mr Schwager—Our separation rate is currently, based on the figures this financial year, 6.8 per cent.

Senator Carr—How many people in the department next year?

Ms Graham—We estimate the average staffing level to be 2,288.

Senator CAMERON—With that turnover, Mr Paterson, you would look at losing 100-odd employees each year? It would be about 500 to 600 employees turnover. That is 20-odd per cent. What is the figure?

Mr Paterson—It is a bit less than 120.

Senator CAMERON—We need Barnaby!

Mr Paterson—A bit less than 120 over that period.

Senator COLBECK—They are rubbery figures, I would have thought.

Senator CAMERON—They're Barnaby's, not mine! As you are aware, there have been some proposals for a freeze on recruitment. Given your turnover, what are the implications for a freeze on recruitment for your department?

Mr Paterson—Any savings measure that is applied to the department has a consequence, whether it is a freeze of the nature you outline or other efficiency measures. If there are savings applied to the department, we have to make choices about the activity that is undertaken and the activity we have to cease. As you are aware, our anticipated ASL going forward increases in the next financial year. That is predominantly driven off the back of us taking over, with effect from 1 July, the national trade measurement function, which is a function traditionally undertaken by the states and territories, and taking over responsibility for what will be known as the Australian Astronomical Observatory, currently known as the Anglo-Australian Observatory, at Coonabarabran. So our numbers will vary depending on the activities we undertake. But if there are savings measures applied to the department, we have to curtail activity to reflect the reduction in the available appropriation.

Senator CAMERON—Thanks.

CHAIR—There being no further questions, that will conclude today's discussion. The committee will suspend until tomorrow morning, when we will begin with the Resources, Energy and Tourism portfolio.

Committee adjourned at 9.08 pm