



COMMONWEALTH OF AUSTRALIA

Proof Committee Hansard

SENATE

ECONOMICS LEGISLATION COMMITTEE

Estimates

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THURSDAY, 25 OCTOBER 2018

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SENATE

ECONOMICS LEGISLATION COMMITTEE

Thursday, 25 October 2018

Members in attendance: Senators Bushby, Kim Carr, Di Natale, Hume, Keneally, Ketter, Leyonhjelm, McAllister, O'Neill, Patrick, Dean Smith, Williams.

TREASURY PORTFOLIO

In Attendance

Senator Seselja, Assistant Minister for Treasury and Finance

Department of Treasury

Mr Philip Gaetjens, Secretary

Macroeconomic Group

Mr Chris Legg, Deputy Secretary, Macroeconomic Group

Mr Ian Beckett, Division Head, Macroeconomic Modelling and Policy Division

Dr Michael Kouparitsas, Principal Adviser, Macroeconomic Modelling and Policy Division

Dr John Swieringa, Principal Adviser, Macroeconomic Modelling and Policy Division

Ms Lisa Elliston, Division Head, International Policy and Engagement Division

Dr Angelia Grant, Division Head, Macroeconomic Conditions Division

Ms Laura Berger-Thomson, Principal Adviser (Forecasting), Macroeconomic Conditions Division

Corporate Services and Business Strategy Group

Mr Matthew Flavel, Deputy Secretary

Mr Robert Twomey, Chief Financial Officer, Chief Financial Officer Division

Ms Shannon Kenna, Division Head, Communications and Parliamentary Division

Miss Phoebe Burgess, Head of Human Resources, Risk and Governance, People and Organisational Strategy Division

Mr Michael Webb, Chief Information Officer, Information Services Division

Mr Simon Writer, Division Head, Law Design Office

Fiscal Group

Mr Simon Atkinson, Deputy Secretary, Fiscal Group

Mr Jonathan Rollings, Division Head, Budget Policy Division, Fiscal Group

Mr Adam McKissack, Principal Adviser, Budget Policy Division, Fiscal Group

Mr Kieran Davies, Principal Adviser, Budget Policy Division, Fiscal Group

Ms Vicki Wilkinson, Division Head, Social Policy Division, Fiscal Group

Ms Philippa Brown, Principal Adviser, Social Policy Division, Fiscal Group

Mr Robert Jeremenko, Division Head, Retirement Income Policy Division, Fiscal Group

Mr Darren Kennedy, Principal Adviser, Retirement Income Policy Division, Fiscal Group

Ms Michelle Dowdell, Principal Adviser, Retirement Income Policy Division, Fiscal Group

Mr Robb Preston, Principal Adviser, Retirement Income Policy Division, Fiscal Group

Ms Kate Phipps, Division Head, Commonwealth-State Policy Division, Fiscal Group

Mr Andrew Deitz, Senior Adviser, Retirement Income Policy Division, Fiscal Group

Markets Group

Ms Diane Brown, Deputy Secretary Acting, Markets Group

Mr James Kelly, Chief Adviser, Financial System Division

Mr Warren Tease, Chief Adviser, Financial System Division

Ms Julie Greenall-Ota, Principal Adviser, Financial System Division

Ms Elizabeth Williamson, Division Head, Consumer and Corporations Policy Division

Ms Kate O'Rourke, Principal Adviser, Consumer and Corporations Policy Division

Ms Lucy Vincent, Principal Adviser, Consumer and Corporations Policy Division

Ms Kate Lynch, Principal Adviser, Consumer and Corporations Policy Division

Mr Roger Brake, Division Head, Foreign Investment Division

Ms Victoria Anderson, Chief Adviser, Foreign Investment Division

Ms Jessica Robinson, Principal Adviser, Foreign Investment Division

Mr Tim Baird, Principal Adviser, Foreign Investment Division

Structural Reform Group

Ms Meghan Quinn, Deputy Secretary Structural Reform Group

Mr Hamish McDonald, Chief Adviser

Mr Tom Dickson, Principal Adviser

Ms Kristen Baker, Principal Adviser

Revenue Group

Ms Maryanne Mrakovic, Deputy Secretary, Revenue Group

Ms Marisa Purvis-Smith, Division Head, Individuals and Indirect Tax Division

Mr Robert Ewing, Acting Division Head, Tax Analysis Division

Mr Paul McCullough, Division Head, Corporate and International Tax Division

Mr Geoff Francis, Principal Adviser, Corporate and International Tax Division

Mr Brendan McKenna, Principal Adviser, Corporate and International Tax Division

Ms Kathryn Davy, Principal Adviser, Corporate and International Tax Division

Mr Graeme Davis, Acting Division Head, Tax Framework Division

Mr Patrick Boneham, Division Head, Black Economy Division

Mr Simon Writer, Division Head, Law Design Office

Australian Charities and Not-For-Profits Commission

The Hon. Dr Gary Johns, Commissioner of the Australian Charities and Not-for-profits Commission

Australian Taxation Office

Mr Chris Jordan, Commissioner of Taxation

Mr Neil Olesen, Second Commissioner, Client Engagement Group

Mr Matt Hay, Acting Chief Information Officer, Enterprise Solutions and Technology

Ms Jacqui Curtis, Chief Operating Officer, Corporate and Enabling Services Group

Ms Melinda Smith, Chief Service Delivery Officer, Service Delivery Group

Ms Frances Cawthra, Chief Finance Officer

Ms Deborah Hastings, Deputy Commissioner, Review and Dispute Resolution

Mr Jeremy Hirschhorn, Deputy Commissioner, Public Groups

Ms Deborah Jenkins, Deputy Commissioner, Small Business

Mr James O'Halloran, Deputy Commissioner, Superannuation

Mr Jonathon Todd, ATO General Counsel, Australian Taxation Office Corporate

Ms Michelle Crosby, Deputy Registrar, Business Reporting and Registration

Mr Robert Ravello, Deputy Commissioner, Debt

Mr Tim Dyce, Deputy Commissioner, Indirect Tax

Mr William Day, Deputy Commissioner, Private Groups and High Wealth Individuals

Mr Grant Brodie, Deputy Commissioner, Client Account Services

Australian Competition and Consumer Commission

Ms Linley Johnson, National Competition Council Executive Director

Mr Rod Sims, Chair

Ms Rayne de Gruchy, Chief Operating Officer

Mr Scott Gregson, Executive General Manager, Merger and Authorisation Review Division

Mr Marcus Bezzi, Executive General Manager, Specialised Enforcement and Advocacy Division

Mr Rami Greiss, Executive General Manager, Enforcement Division

Mr Tim Grimwade, Executive General Manager, Consumer, Small Business and Product Safety Division

Mr Michael Cosgrave, Executive General Manager, Infrastructure Regulation Division

Mr Peter Maybury, Chief Finance Officer

Ms Elise Davidson, General Manager Strategic Communications Branch

Australian Energy Regulator

Ms Michelle Groves, Chief Executive Officer

Ms Sarah Proudfoot, General Manager, Retail Markets Branch

Mr Warwick Anderson, General Manager, Network Finance and Reporting

Mr Gavin Fox, Director, Wholesale Performance

Australian Prudential Regulation Authority

Mr Wayne Byres, Chairman

Mrs Helen Rowell, Deputy Chairman

Mr John Lonsdale, Deputy Chairman

Mr Geoff Summerhayes, Member

Mr Mark Adams, Executive General Manager, Specialised Institutions Division

Mr Warren Scott, General Counsel

Mr Adrian Rees, General Manager, Diversified Institutions Division

Australian Securities and Investments Commission

Mr James Shipton, Chair

Mr Daniel Crennan QC, Deputy Chair

Ms Cathie Armour, Commissioner

Ms Danielle Press, Commissioner

Mr John Price, Commissioner

Ms Laura Higgins, Senior Executive Leader, Financial Capability

Ms Louise Macaulay, Chief Supervisory Officer

Mr Michael Saadat, Senior Executive Leader, Deposit Takers, Credit and Insurers and Regional Commissioner—New South Wales

Mr Tim Mullaly, Senior Executive Leader Financial Services Enforcement

Mr Warren Day, Senior Executive Leader Assessment and Intelligence and Regional Commissioner - Victoria

Mr Carlos Iglesias, Chief of Operations

Mr Greg Kirk, Senior Executive Leader, Strategy Group

Ms Jane Eccleston, Senior Executive Leader, Investment, Managers and Superannuation

Productivity Commission

Mr Michael Brennan, Chair

Ms Karen Chester, Deputy Chair

Ms Nina Davidson, Head of Office

Commonwealth Grants Commission

Mr Michael Willcock, Secretary

Mr Anthony Nichols, Assistant Secretary, Branch A

Mr Gregory Freeman, Chief Operating Officer, Corporate Services

Inspector-General of Taxation

Mr Ali Noroozi, Inspector-General of Taxation

Mr David Pengilley, General Manager, Inspector-General of Taxation

Committee met at 09:00

CHAIR (Senator Hume): I declare open this meeting of the Senate Economics Legislation Committee. The committee will continue its examination of the Treasury portfolio with questions for the ACCC and the Australian Energy Regulator. The hearing will then follow the order as set out in the circulated program. I ask photographers

and cameramen to follow the established media guidelines and the instructions of the committee secretariat. As set out in the guidelines, senators' and witnesses' laptops, mobile phones and other devices and personal papers are not to be filmed.

Australian Competition and Consumer Commission
Australian Energy Regulator

[09:01]

CHAIR: I welcome the Assistant Minister for Treasury and Finance, Senator Hon. Zed Seselja, representing the Treasurer; and officers of the ACCC and the Australian Energy Regulator. Mr Sims, would you like to make an opening statement?

Mr Sims: No, I'm happy just to dive into questions, thanks, to give maximum time for that.

CHAIR: Minister?

Senator Seselja: No, thank you very much.

CHAIR: Thank you.

Senator KETTER: Mr Sims, I will start off with some of the news we've seen today. Did you provide a recommendation to the government for divestment powers in the energy sector?

Mr Sims: No, that wasn't one of our recommendations. I guess we took the view that there should be a range of forward-looking measures to promote competition—things like the 20 per cent cap on new acquisitions, our debt underwriting recommendation and bidding demand into the market. So we did take a different approach.

Senator KETTER: When was the first you learned of the government's intention to pursue this policy? When did you find out about this?

Mr Sims: I think I can confidently say I found out about it when everybody else did: when I read about it in the newspaper. But I have no idea when that was. Certainly that's when I found out about it.

Senator KETTER: So last Monday, I think.

Mr Sims: I think it was mentioned well before last Monday. Whenever it was first mentioned, I've just been following it in the press.

Senator KETTER: It is some weeks ago now, yes. Did you have any conversations with Mr Morrison beforehand on these powers?

Mr Sims: I don't think so. I'm just trying to be as clear as I can. We've had a number of discussions, obviously, with the Prime Minister—the previous Treasurer—on energy matters, as you can imagine. He took, when was Treasurer, a keen interest in our study. So we've had a lot of conversations, but in terms of the divestiture thing I don't think we have. Certainly I don't think I have.

Senator KETTER: Thank you very much. Can we just go more broadly to the energy policy question. Like the Labor party, the government has announced it will be adopting your default retail price recommendation as policy. Can you just give us a short explanation of what you've recommended there and how it will work.

Mr Sims: We had two goals in mind with the default pricing. They're quite separate goals that we were pursuing as we worked up our recommendations, and then they came together through one mechanism. The first objective was to take some of what I've described as fluff out of those standing offers. What's happened over the last 10 years is that electricity prices in real terms have gone up by 56 per cent but the standing offers have gone up by something north of 100 per cent. I think that's largely because companies have more and more, in their marketing, wanted to rely on discounts and, the bigger the standing offer, the bigger the discount. So the standing offers have gone up way more than market rates have. I think those who are stuck on standing offers, which is 20 per cent of small business and 20 per cent of residential customers in New South Wales and Queensland, are just paying too much for that. So we recommended that a default price be set in place of retailers individually setting that price.

The second objective, which was really important, was to have a common benchmark. You don't have to offer a discount, but if you do it's got to be off that set default price so that customers can compare a 20 per cent discount with a 10 per cent discount. At the moment we have situations where you can be offered a 40 per cent discount or no discount, and the price is the same. You just can't rely on the discount. We want to make sure that there is more competition in the market and that consumers can understand the market. We think a well-functioning market needs that clarity. So it was a comparison for discounts as well as taking some of the fluff out of the standing offers, to the benefit of those stuck on them.

Senator KETTER: How will this work to lower retail prices, and which customers will it lower prices for?

Mr Sims: I think it will probably benefit all customers. About 20 per cent of small business customers will benefit. These are our estimates—my colleagues on my left have the delightful job of having to set it. In our report that we submitted at the end of June, we estimated that 20 per cent of small businesses would benefit and that they would benefit by about \$1,000, give or take a bit—some more, some less—and residential consumers would benefit by \$200 to \$300. There are probably 10 per cent to 15 per cent of those—as I said, it is nearly 20 per cent of residential consumers in New South Wales and Queensland, and it's a lot less in other states, so the average is 10 per cent or 15 per cent of residential customers. Those on standing offers clearly benefit at the stroke of a pen. All other people benefit because they have clarity on discounts. Some small proportion of customers find their way around the market and get the best offer anyway. For others, this clarity will help them get a better offer, and, in moving to a better offer, they could easily save \$100 by having clarity around which discount to choose. I don't know how many of those people who aren't on standing offers will benefit, but all of them stand to benefit to some extent. It's one of our key recommendations.

Senator KETTER: In your report, you provide a table that sets out some of the estimated savings. I'm looking at appendix 5 on page 368. Do you have that in front of you?

Mr Sims: I've memorised just about every page of that report, so I know exactly the table you are referring to—I know the numbers on it. I have to say: we did adjust the numbers from the report to the press release, which I know was awfully confusing. The numbers I've just quoted to you are the numbers that we put in the press release, which differed from the ones in the report. We tried to make that clear but I realise that's caused a lot of confusion, so I very much apologise for that. Once we'd sent the report to publishers, we got new information which changed the numbers. We had to go with the latest numbers, and so we did, but I do understand that it's confusing having a difference.

Senator KETTER: Let me just see if I've got it right then: the estimated saving for a South Australian customer who moved from the standing offer to the default offer was something like \$140 a year?

Mr Sims: That sounds about right, from the report, yes.

Senator KETTER: So the average saving—

Mr Sims: I'm getting it passed to me now; my colleagues on my left are ever vigilant! Yes, I've got it.

Senator KETTER: So the average saving per South Australian customer appears to be \$17.

Mr Sims: Yes. We worked out the average saving per customer so we could do the bill chart and talk about savings overall. For those on standing offers in South Australia, the saving is \$140. But, as I say, those numbers have gone up in our press release. All the numbers there—\$165, \$105, \$140 and \$106—have now gone up by close to \$100 because of the new numbers we've got. As I said, I apologise for that. The numbers I've been using, when I say it's \$200 to \$300, are the new numbers. I understand the confusion, and, again, apologise.

Senator KETTER: Can you tell me what is the revised average saving per South Australian customer?

Mr Sims: I can certainly send you that, but they vary by between \$200 and \$300. I did actually have that number—there's a chance I still have it, depending on what I managed to bring with me—but I can certainly provide it. But the numbers are between \$200 and \$300.

Senator KETTER: Your report didn't present a saving for ACT customers. Is this because the default recommendation won't apply in the ACT because there's already a regulated price?

Mr Sims: Correct. That's exactly right.

Senator KETTER: My figures might be wrong now. According to the report, the estimated savings for residential customers in South Australia from the implementation of the default offer would be \$832, and ACT customers would save \$273.

Mr Sims: I've got the numbers now. Instead of the ones on that page, Victoria is \$287, New South Wales is \$183, South-East Queensland is \$252 and South Australia is \$416—sorry, I've done them in a different order to what they are there. They changed a lot with the latest numbers that came from the AEMC. There was a huge change there. When we were doing the report, they were old numbers.

Senator KETTER: I want to reflect on the old numbers for a second. When the Prime Minister announced that they were going to adopt the default offer recommendation, he said:

Well, on the residential customers—this is just on the default price—the savings for residential consumers range from \$273 in the ACT through to \$832 in savings in South Australia.

Was this claim by the Prime Minister consistent with your analysis that was set out in your report at that time?

Mr Sims: If that quote refers to 'up to', which I think it does, it is consistent. It depends, firstly, on what standing offers you're on, because all the standing offers from the retailers differ a lot, and then it depends on what your consumption is. I suspect the \$800 is at the top end of the savings that anybody could make. They'd be on a lousy standing offer—one of the worst—and they'd be high usage customers. I can't comment on the ACT, I'm afraid. I haven't looked at that for a very long time, so I don't have that at the top of my mind.

Senator KETTER: I'm just interested in whether or not what the Prime Minister said is consistent with your analysis at the time, as per your report.

Mr Sims: I think in New South Wales, if the words 'up to' were used, yes. I will get back to you on the ACT.

Senator KETTER: This was said at the press conference on 23 October. When did your media release come out?

Mr Sims: It would have come out in early July. We will make sure that that is made available as well.

CHAIR: I've got some questions for you, Mr Sims, about the open banking regime and, particularly, the consumer data right. I know that this was announced in the 2017-18 budget but I'm wondering whether you can explain, for the benefit of the committee, exactly what open banking is versus the consumer data right, and what the ACCC's role is going to be as this program is implemented?

Mr Sims: I'll give you one line, and then I'll pass to my esteemed expert on my right. 'Open banking' is a term used to describe the fact that the consumer data right will apply to banking in the first instance. It will then reasonably quickly apply to energy and then telco. It's essentially giving the consumer—and it's very much about the consumer—the right to have their data sent to another financial institution, at their choice, so they can compare the prices they might be able to receive. In the banking sector it's very difficult to compare offers, particularly in the sector we've spent a lot of time on, which is mortgages, where the only way you can get an alternative offer is to go through an application process with another bank to find out what they'll give you, because the headline rate is meaningless. It's only when you get into the process that you find out what discounts you might be entitled to. The aim of open banking, first cab off the rank for consumer data right, is to allow the consumer either to direct their data to another bank and say: 'What's your best offer? Here's all my information,' or to do that through an intermediary.

Mr Gregson: That also comprises our consumer data right branch, which is a new branch with funding from last year's budget. I'll give you a little bit more, and I'm happy to take further questions depending on the detail you want. As Mr Sims mentioned, the consumer data right is the framework we're using. The government has indicated that it will first be used for banking, and will then move through to other sectors such as energy and telecommunications. We will have a number of roles, including recommending to government future industries to be designated; they will come on stream industry by industry. We will determine the rules, which is the high-level framework for how the data is to be released to the third party on the request of a consumer. We will have roles in accrediting third-party data receivers and presenting that information in an electronic address book, which will allow, in this case, banks to interact with us to make sure that they're releasing data to accredited persons. The open banking regime was the subject of a review that the government commissioned; Scott Farrell produced that report. It has been the prototype of how we are moving ahead with the consumer data right more generally. We've been busy with publishing a draft rules framework, which we did a couple of months ago, and we've been consulting on that. The next major part for us is to go ahead with the draft rules and produce this address book, which industry is looking for.

CHAIR: I know that this is supposed to improve competition for individuals. Does it also affect small businesses, or business generally, or does it just affect individuals?

Mr Gregson: The definition is quite open as to who can take advantage of, first of all, open banking and, then more generally, the consumer data right. It applies to standard products, which will include small businesses that have standard banking products. It's less likely to apply to large businesses that have got quite tailored products, but that is the catch to get in—is it a standard product? If it applies to a small business, then, yes, they can take advantage.

CHAIR: Is the objective of open banking and the consumer data right purely competitive? Is it to increase the amount of competition available or to reduce prices, or both?

Mr Gregson: It is a paradigm shift to empower consumers to have more competitive offerings. It does that in two ways. As Mr Sims mentioned, it provides an increased capacity for switching but also the capacity for other services to be provided. We've seen that in the banking sector with fin-techs; when you can get access to data, there are a plethora of services that can be offered to consumers for their benefits. While we can come up with

some use cases, you don't want bureaucrats coming up with exactly how these things may be used in the future. If you make it available, there will be innovative products made available.

Mr Sims: Where it's of real value is where the market is not transparent. If you could see all the prices out there and say, 'I'll take that offering, and I understand exactly what I'm getting and paying,' there's not as much value. When you've got markets that are extremely confusing, like the banking market and the energy market, then it's immensely valuable.

CHAIR: I understand what it might look like—perhaps you can better explain to me. If I have access to all my consumer data, and I go and say to a different bank: 'This is my personal situation and all my personal data. Tell me what the best offer you can give me is,' that's fine. But does it also mean that all of those financial services organisations automatically have access to my data and, therefore, can bombard me with offers?

Mr Sims: Consumers are in control. I'll let Mr Gregson answer that. But our absolute catchcry is that this is for consumers. It's not for financial institutions. Frankly, they don't count. This is for the consumer. The consumer can do what the consumer wants, and as long as the consumer is fully informed in making that decision, that's fine.

Mr Gregson: There are some fundamentals in the rules framework that we've set out. The first is that it's all driven from the consumer request to release data to a third party. The rules will also make it very clear that there has to be informed consent and it has to be known for the purposes by which it must be used. There's also capacity to say, 'I'm now done; I would no longer like my data to be used.' So, we're putting all the mechanisms in place to protect the consumer position in this regime. It also comes with parallel safeguards for privacy and the OAIC—the Office of the Australian Information Commissioner—is front and centre with us in this regime.

CHAIR: That was my next question. So, security of data must be at the forefront of our minds when we implement a regime like this; it's not just privacy but also security. What is being done in that regard?

Mr Gregson: The legislative regime picks up privacy principles in relation to certain aspects and what are also known as privacy safeguards. That's meant to set the framework for how data can be used. I've mentioned the consent aspects and the ability to say the purposes for which that data is being released. The next avenue of protection is through the accreditation process. So, the third-party data receivers will have to demonstrate that they've got the systems, the capability, to protect the security of that data. Beyond the security, we move into the standards, and that's where we are working with Data61, who will have the precise technical standards to make sure that the system is intact.

CHAIR: Obviously an open banking regime has existed in the UK for awhile. Is their open banking system regulated or overseen by an equivalent to the ACCC?

Mr Gregson: There are some differences, but we've been able to leverage a lot off the UK experience. We've been having engagement with them. They operate under a rules framework, moving to standards as well, so we've been able to gain a lot there. We may have slightly different settings and the regulatory regime is not identical, but there are some strong similarities. It's one of the good reasons banking is a good place to start. There is that parallel to look at.

Senator KETTER: Who's the regulator? Is it our equivalent?

Mr Gregson: It is our equivalent that has one of the roles in there, which is the Competition Markets Authority.

CHAIR: And I'm assuming that there have been significant learnings from the UK experience, not just from a regulator's point of view but also from an industry point of view and everything else. And I should ask: does the UK have a Consumer Data Right program in the same way we do, or just open banking? Are they moving into telecommunications and energy as well?

Mr Gregson: No; theirs is very much focused on banking; it's a banking initiative. Whether they pick up and have parallels in other industries, I'm not aware of that. It's certainly an isolated program.

CHAIR: What is your time line for moving into other industries with the Consumer Data Right?

Mr Gregson: Into other industries?

CHAIR: Well, into telecommunications and energy, and then beyond.

Mr Gregson: We are very much focused on banking today.

CHAIR: Yes, I know—I'm getting ahead of myself.

Mr Gregson: That's due to be implemented by 1 July next year with certain products, moving through into further products as we get through to February 2020 and beyond. Energy is looking like it's moving with some

interest. We're currently working with stakeholders there to determine what timetable we could move on. There are two factors that might lead to the timing there. The first is that we do not want to be distracted from banking, and we've got to make sure we have a successful implementation with the first industry. The second is that there are lots of complications, and just translating the complications from the banking sector to the energy sector, where there are very different structures, is risky. So, we want to make sure we've built in enough time. But we ourselves indicated in the retail electricity pricing inquiry that energy consumer data rights should also be a priority, and that's the one we are working towards.

CHAIR: Finally, comprehensive consumer credit reporting has already been implemented by a number of organisations, and I think it becomes compulsory in March next year. Does that sound right? You might not know that. I just want to know: has your oversight role in an open banking regime or a consumer data right regime already begun, because the beginnings of open banking have already been implemented?

Mr Gregson: The comprehensive consumer credit reporting is a matter that ASIC's progressing. There is interaction with the Consumer Data Right, and we're watching that very closely to make sure that we're not inconsistent, but it's not a frontrunner to the Consumer Data Right or open banking. But there are parallels and we are watching closely to make sure we are consistent.

Senator KETTER: Mr Sims, I want to go to the Takata airbag issue. Can you give us an update on developments on the recall? Firstly, how many potentially deadly airbags still need replacing?

Mr Sims: I'll pass that to Mr Grimwade.

Mr Grimwade: We're just about to announce the first quarter update in relation to the Takata recall. I can say that 2.5 million airbags have now been replaced in 1.6 million vehicles. There remain to be replaced 1.4 million airbags in 1.27 million vehicles. We are now seeing replacements at a rate of over 100,000 airbags per month, with 1.5 million having been replaced in the past 14 months since we've been involved. Of the 114,000 alpha airbags, which are the most dangerous population of airbag inflators, only 12,120 are yet to be accounted for, and obviously they're being prioritised. We're using a number of strategies in working with registration authorities in states and territories at the moment to incentivise the replacement of those alpha inflators.

Senator KETTER: Not all of those may be on the road.

Mr Grimwade: It's unclear. These are very old vehicles. Alpha inflators are in vehicles supplied between 2001 and 2004. So, we anticipate that not all of them will actually be operated on Australian roads. And there's one other statistic I should give you. There are, we think, around 200,000 airbag inflators that won't be subject to recall because they're either in vehicles that have been exported or stolen or they have not been registered for a couple of years or have been wrecked.

Senator KETTER: Over the course of the recall, a number of additional vehicles have been added to the recall list on the ACCC website. Are you confident now that all affected cars are subject to recalls?

Mr Grimwade: Yes, we are. The fact that there are new vehicles being added is related to the staggered approach that we have to the Takata recall. New cars are being put on future recall lists. If a car is to be recalled in the future, it will actually become an active recall at a particular point of time, and then they're added to the recall list on the website.

Senator KETTER: You've endorsed the Chamber of Automotive Industries online portal as well as its regular updates on the Product Safety Australia website. How are you informing those without internet access of the potential dangers of these airbags?

Mr Grimwade: As part of the recall notice we required a number of communication initiatives from the manufacturers to consumers. One of those initiatives was in relation to a mainstream advertising campaign. Part of that campaign from the FCAI, which was doing it on behalf of the manufacturers, was to initiate a website where easy access through a registration plate could be entered, rather than a VIN number, ismyairbagsafe.com.au. You're also able, if you don't have internet access, to text a particular number that's been advertised, and you can text your registration plate and get contact that way. In addition to that particular mechanism, the FCAI have rolled out a very significant TV campaign, and that's a three-month period. They've also rolled out radio advertising, rural, regional and metro billboards and newspaper advertising. In addition to the general advertising campaign there are requirements in the recall notice for them to have an escalated approach to targeting individual consumers who have affected airbags through post, registered post, SMS texting and those sorts of methods.

Senator KETTER: How many people have subscribed to the product safety alerts distribution list?

Mr Grimwade: I don't have that figure precisely, so I might take that on notice, but it would be I think in the tens of thousands. But I should note that we are aware that 3.62 million consumers have accessed the ismyairbagsafe.com.au website, and through that process over half a million consumers have had a vehicle identified as having an affected airbag.

Senator KETTER: Have the state registers been sharing their data with the Commonwealth to inform the recall process?

Mr Grimwade: Yes. That was one of our early initiatives. We set up what's called a Takata Interagency Group involving all the consumer law regulators from states and territories and also all the registration authorities as well as the department of infrastructure and ourselves, and we chair that group, and there's another meeting on Monday. We have promoted a number of other initiatives and we're pleased to say the registration authorities and states and territories are working with us to achieve this, to share the data that they have consumer contacts, particularly given that the NEVDIS database is a bit outdated and doesn't have all the information that manufacturers need to contact consumers. So, that's one of the main initiatives. Another one is that registration authorities are sharing information relating to the Takata recall with consumers and people who are visiting their offices. The third initiative, which is an important one, is that a number of jurisdictions have now implemented de-registration sanctions for consumers who will not have their alpha bags replaced despite being contacted and informed by the manufacturers that they have an alpha airbag.

Senator KETTER: I understand that there's been a problem with the recall in the sense that there's been a global short supply of airbags, which has led to extended waiting times for replacements. There have also been reports that some faulty Takata airbags have been replaced with further faulty Takata airbags. Are you able to tell us how many airbags have been replaced with faulty airbags?

Mr Grimwade: Perhaps I'll address the first question first and then move on to the like-for-like replacement issue. There has been global competition for the supply of replacement inflators. We estimate that there are around 100 million vehicles affected worldwide. A number of recalls around the world are competing for the supply of replacement inflators. That was one of the reasons we have a staggered approach to the Takata recall that will conclude in December 2020. We are confident—and we've been informed by the manufacturers—that there is sufficient supply to each of those manufacturers to meet the tight time frames that we've required of them every quarter to achieve a certain number of replacements.

In relation to the replacement of faulty airbags with other faulty airbags, that has been a practice, and there's much less of that going on. Our recall notice requires that there be no more like-for-like replacements beyond a particular date—I think it's the end of 2019. But we expect that there won't be any like-for-like replacements, or very few, next year anyway. This has occurred because of the fact that there aren't very many alternative suppliers of airbag inflators and these replacement inflators from Takata are not unsafe for a lengthy period of time, for at least six and up to 25 years. So, they're not immediately faulty. If a supplier has no access to a substitute, then we have permitted the like-for-like replacement so long as that like-for-like replacement is replaced by a non-Takata airbag within the time frame in certain situations. You don't want a situation where you have, say, a 10- or 15-year-old Takata inflator in a vehicle and you extend the waiting period for a substitute replacement by a year or so, when it can be replaced by a safe Takata inflator which is then replaced before there's any risk of misdeployment manifesting.

Senator KETTER: All like-for-like replacements will be gone by the end of 2020?

Mr Grimwade: No. The end of 2019. We understand from talking to manufacturers that they now have enough supply of non-Takata inflators so there are very few, if any, like-for-like replacements occurring that we are aware of.

Senator KETTER: But, where it has happened, if a driver is injured, in the course of driving a vehicle as a result of a faulty replacement, is the Commonwealth liable?

Mr Grimwade: I don't have an answer to that question. I might have to take that on notice. The fact is that there's much greater risk of an older Takata inflator misdeploying than a new Takata inflator. The best evidence that the Commonwealth has received, from the pre-eminent expert in the world—Dr Harold Blomquist—and supported by numerous expert studies, is that the minimum safe life of a Takata inflator is six years and, frankly, they're the worst of the worst inflators. The more modern Takata inflators may present a risk much later on than that, and that risk itself is only going to present in the most hot and humid environment as well.

Senator KETTER: Given that there appears to be a lack of communication between the manufacturers and consumers, with many consumers apparently still in the dark about the recall process, does the Commonwealth

have powers to compel manufacturers to communicate with consumers and notify them of the risks of driving with a potentially deadly airbag prior to the 2020 deadline?

Mr Grimwade: That is what they are required to do under the recall notice. One of the reasons we issued a compulsory recall was the inconsistent approach and, in some cases, lack of transparency in communicating to consumers the reasons for the recalls. We have required very clearly, for every manufacturer, in every communication with the consumer, to identify the precise risk that that inflator presents, including the risk of serious injury or death. Those communications should be happening now, and, if they're not, they will be in breach of the recall notice.

CHAIR: Senator Patrick.

Senator PATRICK: Mr Sims, you and I had a conversation in September through the media, I think, on the CKI decision that you made. Obviously, you had to review the potential takeover of APA Group by CKI. The east coast gas report that you did a couple of years ago talked about the fact that there was monopoly pricing at play and made the observation that that is not illegal. But that observation was made. Then there was your electricity report which raised the prospect of divestiture. I think you made a reference to the UK using divestiture as a tool. Then of course there is the latest announcement by the government this week proposing divestiture. I suggested this was an inappropriate acquisition, on the basis that it would leave a foreign controlled company with a monopoly situation. Your rebuttal, and I'll give you the chance to correct me, fundamentally said that you are not in a position to deny that takeover because it doesn't create a monopoly; it only maintains one. Is that an accurate summary?

Mr Sims: Yes. Spot on, Senator. If you've already got a monopoly and you just sell them—the merger test is: does the merger or acquisition change the competitive situation? We've had this a number of times. When all the wheat ports in South Australia, which were owned by one company, a complete monopoly, were sold to another monopoly, there is no change in the competition environment. It's not something we can deal with under section 50, and it is the same here. There was a change in WA. We got an undertaking on divestitures there. But, on the east coast, essentially, APA Group—it doesn't have a monopoly but it's pretty close to that. This is in essence a bare transfer of that monopoly—or near monopoly—from APA to CKI, so it doesn't breach the act.

Senator PATRICK: I just want to explore whether or not there is a lack of power or the test is not correct. The proposition I put to you as the end state, which is the monopoly, is the thing we are trying to avoid; from a competition perspective, we would rather not have a monopoly.

Mr Sims: Yes.

Senator PATRICK: Noting that that is the end state we are trying to avoid, do we have a shortfall or would your powers be improved if your test could deal with that end state, so that, even if it starts as a monopoly, if it ends as a monopoly, that is a no-go situation. We would send a signal to boards, to companies, that of course you can get yourselves into that state where you are a monopoly, and there are certain advantages to doing that, but one of the disadvantages will be, come a takeover, you won't be able to sell the company in its entirety. There is likely to be Mr Sims saying, sorry, you can't do that. On the basis of what you went through, with CKI and other situations, is that something we should consider?

Mr Sims: The reason I think not—with respect—is that that would leave the monopoly that was then created in an unassailable position. They could just sit there knowing they could never be taken out. I'm not sure that's a better situation than where a monopoly has, I guess you could call it the threat, of somebody else taking them over. The essence of the merger test is: does the merger or acquisition change something? If it doesn't change anything, it's very hard to see how any section 50 test could block that. I just don't see how it fits within any merger test that you could use, because then you are using the merger laws to correct another problem. It's not a problem from the merger and acquisition; it's a pre-existing problem that you want to fix. If people want to fix pre-existing problems, then they need to use some other mechanism, rather than the merger laws. I think that would be an indirect and potentially inconsistent way to do it.

Senator PATRICK: What about if you added in a transition period, with the idea that all laws are designed to adjust conduct? No-one wants to put people in jail; no-one wants to fine people; the whole idea of most of our laws is to adjust the conduct of people. If you had a transition period, maybe in a couple of years—the point being, though, that you say a company might not be able to put itself up for sale and then you're still left with a monopoly. But, in those circumstances, maybe other companies would not get themselves into that situation, if it is signalled well ahead that this is going to create a problem for you further down the track. It may actually end up avoiding monopoly situations and be helpful in that regard.

Mr Sims: Possibly. I understand the disincentive effect. I just think, though, it's not consistent with a test, however you define the test, that says the problem really has to arise from the merger or acquisition. I really think, if you want to deal with monopolies, then deal with them directly, rather than using the merger test. It's clearly not a problem caused by the acquisition. It is a problem arising for other reasons and, therefore, should be dealt with by other mechanisms.

Senator PATRICK: That's very helpful. I might review this, think about it a bit more and come back.

Mr Sims: Sure. It is a fun topic.

Senator PATRICK: Moving to AER, I put some questions on notice to AEMO and AER in respect of a report that suggested that in 2016-17 there were 11 instances where the national energy system was operating outside secure limits for greater than 30 minutes. Are you familiar with the question I posed and the response? I have a concern, as you'd understand, that that says something about the robustness of the system. I understand that 'N minus one' concept, but if we are getting our system into a state where it's operating beyond secure limits for a long period of time, that does give an indication as to the volatility of our system. I note in another answer that, for the subsequent year—it looks like there's only one, and possibly another one you are looking at—you have fined some operators associated with those particular instances, but not AEMO. It's consistent with the idea that some of these penalties are just conduct. I'm worried that there may be a disincentive to actually look at the robustness of the system because the regulator is simply not willing to impose a fine upon AEMO.

Ms Groves: With respect, Senator, I don't think I would agree that AEMO is not extremely focused on the security and reliability of our system. In respect of the subject of your earlier questions, we did investigate those matters. The reliability panel report, which annually reports on such matters, we think perhaps led to some confusion in the market by characterising those as breaches of the rules, which we don't think is necessarily the case, which is why we investigate those sorts of matters. On close investigation, as you pointed out, there are a number of those matters where we were concerned about the conduct of individual market participants, and we have taken action in respect of those. The obligation on AEMO is for them to take all the actions they need to adjust the system's operating conditions to return the system to a secure operating state as soon as is practicable to do so. In those instances, we considered AEMO had taken the appropriate actions and the system was returned to a secure state as soon as practicable.

Senator PATRICK: I'm worried about the situation that was allowed to develop prior to the events occurring. It's the fragility of the system that leads to these other instances. AEMO may well then act very reasonably in response to that, but the point I'm making is that in the lead up to that the system clearly didn't have enough reserves. It was fragile, and that needs to be the focus of attention.

Ms Groves: The issues around a secure operating state and those instances were all caused by quite specific issues on the day. We can provide you with more detail about those particular matters if you would like. As you've pointed out, there have been fewer instances recently as well. Each of these instances provides the market with information. AEMO takes that information, acts on it promptly and ensures that we learn. So our system is adapting a lot at the moment. As you are aware, there are a lot of changes in the system, and it is important that we have an adaptive system that learns from each instance, adjusts, learns again and adjusts. That's what I think we are seeing. We felt the behaviour and the actions of AEMO, in respect of those, and subsequently in relation to other matters, has been appropriate.

Senator PATRICK: The chair's quite ruthless, so I'll just end with one comment. We've watched a banking royal commission where we've seen a whole bunch of abhorrent conduct by financial institutions, but Justice Hayne has made it very clear that you can't simply blame the banks; you have to look closely at the regulator. And the regulator, in all instances—it doesn't matter whether it's the financial regulator or an electricity regulator—really, if they get ho-hum, you end up with problems. I'll just leave you with that thought. I'm not making an accusation. It's just an observation I've made, in respect of the banking royal commission.

Ms Groves: I would agree that is an important thing. I wouldn't consider the approach we have taken has, in any way, been ho-hum. We have looked at these very closely, as we do, and we monitor the system on an ongoing basis.

Senator KETTER: Just going back to energy, for a moment, your report on page 89 dealt with the divestiture issue. Quoting from your report, you said:

Requiring the divestiture of privately owned assets is an extreme measure to take in any market, including the electricity market.

Can you take us through your view on that issue and why it is an extreme measure?

Mr Sims: Absolutely, I can. Divestiture, in many markets, has been a big issue in various countries at various times. I think one of my predecessors is very keen on the idea—Professor Allan Fells, who did a great job. He has a view. I guess the view we formed was that to make the call on investiture, because it has such big implications, is a difficult judgement to form. The larger the implications, the more steps, the more thought, that's got to go into doing it. Contrast that with taking people to court, which we do all the time, getting penalties against them. We've taken criminal cartel proceedings, which could see people end up in jail. They're graduated steps up. And, I guess, divestiture is such an extreme step that we felt that judgement would be very hard to reach.

It's absolutely a policy question. A lot of people have different views on it, and I mentioned Allan Fells. I respect all views. Whatever we're asked to do, we'll do. But that was the judgement we reached, and our view hasn't changed. This is purely a policy question. The government's there to make these calls, and if that's where that goes, then we'll do the job asked of us.

Senator KETTER: I'd like to move onto another issue, the issue of complementary medicines, and the Australian-made issue. You'd be aware that the ACCC has made a number of announcements, in relation to the Australian-made status of complementary medicines. Can you confirm that there's been no change to that position?

Mr Sims: No change to?

Senator KETTER: To the position you've announced.

Mr Sims: The way I'd like to address this—what changed was the law, and I'll let Mr Grimwade explain that in a second. All the ACCC has done is, when the law changed, and it changed quite considerably from what the previous law was, we just changed our guidelines. The point I do want to make before passing to Mr Grimwade is that this area of the law has been contentious for some time. People see 'Made in Australia' and say, 'Hang on, that's not made in Australia; how does that make the test?' So there was a lot of criticism that the 'Made in Australia' test led to things being able to call themselves 'Made in Australia' when, in fact, a lot of people thought they weren't. So the law changed. Mr Grimwade can briefly explain how that changed, but when the law changed we, as a matter of course, changed our guidelines. So we didn't do anything other than follow the law change. The law change was quite a profound one, quite a deliberate one. Mr Grimwade, could you explain the changes in more—

Mr Grimwade: Yes, certainly. I think in February 2017 there was a legislative amendment to the country-of-origin standard. What that change did was change the safe harbours for claiming whether a food or a non-food was grown, produced or made in Australia. In particular, and I think this is what you're getting to because the impact is on the complementary medicine sector, is the safe harbour for 'Made in Australia'. Previously, one could claim a product was made in Australia from imported ingredients if the form or appearance changed. The legislative amendment changed that definition to one where you could only claim that a product was made in Australia if there had been a substantial transformation in the nature, the identity or the essential character of all the imported ingredients.

Senator KETTER: I'm running out of time, so sorry to interrupt you. I just want to confirm your current position is that complementary medicines do not meet the substantial transformation of imported ingredients.

Mr Grimwade: No, that's not correct.

Mr Sims: No, not at all. We haven't made that judgement. We have made no judgement about any particular product. All we've done is—the law changed and we put out some guidelines of general application. How they apply to any situation is something that needs to be determined in the light of that situation.

Senator KETTER: Can I just ask this next question, then. Have you instructed the Australian Made organisation to withdraw or cancel the licences for complementary medicine manufactures?

Mr Grimwade: We issued guidance for the complementary medicine sector at their request, and after consultation with them where we expressed views in relation to various types of—

Mr Sims: We were given no instruction, to answer your question.

Mr Grimwade: The ANCL has said that it is relying on the guidance that we issued to make decisions.

Mr Sims: But that's their call, not ours.

Mr Grimwade: And there is a court case that will occur. A hearing is scheduled in late November where a particular manufacturer of fish oil is taking action against Australian Made, and we will be intervening in that court action. That relates to a particular type of process. Our guidelines dealt with encapsulation broadly, tableting, dry blending and a few other processes, but we haven't instructed, to answer your question.

Mr Sims: So the answer's no, we haven't instructed.

Senator KETTER: So you've issued guidelines—

Mr Grimwade: Correct.

Mr Sims: When the law changed. When the law changed, we had to change the guidelines.

Senator KETTER: about the law changes. Is it possible that advice regarding the revocation of Australian-made status could be extended to the pharmaceutical industry as well?

Mr Grimwade: This has to be product specific. It's a matter for every product. To give an example, in our guidelines, we consider tableting does constitute substantial transformation. We have advised that it can be classified as made in Australia if there is a tableting process. Encapsulation of foreign fish oil, we have advised, would generally not meet that test if one inquires as to whether the essential character of the imported ingredient has changed simply by encapsulating it in a capsule.

Mr Sims: The guideline wasn't specific to complementary or not; it was just general guidance.

Mr Grimwade: We've done general guidance. We have done some specific guidance to the complementary medicines sector specifying some processes but not individual products, as such. And there is one particular product that is the subject of a declaratory proceeding in the Federal Court, at the moment.

Senator KETTER: Are you going to be issuing guidelines in respect of the pharmaceutical industry?

Mr Grimwade: No, it's not our intention to issue any guidelines beyond what we've issued. Those guidelines, I think, will state the law as we interpret it. If this court case finds differently, then we would have to issue new guidelines.

Senator KETTER: I'm going to quote from the New South Wales Liberal government minister for trade and industry. These are his words not mine. He's described your actions as 'madness and a bureaucratic own goal that removes one of industry's biggest marketing advantages when selling to hotly contested overseas markets'. How would you respond to that?

Mr Sims: I'd respond by saying the key change was the change in law made by this parliament. We changed the guidelines only in accordance with the change in law. We didn't initiate anything; the law changed. I'd also point out there was massive criticism of the law as it was, which is why it changed. There were many Australian companies that were complaining about others who could use 'Made in Australia.' The law change was meant to accommodate them, so there are people on both sides of this debate.

Senator KETTER: Are you aware of the likely consequences of this determination in terms of revenue foregone and jobs lost?

Mr Sims: When the law changed, we change the guidelines. I'm sure all of those things were taken into account when the law changed. Our guidelines simply follow the law.

Senator KETTER: So you don't feel that you've got any discretion in terms of the guidelines?

Mr Sims: I think the law change was pretty clear.

Senator KETTER: I'm going to turn to the issue of petrol prices.

CHAIR: You've about a minute left.

Senator KETTER: I want to finish on this. You're committed to conducting a deep dive petrol study into the Queensland petrol cycle, which, from what I can gather, is the most egregious in the country, with a focus on the Brisbane markets. Is that still on track to commence in November this year?

Mr Sims: We're going to look at price cycles in all markets. I agree, the Brisbane market is the most problematic. We'll have that study into the price cycles done by the end of the year. It'll be completed by the end of the year.

Senator KETTER: What capacity will regional areas have to provide input into this investigation?

Mr Sims: It's mainly about price cycles, which affects the capital cities and a small number of neighbouring cities. Given it's price cycles, it's essentially focused on the cities, not the regions. We've done regional studies before, so we've given a lot of guidance on that. We'll have a continuing series of studies that will deal with regional areas. The price cycles are really an issue for capital city and surrounding areas.

Senator WILLIAMS: Thanks, Mr Sims, and your team here. On your media release 'Processors warned not to mislead dairy farmers about milk prices,' can you explain to the committee the difference between private labelled milk and branded milk?

Mr Sims: Thank you for the question. With private label milk, in virtually all the contracts that the supermarkets have with the processors, they have said that—

Prof. Williams: Is this the dollar-a-litre milk?

Mr Sims: Yes, that's right. It's the private label dollar-a-litre milk. They have said—and this is what we discovered through our dairy inquiry—that whatever the processor has to pay the dairy farmer for the milk will get passed back to the processor. The supermarket will compensate the processor for whatever the processor has to pay the dairy farmer to get the milk. That doesn't happen with branded milk. Branded milk, as you know, goes for a much higher price, but the dairy farmer gets the same price. That flow-through clause only applies to private label \$1 milk.

Senator WILLIAMS: Keep up your good work on it, because the dairy industry is doing it very tough.

Mr Sims: Indeed. We understand that.

Senator WILLIAMS: Honey is on the agenda. I brought to your attention a few years ago our Victoria honey, which was actually corn syrup from Turkey. You fixed that problem, but I think the fine was very weak. Mr Sims, do you face situations, like some other departments, where the money made by the company is a lot of money, but you're limited to how much they can be fined, which is not very much at all? Have you seen that situation? I think Nurofen was one, wasn't it?

Mr Sims: Yes. Absolutely. That was a huge problem.

Senator WILLIAMS: I think it was \$44 million worth of sales and they were fined \$4 million or something.

Mr Sims: Absolutely. But, if I can put it this way, we are extremely grateful and very pleased with the parliament for having changed the law. About six weeks ago the law changed so that the penalties for consumer law breaches went from a maximum of \$1.1 million per breach. It didn't get much publicity.

Senator WILLIAMS: Is this for companies or individuals?

Mr Sims: Sorry, I'll explain. But this didn't get much publicity because there were other events going on at the time.

Senator WILLIAMS: There have been a few going on.

Mr Sims: Yes. For a company—and I'll let somebody else explain the individuals—the penalty went from a maximum of up to \$1.1 million per breach to \$10 million or 10 per cent of turnover of the company, whichever is higher. With Telstra, for example, we recently got a \$10 million penalty under the old regime, as we did with Ford Motor Company. In my view, because there were many breaches, if that same behaviour occurred now, those penalties would be north of \$100 million for each of those companies.

Senator WILLIAMS: Is there a peak or max? For example, the proposed ASIC changes are peaked at \$210 million. Is there a maximum figure when it comes to 10 per cent of turnover in your regulations?

Mr Sims: There's no cap. It's very exciting.

Senator WILLIAMS: Hopefully it's a good deterrent.

Mr Sims: I think it will be. We need to get the first cases and some big numbers, but I've been telling everybody about it, so I hope it is a big deterrent.

Senator WILLIAMS: Good luck with it.

Senator DI NATALE: I just want to confirm that what the ACCC recommended in the retail prices report is going to be reflected in the legislation that's going to be considered by Parliament. I particularly want to focus on recommendation 4. Just correct me if I'm wrong—I want to make sure I understand this—primarily that recommendation intends to create more competition in the generation market by providing new entrants with an alternative to securing long-term financing without the need to go through the big three gentailers to sign an agreement.

Mr Sims: Correct.

Senator DI NATALE: That's the primary intent.

Mr Sims: Well it was to do three things. It was to help competitions who are getting new players, and it was to help commercial industrial customers because they would be the people taking the power, but it was not to underwrite the equity. It was just to help them get debt finance.

Senator DI NATALE: So it's a mechanism to improve competition—

Mr Sims: Yes.

Senator DI NATALE: not an investment framework in and of itself. It's targeting projects that would not have occurred because of market failure in this area.

Mr Sims: Correct.

Senator DI NATALE: Recommendation 4 uses says 'new generation' several times. From that, do I take it that it wasn't meant to apply to existing generators?

Mr Sims: Our intention was new generations.

Senator DI NATALE: So, if we're talking competition, we're talking new entrants to the market.

Mr Sims: Yes. It came about because there were new players in the market, and, if you're a new player, you need somebody to take the power for long enough to get debt finance, and either they couldn't find people willing to take the power for long enough—we said, 'You've got to take it at least five years.'—or, because it's a collection of commercial industrial customers, the bank wouldn't trust the credit of all the players. They would trust the credit of some in those out years but not all of them. Those were the two problems we sought to address.

Senator DI NATALE: Good. Is there a place for vertically integrated gentailers in what you're describing? Is there a place for them to take advantage of it?

Mr Sims: I'm pretty sure our recommendation said that you can't have 10 per cent generation capacity in any market to be eligible. You can still be vertically integrated provided you're not 10 per cent of generation capacity.

Senator DI NATALE: So the big three are unlikely.

Mr Sims: The big three deliberately don't qualify.

Senator DI NATALE: Good. That doesn't really fit anywhere within your recommendations, despite the fact that we've seen the government's consultation paper which allows it under part of their project criteria. But I take it that you're not going to speak to that. It's not an issue you probably want to reflect on.

Mr Sims: The government has come out with four different options. One of them was ours and the other three weren't. They make the policy.

Senator DI NATALE: Let me unpack the 10 per cent market concentration test. Is that by state or across the whole NEM?

Mr Sims: I think I'm correct—my colleagues might be able to help me or might not! If you've got 10 per cent in any market you can't participate.

Senator DI NATALE: So we're talking within a state.

Mr Sims: That's right.

Senator DI NATALE: In terms of a significant market share, can you specify what the criteria or principles are that you want the test to represent?

Mr Sims: It was the 10 per cent, unless I'm misunderstanding your question. You've got to be a new or small player and so you can't have a 10 per cent share in any market.

Senator DI NATALE: It's a simple as that?

Mr Sims: Yes, it's as simple as that.

Ms Groves: In any region.

Mr Sims: That's right. So you could be investing in one. If you've got 10 per cent in another, you're gone.

Senator DI NATALE: I think you said a minimum of five years—

Mr Sims: Yes. Under our proposal there was no support for five years.

Senator DI NATALE: What are the downsides of government underwriting offtake agreements from day one of operation compared to after five years as you've recommended?

Mr Sims: Our primary objective was to let the market decide what they wanted to do here, rather than government initiating it. Our recommendation was that the market would need to take the equity risk; commercial industrial customers would need to want to take the power unencumbered, unassisted for five years. We were just addressing a particular market failure that we identified.

Senator DI NATALE: So you couldn't get a long-term power purchase agreement. Under your proposal you're saying: this is a proposal that would happen anyway—

Mr Sims: No, it wouldn't have happened anyway—

Senator DI NATALE: Sorry, this is a proposal that a new entrant would like to engage—

Mr Sims: Yes—and they've found customers.

Senator DI NATALE: They've got customers. They can't get a long-term agreement. So, what we're going to do is underwrite the finance beyond five years.

Mr Sims: Yes, in a win-win—because the underwriting is at such a low price that if it ever went below that low price we'd all be breaking out the champagne. So either the government doesn't ever have to foot the bill, or we're breaking out champagne. Either way it's pretty good.

Senator DI NATALE: So you're saying that if it was from day one then effectively it's the government deciding what projects it wants to fund?

Mr Sims: We never contemplated day-one scenarios—

Senator DI NATALE: for that reason.

Mr Sims: but the concern was we wanted this to be market driven.

Senator DI NATALE: Again, to be absolutely certain, in the final of your four conditions, which is 'being capable of providing a firm product so that it can meet the needs of customers', by 'firm product' what you mean is being able to supply the consumption profile of your customers, which could be provided by generation storage, demand response and/or contractual arrangement or hedging contract.

Mr Sims: Correct.

Senator DI NATALE: Your proposal's technology neutral?

Mr Sims: It was, absolutely. I've said before that the projects we ran into that caused us to come up with this idea were gas on the one hand and renewables on the other.

Senator DI NATALE: And obviously customer led. I mean, in any these circumstances did you come across new coal-fired generation?

Mr Sims: We had no approaches from or interaction in relation to that recommendation with coal-fired power.

Senator DI NATALE: So, contracting for a pre-specified flat-load profile wouldn't be technology neutral or customer led. Would that be accurate statement to make?

Mr Sims: Governments can make whatever policy they want—

Senator DI NATALE: I'm asking you for your view.

Mr Sims: but it wouldn't be deriving from what we recommended. That's right.

Senator DI NATALE: To be clear, they wouldn't be deriving that from what you recommended. What you recommended is: there's market failure. If we want to see a new entrant in this market what we need to do is underwrite the financing—

Mr Sims: In year 6 onwards.

Senator DI NATALE: from year 6 onwards. That means not specifying what sort of load profile you want, what sort of generation capacity you want. It's got to be market led. And you're saying you've had no interaction with any new coal entrants who would seek to finance a product under this model.

Mr Sims: In relation to recommendation 4, which is what you're talking about, we had no interaction with coal-fired players.

Senator DI NATALE: The shape of the load that's being contracted should, again, be driven by the market rather than specifying load profiles in regulation?

Mr Sims: In our recommendation, yes.

Senator DI NATALE: That's very helpful. You've put a hell of a lot of thought into trying to stop the dominant retailers from using their market power to protect their generation business. Is that accurate?

Mr Sims: It was a big part of what we looked it, yes.

Senator DI NATALE: The National Energy Guarantee has gone. The government is only going to be adopting one component of it, but the other components of it are now no longer relevant. In your view, would the National Energy Guarantee have exacerbated the problem you're trying to address—the concentration of market power—because basically every new project would have to go through them?

Mr Sims: I don't think we went there much. The National Energy Guarantee, as you have just described, met two objectives—one was emissions reduction and the other was reliability—so it really wasn't central to what we were looking at, which was affordability. So, I'm not sure. We didn't really set our mind to the aspect you have just raised.

Senator DI NATALE: But do you have a view, given that one of the big problems is the dominance of the big three retailers, and we know that they are using their market power effectively to look after their generation

business? If you have a model that further entrenches that power—like the NEG—because every new project effectively has to go through them.

Mr Sims: I see.

Senator DI NATALE: Do you have a view on that?

Mr Sims: I do. Sorry, I misinterpreted—my apologies. When the NEG first surfaced, we publicly expressed concerns with it. Those concerns were then addressed so that we no longer had concerns, because the over-the-counter market transactions were going to be made public and, also, when the NEG was triggered there would be market-making obligations on the players. With those two changes, we then were no longer concerned about the NEG furthering concentration. Indeed, even though the NEG has gone, we have recommended—and I hope they still get adopted—that over-the-counter transactions be made public. They are not now. We also recommended market-making rules in South Australia that, if necessary, could be extended elsewhere. We are hoping those two components still proceed. But, with those two components, we were no longer concerned that the NEG might—

Senator DI NATALE: Okay.

Senator KENEALLY: I have a few questions regarding the auction of the 5G spectrum that's coming up later this year. I'd like to seek a brief update on considerations with respect to the Vodafone-TPG merger. Where is that process up to and can you provide any information on timeline?

Mr Sims: We are scheduled to come out with our decision in early December. That's the current schedule.

Senator KENEALLY: Regardless of whether the ACCC accepts or rejects the merger, does that impact the joint-venture that TPG and Vodafone have set up for the purpose of bidding on the 5G spectrum as a single entity?

Mr Sims: They are separate issues. We've got the merger consideration, and they joined a joint-venture to bid for the 5G spectrum. We got them to sign an undertaking that they wouldn't further that joint-venture beyond the bidding for the 5G spectrum. Our considered view is that their just bidding together for the spectrum doesn't cause a competition problem, because even if they get the spectrum together they can use it separately—that is the technology view we've formed. Sorry if that complicates it a bit.

Senator KENEALLY: They can bid as a joint-venture—

Mr Sims: For the spectrum, yes.

Senator KENEALLY: But if the merger does not proceed, and they are successful in the bidding, they could still use the rights separately?

Mr Sims: That's right. The mechanisms exist for them to retail their products completely separately and to make full use of the spectrum whenever one is selling—Vodafone is selling to its customers or TPG is selling to its customers. We don't have a competition concern with that, in and of itself.

Senator KENEALLY: Was any advice sought from the ACCC on the approach to the auction after it became clear on 31 August that there will likely be fewer bidders in the auction as a result of the joint-venture?

Mr Sims: I could make two comments. One is: the answer to your question is no, because ACMA determined that, under their prescriptive rules—which never envisaged this situation, I might add—there was nothing else they could do but continue with the auction, so they didn't need to come back to us. But, separately, our view at the ACCC has always been: we're not so much concerned with the money raised from the spectrum; we just want to make sure the spectrum can go to players so that they can operate in the market and be competitive in the market. So this joint venture coming together to bid in the auction did not affect issues that we, the ACCC, were most concerned about. It certainly affected issues the Department of Finance is concerned about but not issues we're concerned about.

Senator KENEALLY: So the lessening of competition is not an issue the ACCC is concerned about in this auction?

Mr Sims: Lessening of competition would be a drastic issue, but we don't judge there's any lessening of competition through Vodafone and TPG bidding for spectrum together, because, once they've got that joint spectrum, they can participate individually in the marketplace.

Senator KENEALLY: Sure. But I will just probe this a bit further; I'm trying to understand. It's a 120-megahertz auction. The bidders can bid for up to 60 megahertz. We've gone from three bidders to two—two bidders in what will be likely to be two lots of 60 megahertz. It seems to me that there's a great advantage to TPG and Vodafone merging into a single entity for the bidding process. They've effectively brought the competition down.

Mr Sims: I understand, and that's why I say the Department of Finance is concerned that there's less competitive tension in the bid for the auction; that's right.

Senator KENEALLY: I see your point. Your concern is about what happens. I understand.

Mr Sims: Our problem was we actually recommended competition limits of 40 so that all three players would get 40. We weren't concerned about the money from the auction; we just wanted players to have enough spectrum to then compete in the market. This joint venture coming together in a way almost achieves what we had in mind in the first place—not that we had anything to do with the joint venture happening.

Senator KENEALLY: I understand that now. Your concern is not so much the competition tension in the auction itself but rather in—

Mr Sims: That's right—who's got spectrum to compete in the market.

Senator KENEALLY: who has got it and how customers—

Mr Sims: Yes, because spectrum is the scarce resource here. If you want to compete in the mobiles market—and we desperately want to maintain and enhance competition in the mobiles market. That's how consumers benefit. But to play in the market, you need spectrum.

Senator KENEALLY: When considering the merger, will you have some consideration, then, of what happens in the auction? Will that play a role in your considerations?

Mr Sims: Yes. It won't play a big role but it will play some role, in the sense that we'll have a better sense of what the world looks like with and without the merger. We'll then understand what spectrum the parties have got and what they can do with it, and that factors into our assessment. But it's not an overriding issue.

Senator KENEALLY: Thank you very much. It was helpful.

Senator LEYONHJELM: I'd like to briefly return to this issue of the electricity market. Can you confirm that the current, and the prospective, government's support for renewable energy detracts from investment interest in non-renewable electricity generation?

Mr Sims: The support that is there going forward won't be that much, in the sense that, from 2020, when the Renewable Energy Target is met, the price on the large schemes will effectively come down to zero. So there's not that much support. There is a bit of support with small-scale solar still. We've got concerns with the way the schemes were set up in the past, but I think probably your issue is more one for the AR. But, in our view, we were looking forward—we didn't look back—and the subsidies for renewable energy under the Renewable Energy Target will largely go by 2020, and we recommended the subsidies for small-scale solar also go by 2020. So, under the ACCC's recommendations, effectively by 2020 those subsidies wouldn't be there.

Senator LEYONHJELM: So, at that stage, from 2020 onwards, would you then describe the electricity generation market as an undistorted, competitive market?

Mr Sims: It wouldn't have the distortions of particular subsidies, but we felt that measures needed to be taken to make the market more competitive, and those measures included allowing removing the market failure I was talking with Senator Di Natale about, in terms of letting new generation get in. They also involve market making rules. They also involved bidding in demand management and the 20 per cent cap on acquisitions. We felt that our collection of recommendations would progressively deal with competition problems in the generation market. So we felt we had the problem addressed, but there were four or five recommendations to do that.

Senator LEYONHJELM: Did you think the market would become more of a market—a better market outcome—if there were government support for non-renewable generation?

Mr Sims: The ACCC's view is that anything the government does will be much better if it's technology neutral. This is a very difficult market to work out—and has been for some time—what the most cost-effective form of generation is. I think, if governments pick it, they'll get it wrong.

Senator LEYONHJELM: Alright, thank you.

Senator WILLIAMS: Can I have a supplementary on that? Come 2020 and the Renewable Energy Target is fulfilled at 20 per cent—or 33,000 gigs, I believe—all those previous renewable energy certificates of contract, those payments, will continue on; correct?

Mr Sims: Yes, they will.

Senator WILLIAMS: For how long? In other words, if I build a wind tower today and I contract it at an \$80 certificate and in 2020 the RET stops, how long, ongoing, do I get paid for those certificates?

Mr Sims: I think up till 2030. If I've got that wrong, we'll come back.

Senator WILLIAMS: So it's another 10 years I get paid the—

Mr Sims: Yes, but that's in a contract that has already backed generation into the system. That doesn't affect new generation coming into the system, which I thought was Senator Leyonhjelm's question.

Senator WILLIAMS: No, but, if it's already backed once, those prices could be locked in now till 2030.

Mr Sims: That's correct; that's absolutely right.

Senator LEYONHJELM: That does make it less than a free market, doesn't it?

Senator WILLIAMS: Of course it does.

Mr Sims: Those are past decisions. We are focused on going forward. We're forward-looking people.

Senator WILLIAMS: That's a very good political answer.

Mr Sims: Thank you, Senator. I take that as a compliment.

CHAIR: And a perfect place to end this on. Thank you very much for appearing. Just before you go, Mr Sims, I congratulate the ACCC on what was obviously a very successful year for the organisation. I understand that you looked at over 280 mergers—does that sound right?—in the financial year, which is quite extraordinary.

Mr Sims: That sounds right, yes.

CHAIR: And some of your work resulted in—I've got \$170 million or so here in penalties, which is—

Mr Sims: That's right, which will go north under the new penalty regime.

CHAIR: Excellent. That's very good to know.

Mr Sims: Doing our bit to help the budget.

CHAIR: Excellent. We're all rowing in the same direction. And can I ask, too, about—you've just recently started a couple of new inquiries—wine grapes? Does that sound right?

Mr Sims: Yes, we've started an inquiry into the wine grape industry. That will be done, I think, in—

Mr Bezzi: June 2019.

CHAIR: So it won't quite be ready for the next estimates.

Mr Bezzi: No.

CHAIR: What about the foreign exchange overcharging by banks? Can we ask you questions about that at the next estimates?

Mr Sims: March or April?

Mr Bezzi: Yes, it is March or April. I'll tell you exactly.

Mr Sims: March or April, Senator. So it probably won't get in either for the next estimates, but we'll see what we can do by way of update.

CHAIR: Thank you very much for appearing before the committee today. We'll let you go. In consultation with the committee, we have decided that we will break 15 minutes early and then come back with APRA at 10:45am, if that's alright with everyone here. Thank you very much appearing today.

Proceedings suspended from 10:29 to 10:43

Australian Prudential Regulation Authority

CHAIR: I welcome officers from APRA. Thank you very much for joining us today. Mr Byres, do you have an opening statement for us?

Mr Byres: I do have an opening statement, which I think has just been circulated to you. So I'll go through it pretty quickly. I would like to begin by acknowledging John Lonsdale, who joined APRA a couple of weeks ago as a new deputy chair. John is obviously no stranger to these hearings; he's well known to many of you from his previous senior roles in Treasury. We are, obviously, very pleased to have someone with his experience join us at a time of intense activity and heightened scrutiny of the financial system and its regulators. John's appointment gives us an opportunity to take a fresh look at our governance and the allocation of responsibilities amongst the APRA members. John is going to oversee a number of our important strategic initiatives, as well as take some responsibilities in relation to supervising authorised deposit-taking institutions. In particular, John will take member-level responsibility for our work on governance, culture and remuneration, including implementation of the Banking Executive Accountability Regime. He will also review our enforcement strategy in response to the BEAR and to the issues that have emerged at the royal commission, further building APRA's crisis resolution capability and strengthening our collaboration with other regulators.

Before we turn to questions, I'd like to highlight some of the important issues on our agenda since we last appeared before this committee. In doing so, I want to emphasise the overarching point that Australia's financial system remains fundamentally sound. While there are, obviously, areas where the financial sector must lift its game, particularly in relation to operational and cultural improvements, we are thankfully working on these from a position of financial strength. Risk based capital ratios within the banking system, for example, are at their highest levels in the 20 years of APRA's existence. It is important, particularly in the current environment of volatility, that we protect and, where possible, reinforce the soundness and resilience of the system in anticipation of future adversity, whenever that may occur.

As I noted in a recent speech, however, the financial strength of the system doesn't make the evidence at the royal commission or its interim report any less confronting or uncomfortable. Clearly, there have been too many instances of behaviour that do not meet community expectations or, in some cases, the law. The commission has identified failings that ultimately will need to be addressed by institutions, by regulators and by the parliament. We will of course be providing submissions to the commission on the issues that have been identified. There are many of interest to APRA, but I want to highlight two key themes. The first is remuneration and incentives. The commission has rightly highlighted the potential for these, if poorly designed, to incentivise poor consumer outcomes. Being a prudential regulator, we've traditionally focused on the potential for poor incentives to impact on the long-term financial soundness of financial institution. That's primarily the lens through which our prudential standards are framed. The commission has suggested a broader examination of the issue is needed and APRA and ASIC will need to work together to consider how that can best be done without exacerbating existing concerns that the responsibilities between the two agencies are becoming blurred.

The second theme I want to highlight is the issue of reinforcement. While APRA has been able to generate improvements within the industry across a range of dimensions over many years, the royal commission noted that we've not utilised court based sanctions. As a supervision-led agency, our priorities have traditionally been prevention and rectification and then sanction. With the benefit of John's fresh perspective, we are re-examining our enforcement philosophy, our governance structure for enforcement decisions and our resourcing for enforcement activity, and whether they can be improved. This will take into account not only the lessons from the royal commission but also the need for new processes and structures to be developed for the BEAR. I don't want to pre-empt the outcome of that review, but in our submissions for the commission we already flagged the potential for greater use of enforcement powers to achieve general deterrence across the industry.

On the subject of the BEAR, I should note it took effect for the four major banks from 1 July. Those banks have registered their accountable persons and lodged their accountability statements and maps. Their senior executives and directors are now subject to the BEAR's obligations. Building on our experience with the initial four banks, last week we released an information paper to guide other ADIs who become subject to the BEAR from the middle of next year in meeting the new requirements. Implementing the BEAR and ensuring its operating as intended will be a major focus for our ADI supervisors over the next year or so.

While the royal commission obviously has been a priority, we've also continued to pursue our broader agenda to build resilience across all the industries we supervise. Since we last appeared before this committee, in June we released a final package of measures to clarify and strengthen the important role that actuaries play in general life and private health insurance. In July we proposed changes to the requirements for AEIs in managing risks from associations with related parties. In August, we sought feedback on possible changes to the ADI capital framework to improve its transparency, comparability and flexibility. In September, we released a package of prudential standards and guides aimed at improving governance and decision-making in the private health insurance industry. Also in September, we released updated information on prudential considerations and the use of shared computing services, including cloud, by APRA regulated institutions. And this week we have released new requirements for life insurers to report claims data to APRA, which is an important milestone in our joint work with ASIC to improve transparency and consumer outcomes in that industry. Our primary objective in undertaking all of these actions is to continually build strength in the financial system for the benefit of depositors, policy holders and super fund members.

Finally, through most of 2018, Australia—particularly APRA—has been subject to an extensive independent assessment of financial stability issues and regulatory oversight via the Financial Sector Assessment Program conducted by the IMF. As part of this review, APRA has been subject to a comprehensive assessment of its supervision approach and capabilities in banking and insurance supervision. The IMF also assessed the adequacy of systemic risk oversight by APRA and other members of the Council of Financial Regulators, our crisis preparedness and financial safety nets. As I noted last time we appeared before this committee, we welcome this

independent assessment. It provides a valuable scorecard against which to measure our capabilities and performance, and we expect the results of the review will be published by the IMF in early 2019.

CHAIR: I only have a couple of questions for you, specifically about the BEAR and about your relationship with ASIC, and then I'm going to cede my questions to Senator Williams before we moved to Senator Ketter. You were quite compressive in your opening statement, but I'd like to know if you've had any feedback on the BEAR from the big four banks, where it has been implemented already.

Mr Byres: I think there were four organisations that probably didn't welcome it when it was first announced. They have recognised that it has delivered value for them in that the process of spelling things out quite clearly in fairly thorough accountability statements for the senior executives has highlighted areas where accountability is actually not as clear as it could have been amongst the executives within organisations, particularly amongst the directors, who are overseeing the executives. They have found that exercise to actually be quite valuable for them.

CHAIR: So they're taking the process particularly seriously. Were they taking it seriously before the banking royal commission, or is it just now that we've had the interim report?

Mr Byres: No. We've been working on the BEAR essentially since the legislation passed and obviously we were doing preparation in anticipation that the legislation could pass the parliament. Banks have been preparing. I don't think it's just a product of the royal commission. I think they recognise it's a very strong piece of legislation that the parliament has passed. The penalties for noncompliance are significant, and so they've taken it very seriously.

CHAIR: Is there a general consensus that it will address some of the issues that were raised in the royal commission?

Mr Byres: I think it will address at least some of the issues raised by the royal commission. It's still framed as a prudential regime, so the obligations relate to behaviours that might jeopardise the prudential standing or the prudential reputation of the organisation. There may be issues that have been raised by the royal commission that don't necessarily go to that. But certainly some of the issues I think could well be covered by the BEAR.

CHAIR: You mentioned remuneration and incentives and you were concerned that:

The commission has suggested a broader examination of the issue is needed, and APRA and ASIC will need to work together to consider how that can best be done without exacerbating existing concerns that responsibilities between the two agencies are becoming blurred.

Is that part of your wheelhouse now, Mr Lonsdale—the relationship between ASIC and APRA and the response to the royal commission?

Mr Lonsdale: Certainly the relationships between not just ASIC but other regulators we deal with—part of my role will be to have a look at where we are, strengthen those relationships and make sure there are no grey areas where things slip through the cracks. That's certainly one thing that I'll be doing. That's one part of the responsibilities.

CHAIR: Can you talk us through the process by which you have started engaging with ASIC on these particular issues?

Mr Lonsdale: I think the first thing—two weeks in—is to go and meet them all.

Mr Byres: Is your question specifically on BEAR issues or remuneration issues?

CHAIR: No, remuneration issues generally.

Mr Byres: There has been ongoing work with ASIC. We have a team looking at issues of governance culture and remuneration, because we think those things are all interrelated with one another. ASIC has some similar specialists in the area, and those teams are engaging with one another, comparing notes and making sure that we've got consistent thinking and we're not telling the industry different things in terms of what regulators are looking for. The specific issue I think we have to tackle that comes out of the royal commission is that, by and large, we have remuneration standards for banks and other prudentially regulated organisations; they don't have the same sort of thing at present. The royal commission has said that potentially the consideration for remuneration incentives needs to look harder at conduct related matters. That is really in their bailiwick, primarily, but we have the standards and the tools. So making sure that we find a way to work together to solve a system problem is really at the heart of this. But it is still very much a work in progress.

CHAIR: I'm sorry, Mr Lonsdale. I should've said congratulations on your appointment and welcome to APRA. I think you'll bring a wealth of experience to the job, and I didn't realise you were only two weeks in. Forgive me.

Mr Lonsdale: Thank you, Senator. The other thing I'd add is that, as the chairman said, we have done some work on this, including a benchmark paper that was released earlier in the year on remuneration. One of the messages out of that paper was that, although a number of ADIs met minimum standards on remuneration, there was still quite a lot of work that could be done to raise that. So there's a work agenda there that we will work on.

CHAIR: I think that, because the royal commission has highlighted that there has been a bit of a blurring of the responsibilities between APRA and ASIC with these organisations, we'll be looking to see a work plan as to how the two agencies are engaging and making sure nothing falls through the cracks. I know it's something that we asked ASIC an awful lot about yesterday. I'd be interested to follow that up, perhaps at the next estimates, with you as well. I'm going to cede the rest of my time to Senator Williams. Senator Williams, you've got five minutes.

Senator WILLIAMS: Thanks, Chair. Thanks, Mr Byres and crew from APRA. One line of questioning: I find it concerning that, if house prices drop by 20 per cent around Australia—let's take the ACT. A report I just took notice of said that, for roughly 50 per cent of houses with loans, the amount of the loan would be greater than the value of the house. What action would APRA take in relation to stability in our banking system if that were to eventuate? Would there be a need for you to do something?

Mr Byres: I don't think we'd need to do anything. I think the work we have done over recent years has been designed to prepare us for that potential outcome. Bolstering the capital in the banking system has been an important step in that regard. Lending standards have been strengthened across the board. Most people now are required to provide more equity up-front when they're getting a loan, and that obviously protects against the potential for negative equity. I think we have to put the current softening of house prices into context. In many cities—Sydney being an extreme example, but even in other parts of the country—there were periods where house prices had gone up strongly. Now in some parts of the country they're coming back. In any of the capital cities around the country, house prices have gone up; now they've come back. Broadly speaking, they're probably still in many parts of the country significantly higher, net, than they were a few years ago. Although prices have come down, many people have built up considerable equity in their property, so it doesn't put them in immediate financial stress. The final point I'd make is that it really only becomes a problem for a borrower and for the bank if the borrower is for some reason unable to keep servicing the loan. Because if your house price goes up and down but you are happy to live in that house and continue to service the loan, it's not irrelevant to you but it doesn't impact you on a daily basis. The key things are unemployment and interest rates.

Senator WILLIAMS: Exactly. Mr Summerhayes, your responsibility for APRA is life, general and private health insurance issues is that correct?

Mr Summerhayes: That's correct.

Senator WILLIAMS: How long have you worked for APRA?

Mr Summerhayes: It will be three years at the end of this year.

Senator WILLIAMS: You used to work for Suncorp?

Mr Summerhayes: That is correct.

Senator WILLIAMS: What was your position at Suncorp?

Mr Summerhayes: I was chief executive of the life insurance business.

Senator WILLIAMS: Did you apply for the job at APRA? How did you come to get employed at APRA?

Mr Summerhayes: I was approached by a headhunter.

Senator WILLIAMS: You were chairman of the guardian financial planning division at Suncorp, correct?

Mr Summerhayes: That is correct.

Senator WILLIAMS: The corporate regulator ASIC disciplined it for breaches involving poor supervision of employees, weaknesses in controls and deficient advice, is that correct?

Mr Summerhayes: That is correct.

Senator WILLIAMS: You are named as the recipient of an external report on the guardian carried out by PricewaterhouseCoopers?

Mr Summerhayes: That was as reported recently in Fairfax Media.

Senator WILLIAMS: That's right. Was that the case?

Mr Summerhayes: There were a number of reports, but I can't comment specifically on the report that was referred to in the media, because that's going back some three to four years and I don't have access to that material, so I am unclear as to what that specific report was.

Senator WILLIAMS: I have a problem, because you were chair of guardian financial planning. At that time, one guardian adviser, Andrew Moroney—are you familiar with him?

Mr Summerhayes: Not personally.

Senator WILLIAMS: was banned for life in February 2016 due to the extent of the churning activities between 2006 and 2014 at the organisation where you were a senior officer, where you actually chair of that financial advice sector. This has been brought out in the royal commission, of course. You now have the responsibility for life and general insurance. So what I'm saying is under your watch some of the people under you were doing the wrong thing in financial planning and he is one that's banned for life for churning. We know what they churn, 120 per cent commission when they write the policy. In your position now, what experience are you going to take from your previous job to use that experience to do your job better for the responsibilities you have here?

Mr Summerhayes: One of the advantages for the APRA executive is that we have a range of backgrounds and industry experience. It is advantageous in that regard. I have quite a deal of knowledge about the industry. As it relates to that issue, we have been very active with ASIC, who has primary responsibility for some of the matters that you refer to in terms of initiatives relating to the life-insurance industry, as you would be familiar with from the PJC hearings that you, Senator, participated in and we presented to. We have been very concerned about the issues in the sector, about the governance of the sector and about some of the conduct in the sector. We have supported ASIC in their reforms of the sector around remuneration, around conflicts and around professional standards in the advice industry.

Senator WILLIAMS: That's good to hear. Were you concerned about that behaviour when you were the boss at Suncorp?

Mr Summerhayes: Absolutely. ASIC found those issues as part of a broader industrywide review. We welcomed the findings. We made sure that we appointed appropriately independent people outside of the business to oversee those matters, including the chief risk officer and the general counsel of the organisation at the time. We appointed independent experts. We made a number of executive changes with the remuneration consequences. We appointed an independent person to manage that oversight and remediate where it was required. And while those matters have been completed since I left that organisation, my understanding from ASIC is that they have been completed to the satisfaction of ASIC.

Senator WILLIAMS: Why did it go on so long under your watch? For example, there is the bloke that I mentioned and his churning activities from 2006 to 2014. You were there from 2008 until 2015. Were you aware of this behaviour?

Mr Summerhayes: I am not specifically aware of the individual behaviour of the adviser you refer to. Within that business, it was a part of a broader group. I'm aware of the actions that were taken against that adviser. My understanding is that, in fact, evidence from clients was free difficult to obtain. We had some difficulty in clients coming forward to build the case against that adviser, because we were ultimately concerned in having that adviser banned from the industry.

Senator WILLIAMS: Given the royal commission, I hope you will you hasten to be more aware of the wrongdoings that have been highlighted, given the time it took you to be aware of them in your previous job. Thanks, Chair.

CHAIR: Senator Ketter.

Senator KETTER: I will just start off with the issue of the capability review, Mr Byres. The Financial Stability Review recommended that both APRA and ASIC should commit to six-yearly capability reviews. ASIC has had a capability review. Is there one scheduled for APRA?

Mr Byres: Not to my knowledge. We had said to Treasury that we were not keen to have one this year, because we've had the IMF review that I mentioned in my opening statement; but, other than that, it's a matter for the government to decide.

Senator KETTER: Have you been consulted about whether a capability review should be undertaken?

Mr Byres: That specific question has not been put to me.

Senator KETTER: Have you ever asked for a capability review?

Mr Byres: No; but that's not to say we haven't been subject to review. There was the IMF review that I mentioned. We have earlier had reviews from the Financial Stability Board. The Basel committee have done reviews of aspects of our operations. We often get peer assessments from foreign regulators who pass through and give us feedback. So, a capability of review in the strict use of the term, no, we haven't been seeking one. But that is not to say that we haven't been subject to review and independent advice.

Senator KETTER: Has the government ever commented on why it has not undertaken a capability review as recommended by the FSI?

Mr Byres: Not to my knowledge.

Senator KETTER: The FSI also recommended that Australia needs a better mechanism to allow government to assess the performance of financial regulators and that regulators should develop better performance indicators. Can you tell us what you are doing in terms of performance indicators?

Mr Byres: We have worked over the years, we've tried within our annual report each year, to put out more information and more metrics to indicate what we've done and the sorts of things that we have achieved. I think this year we've probably got more metrics on a few different things. We've published some anonymous case studies to give examples of the sorts of things that we do. So we are working on those issues; but, ultimately, we are also guided by the requirements of the PGPA Act, the Regulator Performance Framework and the other mechanisms that we're obliged to comply with.

Mrs Rowell: Can I just add there that there is also the Regulator Performance Framework, which requires an external validation of our performance against standardised KPIs, and we've been through that process over the last five years.

Senator KETTER: Given that APRA has been described as a 'hear no evil, see no evil' regulator, Mr Byres, is it time for you to say to us that APRA has failed the Australian community in terms of supervision of the financial sector?

Mr Byres: I reject the depiction. And I think there's absolutely no case at all to say that we have failed. As I said, the fundamental purpose of APRA is the safety and soundness of the financial system, and there is no question that the financial system is sound and robust. That is what we're here to do: to make sure that depositors' money is safe and it can be repaid when people need it; the insurance companies have the financial wherewithal to repay claims as and when they're there; and superannuation money is accounted for. That is our primary task. I don't think there is any question that those tasks are not being performed well.

Senator KETTER: I accept there is that tension between enforcement action and the stability of the sector, but you haven't escaped criticism from the royal commission, with the interim report pointing out that you've never taken any enforcement action.

Mr Byres: The royal commission points out we hadn't taken court-based action, but we have a range of enforcement measures that don't involve court action. We think of enforcement as broader than strictly appearing before the court, and I think we do use our tools to achieve change within the industry and to get problems rectified when we see them.

Senator KETTER: The counsel assisting the royal commission went through your record in terms of enforcement measures. Since 2008, you've applied to a court to disqualify a person once; that's in the case of Trio Capital. In respect of superannuation, you have not entered into any enforceable undertakings other than with persons associated with Trio Capital, never commenced a civil proceeding for breach of the sole purpose test, and never identified a situation that you considered sufficiently serious to warrant action for contravention of that provision. In the last three years, you've never formed the view that a super trustee was not acting in the best interest of members, and you have not commenced any other court proceeding in the superannuation space in the past 10 years. This characterisation of a 'hear no evil, see no evil' regulator, to me, seems to be quite apt.

Mr Byres: Many of those things were superannuation related, so Helen will probably want to respond to some of that, but let me just start by saying that most of the time our supervisors are supervising against prudential standards. For the vast bulk of the work that supervisors do, we have a regulatory framework that's set out in prudential standards, and that is what our supervisors are looking at day to day: judging whether people are complying. A breach of the prudential standard in and of itself does not have any court-based sanction associated with it. If someone breaches a prudential standard, the first step is to issue them a 'show cause' notice for why they shouldn't get a direction to be asked to comply with the standard. Then there's a long and elaborate process to follow. In most cases, because institutions know that one way or another they're going to have to fix things, they fix things. That doesn't necessarily generate headlines and it doesn't necessarily occur in the public spotlight, but, as I said, I think we could point to significant change in a range of areas across a range of industries where we

have achieved material change in industry practices for the benefit of the community. Housing is one that we have already touched on where we didn't use any particular court-based issue to achieve significant improvements in the way banks were doing lending. So I think it's a narrow perspective just to say that, because we haven't been before a court, there's no action taken. In fact, there's a lot of action taken.

Senator KETTER: I accept that you take some sort of supervisory action and you are engaged with, particularly, the superannuation sector. You work with them. The question is whether they're taking you for a ride or not, particularly in relation to the Colonial First State transition to MySuper. There has been misleading communication to members there that it was signed off by APRA. I understand you've been involved in remediation activity there, but what penalties have been imposed on that company?

Mrs Rowell: No penalties in that particular case, but our focus at the time was in making sure that the remediation of the customers occurred in a timely manner. Given the response of CFSIL after we threatened to take enforcement action if they didn't deal with the customers satisfactorily and undertake the remediation, we got the response and the outcome we needed. In those circumstances, we took the view that imposition of penalties was not needed.

Senator KETTER: I put it to you, Mrs Rowell, that that's totally unacceptable and that it's not sufficient for a company simply to have to remediate without incurring some sort of penalty. It is something like 15,000 members of that fund who were impacted by that transition. APRA is saying to us that remediation is all that is required and there's no need for penalties to deter this type of behaviour.

Mrs Rowell: That was the view that was taken at the time. As part of the review of our enforcement approach and strategy we're considering potential for a shift in that, and more appetite to take enforcement action and to apply penalties in some of those cases. But APRA's long-held approach to supervision of all of the industries we regulate has been to make sure that it's the outcome for the customers that is achieved, and if we can achieve that through means—whether through our action behind the scenes and working with the entities, issuing requirements and setting very clear expectations on what we want done—then that is our approach. If we get the outcome that we achieve, that's our focus.

Senator KETTER: Do you accept that you got that wrong?

Mrs Rowell: I think it's very easy to judge in hindsight where we might have made different decisions. I'm not sure we would say that we got that wrong at the time. That was our approach and we were comfortable with the outcome we got at the time. We are now, in light of a range of matters, having a look at our approach to supervision and enforcement, and looking at where we can change things and improve outcomes.

CHAIR: Just on that issue: I want to ask about directions power, which is something that I understand APRA have sought and the government is considering at the moment, but which the opposition is opposing. Would that have been more helpful in that particular circumstance?

Mrs Rowell: I'm not sure. A directions power may have been helpful in that particular circumstance, although, in the end, the threat of using other powers was sufficient to get the action that we wanted. Our view, as we have said on the record many times, is that a directions power in superannuation would allow us to tackle issues more quickly and more effectively than we have been able to in the past. That is because, in many cases, to take legal enforcement action—formal enforcement action and litigation—we have to demonstrate clearly that there has been a breach of the law. That is quite difficult to do and is often late, in that the outcome has happened and we're acting after the event rather than trying to prevent issues and achieve rectification before there's an actual breach.

Senator KETTER: Just continuing with this question of taking court action, or legal action: during the course of the royal commission you were asked whether APRA could take legal action against an entity that failed to achieve principles set out in a prudential standard, and you said that was very hard to answer. But you went on to say that APRA could determine that an entity had contravened a prudential standard and could direct an entity to comply with the prudential standard. But when asked what would happen if an entity refused to comply with a direction, you were not clear as to what legal enforcement APRA could take. I think that's what counsel assisting said in closing submissions at the royal commission. Are you able to tell us what legal enforcement action is available to you in that situation?

Mrs Rowell: I believe we would apply to the court to get the action taken, but our legal counsel would be in a position to advise that.

Mr Scott: When it's pointed out at the beginning, when there is a breach of a prudential standard—

Senator KETTER: Sorry, it's Mr Scott, is it?

Mr Scott: It is, Senator. If there is a breach of a prudential standard, it does not immediately give APRA the right to impose penalties. The first thing that has to be done is that we issue a direction to the entity to comply with the prudential standard. In the cases that we're talking about, where they were not complying with a superannuation prudential standard, we would then issue a direction. But in that case, if they did not follow the direction, we could then impose a condition on their licence. If they did not comply with the condition on the licence, we could then impose a penalty.

There is a process going from discovering that there is a breach of a prudential standard. And this isn't because of requirements that APRA has created, this is in the statutes. So we have to go from discovering the breach to issuing a direction and to imposing a condition. If they don't comply with the condition then we can impose a penalty. The time—

Senator KETTER: Is that administratively, or is that—

Mr Scott: Part of it is in the CIS Act and part of it is administrative law. The time it would then take to take that entity to court and to have the court impose the penalty would take far longer than if we, on frontline supervision, put pressure on the entity to correct the problem. And that is what we did.

Senator KETTER: Is it any wonder that companies don't fear breaching these prudential standards?

Mr Scott: I would disagree with that completely. The difference between super and banking and insurance is that if APRA is not happy with the way that entity in banking and insurance is conducting its affairs then we can impose a capital surcharge. If we do that, that is going to make their shareholders unhappy with their performance and it's going to cost them money—

Senator KETTER: Have you ever done that?

Mr Scott: Yes, we have.

Mr Byres: Yes. That's done quite frequently. But, unfortunately, because there are no capital requirements per se in super, it's not a tool that we have at our disposal. But it's a tool that's used routinely in the other industries that we regulate, and it is a way in which entities are incentivised to get things done and to get things done quickly. CBA is a case in point. Part of the response to the CBA inquiry report was that CBA had to provide a rectification plan. To give force to that and to provide an incentive for CBA to respond to those recommendations and close the issues, we added a billion dollars to their capital requirement and said, 'We'll take it off when you've dealt with the issues.' That provides a real incentive to them. Unfortunately, because of the nature of superannuation, it's not a tool that we can use in the super case.

Mr Lonsdale: Can I just add one thing to this line of questioning? A lot of the question was on the past, but just on the future—and the chair has flagged this already—there is an opportunity for us, which we're doing, to look at how we think about enforcement. We have a review on enforcement; that's going to be part of my responsibilities. We can't pre-empt that, but in terms of what we've seen already—or, certainly, what I've seen already—there is scope to push up on the risk tolerance of different mechanisms that we've got in terms of enforcement. We think that would bring more individual accountability, more accountability at the entity level and more general deterrence. That's within our existing powers, so that's something we'll be looking at going forward.

Senator KETTER: I welcome your appointment, Mr Lonsdale; I think that's a positive thing. But, of course, we need to learn the lessons of the royal commission. Senator Keneally has a follow-up question, but can I ask: when do you expect to finalise the review?

Mr Lonsdale: We're in the process of doing it. I don't have an end date to give you right now. We can come back to you on that.

Senator KENEALLY: Is that an internal review; is it just within APRA?

Mr Lonsdale: Yes.

Senator KENEALLY: Does it involve any external stakeholders, or recourse to other government departments or agencies?

Mr Lonsdale: At this stage we're scoping not just what's coming out of the royal commission but how we currently conduct our business with the tools that we've got. So at the moment it's internal, but we'll be talking with others as well.

Senator KENEALLY: So right now you're at the scoping stage of what happens?

Mr Lonsdale: Correct, Senator.

Senator KENEALLY: So it could be some time before this review is completed?

Mr Lonsdale: We'll be doing our best to move it along as quickly as possible. That's a key area, because it has been given to a member to drive. That's a key area of my responsibility, and I'll be trying to do that as quickly as I can.

Mr Byres: Also, I've said to John that in conducting the review he has full capacity; if he wants external advice, input or support, he is authorised to get that.

Senator KENEALLY: When was the decision taken to conduct the review?

Mr Byres: It's actually something that had been forming for some time. Leaving aside the royal commission, the BEAR regime will require us to change the way we do enforcement. There's a new set of powers—

Senator KENEALLY: It was legislated some time ago, though.

Mr Byres: That's right, so we had already been thinking about: how do we need to change our processes and what additional infrastructure do we need in the context of the powers that have been given to us under BEAR? So there was work in progress there to think about those. The royal commission has raised a set of new issues, and then John's arrival provides a fresh set of eyes and perspectives on the issue. It is, though, a high priority. It's the first priority that John has, and we spoke about that on his first day. We're doing it as quickly as we can, but we want to do it thoroughly and meaningfully, because it's about getting the balance right, and that's an important judgement that we have to make.

Mrs Rowell: The other point I wanted to add was specifically in relation to the cases that have been before the royal commission. We have set up a separate governance structure which is reviewing each and every one of the cases that have been before the royal commission—what the evidence was, what we already knew about the issues, what has been new information or different information to what we understood, what more information we need and what further action would then be appropriate. We're obviously leaving all potential actions, including formal enforcement action, on the table in looking at those cases.

CHAIR: Obviously ASIC are also doing their enforcement review. They, too, have a new deputy chair who is undertaking that review. Will you be working at all with Mr Crennan? He presented the terms of reference for his enforcement review to the committee yesterday and to the Parliamentary Joint Committee on Corporations and Financial Services last week. He was saying yesterday that review would be finished in January. Is that the sort of timing that you're looking at as well and will you be consulting with Mr Crennan at all at ASIC when undertaking your own enforcement review?

Mr Lonsdale: Two points: we're not in a position yet to give you a time and, second, we have a very close working relationship with all the regulators, but particularly ASIC, as you'd expect. We talk to them all the time, including to Mr Crennan.

Senator LEYONHJELM: You discussed incentives in your opening statement quite considerably. As you well know from the inquiry into the BEAR bill, your role in supervising incentive policies of ADIs was of some concern to me. My questioning was in relation to whether you can effectively supervise ADIs from the perspective of their remuneration policies. I was interested to see that the National Australia Bank have recently amended their incentive policy, with a greater focus on the long term, a higher proportion of shares and the potential for clawback—all of which made sense, but they were justified in the context of the findings of the royal commission. They didn't refer to the BEAR bill, although they've said they're not inconsistent with the BEAR bill. My question to you is: if it took a royal commission for the bank to say, 'I think we should adjust our remuneration approach,' why wasn't that something that occurred as a result of APRA's supervision of the industry?

Mr Byres: I think a number of institutions have been exploring these issues, and how to reshape remuneration schemes, for some time. You may recall a few years ago the Commonwealth Bank tried to change its scheme in a way that gave greater focus to customer and community outcomes and less on key financial metrics. For various reasons, that received a strike against it. A significant proportion of shareholders were unhappy with that approach, and the bank ended up having to revert to a more—for want of a better term—conventional scheme. It will be interesting to see how the National Australia Bank's changes are received. My sense from talking to the banks and others in the industry is that shareholders are not necessarily welcoming of these changes and that, if they are not very carefully managed through, there is potential for boards to receive a strike against their remuneration reports. Obviously none of them want to do that or want to receive that. So there's a great deal of care and caution. In one sense, no-one wants to go first.

Senator LEYONHJELM: The intention of the National Australia Bank is to reduce their reasons for staff to focus on immediate-term results which are not necessarily the best interests of customers, and to take a longer-term perspective. I'm not sure shareholders would have too much trouble with that.

Mr Byres: There is a sense that other than sole focus on financial performance is something that does worry some shareholders—not all, but some constituents. The other thing that is a feature of the number of changes that not just the National Australia Bank but others are looking to do is to try and make performance rewards and long-term rewards subject to more than just share price performance. For many schemes at present, the long-term incentive and the quantum that is received is effectively a product of share price performance. Shareholders like that because it aligns interests totally with the shareholders' interest in the price. That's not necessarily something that will always deliver good outcomes for broader stakeholders.

Senator LEYONHJELM: Apart from ROI, what else would there be that is in the best interests of shareholders?

Mr Byres: The way many long-term incentive schemes work at present is based on the metric called relative TSR—TSR being total shareholders return, a measure of capital gains plus dividends. 'Relative' refers to what performance you've had in your total shareholder return relative to a peer group of institutions. So in a sense it's a share price our performance measure, in very simple terms.

Senator LEYONHJELM: But you're saying that you are not sure—

Mr Byres: Some boards are trying to move away from that and have a broader set of metrics to determine outcomes and also to give boards themselves more discretion to adjust those in light of events that subsequently come to pass that weren't known at the time the award was initially made. Not all in the shareholder community support that direction.

Senator LEYONHJELM: I accept that. There is an argument about whether return on equity is a better option or should be included in the measurement method, in addition to share performance. What I'm getting at, though, is the contribution of APRA that the National Australia Bank's decision to reconsider its remuneration policy was in response to the royal commission—the perception, if not probably the reality, that short-term incentives weren't necessarily good for the bank long term. Given that you have very substantial say over remuneration policies as a consequence of the BEAR bill, how do you see that working in future? Are you the font of all wisdom on remuneration policies, or are you going to encourage them to try and see and tell them if they've got it right later?

Mr Lonsdale: I just have one point, which I referred to earlier. It is an area of work that APRA published material on and looked at for some time. The most recent was in April this year, where they published a report on ADIs' remuneration practices. There are four places where APRA commented explicitly that it was not happy with the remuneration practices. They went to ensuring practices were adopted that were appropriate to the institution's size, complexity and risk profile—they were not happy with that; the extent to which risk outcomes were assessed and weighted within performance scorecards—there was room for improvement there; enforcement of accountability mechanisms in response to poor risk outcomes—there was room for improvement; and evidence of the rationale for remuneration decisions. So those points were put to ADIs, and boards were invited to come back to those. In terms of the motivation for why banks move, I guess it is difficult to disentangle what lies behind that, but I guess we would make the point that this is something that APRA has been highlighting for some time. In going forward, this is another one that I will be looking at as part of accountability, governance and incentives for ADIs.

Senator LEYONHJELM: Thank you for that, although the first three out of those four are prudential, so shareholders are less focused on that, even, than they are on return on equity and relative share price. I guess where I'm going with this is: is APRA going to tell the banks what remuneration policies they should adopt, is it just going to issue guidelines which they can accept or not accept, or are you going to place conditions on them, such as increasing their capital requirements if they don't follow? How are you going to approach that issue?

Mr Byres: Just to be clear about what BEAR does, the legislation essentially has some pretty simple requirements. It is not a framework that says APRA must determine how people get paid. It says individual institutions have to have a policy that is appropriate for their circumstances and, to the extent that someone has variable remuneration as part of a policy, a minimum portion of that policy has to be deferred for four years before people get it: 40 per cent for most people and 60 per cent for chief executives. That is, pretty simply, the BEAR bit of remuneration. It also says the policy has to link to the deferral by saying that, if circumstances come to light that suggest you shouldn't have got that money in the first place, the policy has to allow for the board to take it back. That's BEAR. Our prudential standards, as I said in my opening statement, have traditionally been focused on senior executives: is there anything in their package that unduly encourages them to bet the long-term financial soundness of the company? The royal commission—and I don't want to put words in the royal commission's mouth—is suggesting a broader look is needed than that traditional focus that APRA has had. As I said, we'll need to work with ASIC on how exactly we do that, but we don't think we are the font of all knowledge

on this issue. It's a very complicated issue. It's also an issue in which banks are responding to regulators but they've also got to keep shareholders and other constituents happy.

Senator LEYONHJELM: I guess what I was seeking ultimately was your comment on this: if the National Australia Bank have responded to what they regard as defects in their remuneration policy as a consequence of the royal commission, what prompted that, and where's APRA's role in that context? Are other banks likely to be only prompted by royal commissions, or do you consider it likely that you'll be able to prod them into thinking about that as well?

Mr Byres: I think they are all thinking about it. I don't think the royal commission has prompted them. It may have sped them up, but they have been thinking about it.

Senator LEYONHJELM: They said it was the royal commission that set it off.

Mr Byres: I don't want to talk too much about a specific case, but you've referred to the National Australia Bank. Those announcements and those changes don't happen quickly. They have been a long time in the planning, the preparation, the negotiation with staff et cetera. Without getting into the detail, I know they've been thinking about these issues for some time. It's not an immediate, recent response to the royal commission. There is this challenge, though, as I said, that the sorts of things that we would like to see—a more balanced scorecard and a broader reflection on what performance means—are not necessarily welcomed by the shareholders, who the boards have to seek approval from.

Senator LEYONHJELM: Thank you.

Mr Adams: I'm sure the chair may wish to make further comments on this, but one of the observations that we have is that the changes actually have been in place for many years, and are iterative. If I look back: we've had the introduction of behavioural gateways over a period of time, we've had the introduction of balance scorecards, and banks have changed their measures to include customer outcomes, which is the net promoter score, and have continued to evolve that. As the chair said, the BEAR regime does add additional focus and does give us additional powers. But it is not purely as a response to the royal commission. I think it has accelerated. But those measures, or those changes, have been in place for some time.

Senator DEAN SMITH: Thank you for your appearance here today, and thank you very much for the correspondence that we've shared over the last few months, Chairman, I am appreciative of that. I just want to reinforce one thing in your opening statement before I ask some questions. The comment that you make, that a critical or overarching point is that Australia's financial system remains fundamentally strong—I think that's an important point to amplify. With regard to your opening statement, you say in the third paragraph:

It is important, particularly in the current environment of volatility, that we protect and, where possible, reinforce the soundness and resilience of the system in anticipation of future adversity, whenever that may occur.

Could you just characterise for us the volatility as you see it, and also share with us what you anticipate to be the future adversity?

Mr Byres: To the second part first: I don't have a crystal ball. But I'm conscious that we're currently in an environment—

Senator DEAN SMITH: I think some Australian consumers and householders would like you to have one!

Mr Byres: I would like to have one, too, but unfortunately I don't. One of our jobs is just to remind people when things are going pretty well that, actually, they don't stay that way forever. It's been 10 years since the GFC. There are concerns building about whether markets are due for a correction, whether strong economic conditions can continue around the world—I'm thinking globally here, not so much domestically, because quite often the big problems for Australia come from offshore. When there are shocks to the world, there are geopolitical tensions, there are trade wars; there's a whole raft of issues. We're moving into a world where interest rates look like, globally, they're on the rise. The paradigm that we've been operating in for a long period of time around the world is one of very low interest rates, very ample liquidity, accommodative central banks et cetera. That is changing and markets will be adjusting to that and, when markets start to adjust, there's always a risk they do so quickly, sharply and unexpectedly. Add to that, as I said, trade wars and other things that could shock the global financial system. We want to make sure that, if there was—and I'm not predicting there will be, but if there was—some sort of shock of a material nature, the financial system is as resilient as it can be to respond to that.

Senator DEAN SMITH: Would you characterise the risk of a—to use your words—quick or sharp correction as high or low at the moment? You don't have to answer that.

Mr Byres: I think I would just describe it as possible.

Senator DEAN SMITH: You've made the point well in regard to international risks and volatility. What commentary do you have in regard to domestic volatility or future adversity?

Mr Byres: It's not obvious that there is any immediate vulnerability. We're in an environment where interest rates are low and the Reserve Bank is signalling that, while they might well rise at some point in the future, it's not obviously imminent and it's likely to be gradual. Unemployment, I think, has just hit a record low level, so we don't have any particular issues around that, and economic growth is solid at this point. So if you're looking at it from a purely domestic perspective, there are always risks and issues in any environment, but it's not obvious there's an immediate domestic threat. But if you look beyond our shores, there are certainly some things that you'd want to keep an eye on.

Senator DEAN SMITH: That correlates with your response to a question from another senator when you said that the key issues are unemployment and interest rates, in terms of your own lens, and that they are stable. My final observation with regard to the opening statement—given all of the quite extensive commentary across a variety of media sources now about credit squeezes and credit crunches—is that I was surprised that there wasn't a comment with regard to that.

Mr Byres: This is probably my first statement in a while that hasn't mentioned housing, and it was simply because I try to keep these relatively short. I try not to chew up too much time to respect the fact that we're here to answer questions, not give a speech.

Senator DEAN SMITH: You can always table it, Mr Chairman. An omission?

Mr Byres: So, on this particular case, I decided that issues around the royal commission and other things were of a higher priority. I also anticipated I would get some questions on housing, so I'd get the opportunity to say whatever I wanted to say at that point.

Senator DEAN SMITH: Lucky I'm here! I just want to turn now—and this goes to the substance of our correspondence. In the interests of thoroughness, and you could have put this in your opening statement, Mr Chairman, I did note yesterday what the Secretary of the Treasury said—or it might have even been the day before:

The Australian Prudential Regulation Authority's "very effective" and "well targeted" clamp down on housing investor loans and interest-only credit had helped cool rapid price growth in the Sydney and Melbourne property markets, Mr Gaetjens said.

So, congratulations to you. But my issues go to Western Australia, and that's been the subject of our discussions. How would you characterise the Western Australian economy at the moment, looking through APRA's lens?

Mr Byres: I think it's clearly more subdued than other parts of the country. Particularly, if we talk about housing, house prices have not been as strong as other parts of the country. The arrears on housing loans in Western Australia are higher than in other parts of the country, so, clearly, if we focus it particularly on housing markets, housing lending and the housing sector, the Western Australian property sector, I think, is—it's probably oversimplifying it—still struggling to find its way out of the downturn post the mining boom.

Senator DEAN SMITH: The property sector and small business sector, I would say. I'm interested to know, when APRA was considering its lending standard crackdown, to what extent did you give consideration to its effect on the housing market and small business sector generally?

Mr Byres: That was a consideration.

Senator DEAN SMITH: And then I'm interested to know to what extent there was a specific consideration about the consequences for Western Australia—or the Perth market, primarily?

Mr Byres: Again, it comes back to the problem that we were trying to solve. Although much of the commentary about what we are doing, what we've done and the impact of what we've done has been expressed in terms of house prices—that's the thing that everyone's interested in—our objective has never been expressed as setting house prices: shifting them up or down, slowing them or speeding them up. Our objective has always been to respond to what we saw as an unhelpful erosion in credit standards which applied across the country.

The large lenders, when they're assessing whether you have enough income, expenses—your suitability for a loan—have a pretty standard formula. Brokers allow customers from one part of the country to get credit from institutions in other parts of the country. For us, it was about raising lending standards back to a level that we thought they had slipped from, and those standards are applicable whether at any particular time you are lending to a market where prices are going up, down or sideways. So, to make my point, our policy objective was bolstering lending standards, and we saw that objective as an objective that needed to be applied Australia wide. We were mindful that not all markets are in the same part of the cycle but, nonetheless, we thought that bolstering was essential.

Senator DEAN SMITH: Well, more than mindful; they're not.

Mr Byres: Sorry?

Senator DEAN SMITH: They are absolutely not in the same—that's right.

Mr Byres: You asked what consideration do we give. We were certainly very mindful of that. As we sat at the Council of Financial Regulators and talked about these issues, this wasn't a case of a Sydney-Melbourne problem. We were talking about bank lending standards across the country.

As we looked at some of the issues that we dealt with, we were conscious they would have more of an impact in those markets where there was more speculative activity going on. In targeting investors and in targeting interest-only lending, we thought—and I think the Reserve Bank has just published a piece to show that this has broadly been the case—that they would be more likely to affect the Sydney and Melbourne markets. But that was not a decision point; it was just useful information in thinking about what we would do.

We've done more than just lending standards. I just want to quickly go to your point of small-business lending. We also, as part of bolstering the resilience of the system, made a step which was partly in response to the Financial System Inquiry recommendation of raising capital requirements for mortgage lending for the large banks. When we did that, we specifically excluded from that exercise loans for small-business purposes secured by properties. We were mindful that small-business lending wasn't a prudential problem; it wasn't a systemic problem. We didn't want to stomp on it along the way, so we did think about that when we designed the capital response.

Senator DEAN SMITH: Is the recent experience of the Western Australian housing market a surprise to you or is it what you might have expected?

Mr Byres: I don't know that I'd say it's a surprise. I don't know what I expected, to be honest. There are so many issues that play to supply and demand in housing markets, and bank lending standards are but one. We've been trying, fairly carefully where we can—although you might challenge us—to influence the market, recognising that there are a whole raft of other things going on and that have gone on. State governments have changed stamp duty, taxes on investors and other things. There are changes in population. There are a whole raft of things that influence supply and demand in property, and we are only at the margin changing supply of bank credit. There are a raft of non-bank lenders—

Senator DEAN SMITH: But those other changes don't happen quickly and they don't happen all at once necessarily, so they wouldn't be particularly true of the Western Australian experience, perhaps except for the issue about population de-growth.

Mr Byres: I must admit I don't know whether there have been any stamp duty changes in Western Australia. My point was simply that we are conscious that we are not the only one that has the lever that influences the supply and demand here.

Senator DEAN SMITH: In your correspondence to me, you did acknowledge that APRA remains very mindful of the impact its policies are having in different regions of the country. How many regions of the country are there, in APRA's view? There is clearly a Sydney and Melbourne market region.

Mr Byres: When we look at the sorts of statistics we look at, we've obviously got statistics for each of the capital cities. We've usually got statistics for non-capital parts of each state. We would not go below that, because typically we just don't have the data to know any more than that.

Senator DEAN SMITH: What's the monitoring regime that you employ to assess or monitor the impact of the changes that you've made with regard to lending arrangements? How regularly are they reviewed? To what extent are they reviewed at a granular or a regional level?

Mr Byres: We have a team of people who are looking through the statistics. We've got a coordination group within APRA that is looking at the data we have. That is connected to a working group that we set up under the Council of Financial Regulators that involves the RBA, Treasury and ASIC. They bring their knowledge, insights and analysis to the table as well. I think I can say with absolute confidence that at every meeting of the Council of Financial Regulators for the past few years there has been a discussion about housing markets around the country.

Senator DEAN SMITH: How often do they meet?

Mr Byres: Quarterly.

Senator DEAN SMITH: If you could, I just want you to also elaborate on the comment from the WA Department of Treasury annual report. It says, 'There are a number of signs that conditions are improving' in the Western Australian context, and that is true. The term we use in Western Australia is 'green shoots'. It also says:

However, some uncertainty and risks remain, including the impact of the Banking Royal Commission on the State's property market (and transfer duty revenue) ...

So the Western Australian Treasury makes very clear that this is a risk of prominence to them. I think it might even have been the first or second risk they identified. What are you doing to ensure that there aren't any unintended or significantly adverse consequences on Western Australian families and businesses?

Mr Byres: As we think about that particular issue, I think it is correct to say that the issues raised at the royal commission have caused all sorts of lending institutions, but particularly the banks, to think about whether their established practices are appropriate or whether they need to tighten further. In the current environment, there's clearly a very strong focus on compliance. No-one wants to be seen not to be complying. The risk is that that slows down the process of lending, as people are very focused on dotting the i's and crossing the t's. As a regulator, I don't want to in any way sound like I'm disparaging or discouraging compliance with the law, but I think at present there is an extra sense of care or cautiousness among lenders in the current environment because the commission has raised issues about whether established practices actually comply with the law.

Senator DEAN SMITH: So the behaviour of the lenders in response to the royal commission, you are saying, is in addition to the new lending standards that are in place?

Mr Byres: Yes. There have really been two issues. We've been focusing, if you like, on an aggregate level, on portfolio responses and on policies within banks. The royal commission has focused very much on the responsible lending obligations that are in the National Consumer Credit Protection Act. The key piece of that act is a fairly simple set of principles that says, 'As a lender you have to make reasonable inquiries about the suitability of the loan for the borrower and about the borrower's income and expenses,' but the royal commission has challenged what is reasonable.

Senator DEAN SMITH: I think this is the core of the issue when you think about the hypercaution, if you like, on the part of lenders. Isn't there a cumulative effect which could aggravate this credit squeeze, this credit crunch, that we are hearing about in the media and, more than that, that people are experiencing? That cumulative effect includes the changes to the lending practices that APRA has established, in addition to what I call the anticipatory behaviour of lenders wanting to get ahead of royal commission recommendations. Of course the people that are wearing this are Australian families and small businesses, particularly in my home state of Western Australia, which is economically very, very fragile, and you recognised that in your earlier conversations. You are in control of some elements, I understand, but not every element. I'm just wondering if APRA shouldn't be more sensitive—perhaps even hypersensitive—to the environment, which takes me back to the opening statement.

Mr Byres: My quick response is that I think we have tried to be sensitive to the environment. Particularly, we think lending standards have strengthened and credit has slowed. That was the time it made sense for us to remove some of the temporary constraints that we had put in. So we have removed—as I think I mentioned in my correspondence to you—the investor-lending benchmark, and said to the banks, 'If you're now using good standards and if you want to grow a bit more strongly, that is not of concern to us.' So we've tried to back off in response to the environment having changed. I think I would say we are responsive to that and we do try to respond to it, but I don't want to respond to it in such a way that allows an excuse to go back to sloppy lending.

Senator DEAN SMITH: Who is the WA expert in APRA?

Mr Byres: I don't know that I could say that we have a WA expert in APRA.

Senator KETTER: I have limited time, Mr Byres, so I will try to move through it as quickly as I can. Are you concerned about the impact of the macroprudential measures in regional areas?

Mr Byres: We are concerned to make sure they are balanced and effective everywhere, not just in regional areas.

Senator KETTER: There have been some concerns expressed from business groups in Tropical North Queensland that the approaches have led to undesirable consequences, restricting the number of interest-only or investment loans that regional lenders can offer and that these quotas, they call them, are causing delays in the progress of residential and commercial construction projects.

Mr Byres: The investor benchmark is no longer in place, to the extent that banks are using sound standards. On the interest-only benchmark, which is trying to stay below 30 per cent, the industry as a whole is running well below that number. So there is plenty of room and plenty of lenders having capacity. With a couple of exceptions, almost all of the local or regional financial institutions, the local credit unions et cetera, were well below the benchmark we set it when we set it. So it wasn't really a binding constraint on most of them.

Senator KETTER: Have you done any analysis of the impact of these measures in regional areas?

Mr Byres: Only to the extent that we obviously keep an eye on how markets, prices and availability are changing. I couldn't say that we have a definitive piece of analysis that goes through region by region.

Senator KETTER: Are you aware of any concerns about the tightening of credit more generally?

Mr Byres: We read about it all the time. There are regularly stories about credit crunches. I will make a couple of comments about speed of credit. Housing credit growth is currently around five per cent, which is still a very reasonable level, particularly given household income is not growing that fast. Lending to owner-occupiers, even in the last three-month period, has grown at an annualised rate of about 6.5 per cent—so, again, quite healthy for owner-occupiers. Investor lending has fallen right away. That has slowed considerably. But there is no doubt that that is a product partly of supply, but it is also partly a product of demand. In the current environment, with house prices softening, if you were an investor, you would probably say, 'Why would I, in this environment, want to rush into the market?' So there has been a slowdown in the demand as well. That is why credit is slowing. Interest rates have inched up, which is also going to slow credit. So there are a lot of factors at play.

Senator KETTER: Let's get back to the royal commission. During the course of testimony, Mrs Rowell, you weren't able to advise whether a superannuation fund that is deducting fees and not providing a service was actually a breach of the sole purpose test, despite the practice having been identified for at least two years or so. Have you now reached a view as to whether that practice is a breach of the sole purpose test?

Mrs Rowell: Our view would be that charging fees for no service is obviously a breach of the law. I don't think we've formed a view that it is a specific breach of the sole purpose test. As you know, ASIC is doing a lot of work in this area, and we are coordinating ASIC and following what they are doing in response to that issue. We are also separately looking at all of the cases before the commission, including those that involve fee for no service to see what further action we might take.

Senator KETTER: But this is an area of your responsibility. It attracts a civil penalty under the SI(S) Act, so isn't this something that APRA should be forming a view about?

Mrs Rowell: We will be looking at all of those cases as part of our review of all of the royal commission cases and forming a view about what action we take. We are part way through that process.

Senator KETTER: So you're telling me you still don't have a view as to whether or not it is a breach of the sole-purpose test?

Mrs Rowell: We haven't considered that specific question in relation to that case.

Mr Scott: Can I correct something?

Senator KETTER: Sure.

Mr Scott: Section 52 on the best interest does not have an executing penalty because you breached section 52. We, as a regulator, could do something else, but, if you go to court to say that an entity breached section 52, you can't immediately have the court assess a penalty. We are talking to Treasury to have a penalty put into section 52, but right now it is not a penalty provision.

Senator KETTER: So it's essentially a civil penalty—

Mr Scott: Section 62 on sole purpose—you can get a penalty on section 62, but, again, the sole-purpose test, mainly as it has been viewed by APRA, is when there is an expenditure of money by the fund, rather than deducting a fee from a member.

Senator KETTER: Is this something that you're working on to identify—

Mr Scott: Yes, that is a part of the review of all the case studies that were before the commission.

Senator KETTER: I want to go to a specific case which come up during the course of the royal commission, and that is the matter of NULIS Nominees. Mrs Rowell, I think you had been briefed on that particular matter, but this is one of these cases of NAB and a related party service provider. It was found in evidence that there was an agreement between the fund and the service provider that the cash-option returns would be set at the RBA official cash rate of minus 0.5 per cent or minus 0.75 per cent, so below the official cash rate. Would you agree that that half a per cent or 0.75 per cent cost for a cash investment is significantly higher than market rates for cash investments?

Mrs Rowell: Yes.

Senator KETTER: For example, AustralianSuper charges 0.12 per cent for cash investments. Can you explain why the trustee would agree to receive returns on their cash investments at half a per cent or 0.75 per cent below the official cash rate?

Mrs Rowell: It's a matter for individual trustees to make those decisions. We obviously don't review, analyse or question, necessarily, every specific decision that every trustee makes. Of course, as part of our member outcomes analysis, you will be aware that we have been looking into the performance of various cash options and raising issues with a number of providers around both the returns and the fees that are being charged for those options and, in many cases, have achieved changes to those arrangements, including reductions of fees.

Senator KETTER: Is this a case that you're looking at? And would you agree that these arrangements seem to have been stricken away in a way that on face value prioritises the interests of the NAB over members of the fund?

Mrs Rowell: There is a range of matters coming out of the royal commission in relation to the NULIS case, and I would put it in the same category as the other cases that I've talked about where we are looking at all of the information that has come through and analysing our understanding of it, how it might differ from what we understood before and what the further steps are. This would be one of the matters that would be canvassed as part of that.

Senator KETTER: Was APRA aware of this agreement before the royal commission?

Mrs Rowell: I'm not sure we specifically were—no.

Senator KETTER: Can you take that on notice?

Mrs Rowell: Yes.

Senator KETTER: At previous estimates hearings, the issue has been raised where retail super trustees are paying three times the market rates to related party service providers. Mrs Rowell, you've looked at that analysis, that research, and you said that it was very old research at the time. That was by Mr Liu and Mr Arnold.

Mrs Rowell: Yes. That was based, I believe, on pre-2006 data.

Senator KETTER: Can you explain why this conduct has continued under APRA's nose despite the fact that your researchers identified this almost a decade ago?

Mrs Rowell: I don't want to comment on that specific research. I would say that, over particularly the last five years, since the Stronger Super reforms, APRA has taken a number of steps to improve the way trustees manage their superannuation arrangements, whether they're in the retail sector or in the industry sector. We have done a number of reviews of conflict management and related party arrangements and made recommendations to industry to change practices. We are still identifying concerns and issues in that area and continuing our focus on it and are also now, particularly in light of some of the information coming out of the royal commission, looking at scoping a further deep-dive review into related party arrangements to be undertaken next year.

Senator KETTER: Can you confirm that the structure of this agreement, where there's no specific fee charged to the member or the trustee, would not be recorded as an investment expense under the current APRA reporting standards?

Mrs Rowell: I would need to take that question on notice. I'm not familiar with the particular arrangement. Today I don't have the details of that particular arrangement in front of me. We will take that on notice. I would say, though, that we are aware that there are gaps in our expense reporting and we would like to close those gaps. Some of it requires legislation through parliament to get the expense looked through provision so that we can then undertake our consultation to get more granular reporting of a number of items.

Senator KETTER: The agreement, when you look at it, expresses the client margin as the RBA, OCR, minus 50 basis points per annum. It's not expressed as a fee; it's expressed as a client margin. You'll come back to us on that. Are you aware of how many other agreements are structured in this way?

Mrs Rowell: No, APRA does not look at every agreement that's in place across the whole 200 or whatever RSEs. We can't physically do that.

Senator KETTER: Wouldn't this come down to systemic risks? Isn't this part of your responsibility?

Mrs Rowell: If we become aware of an issue, particularly an issue that might raise potential industry-wide concerns, then we would explore it. This particular issue is not one that has been an area of focus for us. Obviously, now we're looking at a range of areas post the royal commission and, if we feel that this is something that might have industry-wide issues associated with it, we will consider the appropriate steps we need to take to look into it further.

Senator KETTER: Would one of those potential steps be an audit to identify how many agreements are structured in this way?

Mrs Rowell: APRA typically doesn't undertake what you might understand to be an audit. We would need to consider the best way to identify how many of these agreements were in place and the best approach for doing that.

Senator KETTER: You identified legislation that's coming before us. Can you tell us whether these types of arrangements would be captured under the fee caps in the protecting superannuation package bill?

Mrs Rowell: I'd need to take that on notice.

Senator KETTER: As a matter of principle, do you think they should be?

Mrs Rowell: As a matter of principle, the intention of the fee caps is to cover all of the fees that are charged to members. As I'm sitting here at the moment, trying to understand how those costs and fees flow through, I can't give you an answer as to whether they should. We'll take that on notice.

Senator DI NATALE: There's been some discussion about lending practices, but I'm keen to follow on from that issue. The royal commission has shown that, in recent years, mortgage lending standards were pretty loose and, in response to the royal commission, lending standards have tightened up. Would you agree with that observation?

Mr Byres: I wouldn't say, 'In response to the royal commission lending standards have tightened up'—we've been tightening them up since about 2014. They have been tightening over some period of time.

Senator DI NATALE: You don't think there's been any change as a result of the royal commission?

Mr Byres: I mentioned in response to Senator Smith—I don't think you were here at the time—that there is not doubt that, in the current environment, the commission has challenged whether the way the banks have traditionally thought about the responsible lending obligations is the correct way to think about it. That has created a sense of caution, I think, in the industry. It's an added factor in the dynamic; it's not the sole factor.

Senator DI NATALE: Understood, and I expect there are a number of contributing factors. How much do you think these tighter lending practices are responsible for the downturn we are seeing at the moment? Conversely, how much do you think loose lending contributed to the bubble that we've experienced over more than a decade?

Mr Byres: It's really hard to attribute it. Broadly speaking, look more generally at asset markets: all have been buoyant for a long period of time, because the world has been in a very low interest rate environment. That encourages people to borrow and, in some cases, speculate. That's part of monetary policy: when it's low, it's to get people to borrow and bring forward consumption.

Senator DI NATALE: So, the housing market—

Mr Byres: The housing market, the share market and a whole raft of markets have been very buoyant. We've been in an environment where low interest rates around the world have created this issue, not just in Australia but in many countries. Lending standards loosened because, in an environment when everything is looking pretty rosy, there's actually not a lot of risk from making a housing loan, because you just rely on the fact that the value of the house will go up. I think some lenders fell into the trap of just relying on the fact that house prices go up to cover any bad lending decisions.

Senator DI NATALE: That seems to me, as somebody not involved in the industry, to be a risky and patently ridiculous model on which to base your lending practices.

Mr Byres: That's why, from 2014, we've been forcing the banks to make changes to the way that they have been lending: to properly assess borrowers, to factor in future interest rate rises, to properly measure their expenses, et cetera.

Senator DI NATALE: But you'd agree that the loose lending that was going on within the banks has been a significant contributor to the increase in prices, and that the current tightening is a contributing factor to the downturn that we are currently experiencing?

Mr Byres: It's a question of degree, but, no doubt, the changes in lending standards—both positive and negative—are a contributor to the way the market responds.

Senator DI NATALE: Have you estimated what portion of that increase is attributable to lending practices?

Mr Byres: I'm sorry, but, to be clear about the question, contribution to what? To house prices, to lending growth?

Senator DI NATALE: To house prices.

Mr Byres: No, we haven't. My response to an earlier question was there are just too many factors at play, and we find it very difficult to be able to isolate that impact.

Senator DI NATALE: I have a similar question about the risk in the system. How much more risk is there in the financial system as a result of those practices by financial institutions?

Mr Byres: We would say that we've strengthened the system over the last few years. Lending standards have been improved, and I think that shows up in the way that loans are performing. Recently written loans perform better than ones written a few years earlier. We've strengthened bank capital positions considerably. As I mentioned in my opening statement, capital ratios are higher than they've been in any time of APRA's existence, which is 20 years.

Senator DI NATALE: Regarding risk within the system, you don't have a view that there's significantly more risk in the system now as a result of those lending practices?

Mr Byres: No, because we've taken offsetting actions, and we've said to banks—

Senator DI NATALE: We're hearing about negative equity.

Mr Byres: As much as people don't think it's a competitive market, at least in housing lending there's been a lot of competition. I think that has driven lower standards, because people have competed quite hard for market share and volume. They haven't necessarily done so through price; they've done so by trying to find ways to get more money out the door.

Senator DI NATALE: Obviously it's your job to try to make sure that they are competing on that basis.

Mr Byres: Yes, so we've responded to that in two ways. We've tried to lift lending standards back up to a sensible level, and in the last few years I think we've achieved that; at the same time, we've built the capital in the banking system so that, if there is adversity in the future, the banks are well placed to respond to that.

Senator DI NATALE: Are you worried that the RBA is basically boxed in from moving interest rates?

Mr Byres: I don't want to comment on the RBA.

Senator DI NATALE: Is it fair to say that the high levels of household debt have made it very difficult to move interest rates for fear of a consumer spending collapse if rates go up, and now with negative equity in property?

Mr Byres: I'm not saying anything that the Reserve Bank hasn't said in public. It's something they think about in their policy formulation, but I can't really say anything more than that.

Senator DI NATALE: You've mentioned some of the actions you took. Perhaps you might want to outline the top couple of things that you did, you said from 2014, to address loose lending standards.

Mr Byres: Two things that get a lot of attention were benchmarks where we asked banks to stay below certain levels of growth in investor lending, and a proportion of interest-only lending, the second one being slightly more recent. They've attracted a lot of headline attention, and certainly they have been useful, because one of the challenges when you're trying to corral the industry is they want to make sure that everyone else is playing by the same rules, so everyone was constrained in the same way. But the more long-lasting improvements I think are to actual lending policies and the way banks go about assessing whether an individual customer can afford a loan, and that is they're doing better verification of income, they're doing better verification of expenses and they're factoring in a larger interest rate increase in the future in deciding whether someone can not just afford a loan today but is also likely to be able to afford a loan in future, so there's more conservatism built into the credit assessment.

Senator DI NATALE: With respect, the royal commission didn't share your rosy outlook on the banks tightening up their lending standards. They specifically singled out the banks for loose lending standards. They made those comments consistently, and indeed, as a regulator, you've come under some degree of criticism for allowing that situation to develop. You're saying now that the changes we are seeing in terms of lending practices started before the royal commission, whereas the royal commission have made it very clear that they've had grave concerns about lending practices.

Mr Byres: Many of the issues that are being looked at in the royal commission, or indeed that ASIC is pursuing court action on, are not loans that were written this year; they are loans that were written some time ago. So I think it's important to get the time dimension in this discussion. I'm not disputing the views of the royal commission and am certainly not disputing the facts of the individual cases that they've looked at. But, as I said, those cases are not necessarily ones that are happening today.

Senator DI NATALE: No, but they've been happening under the oversight of APRA.

Mr Byres: Yes.

Senator DI NATALE: And the royal commission has singled those out, and singled out our major banks.

Mr Byres: Yes. And what I'm saying is that we think lending standards have been improved significantly. We have been comfortable with where the industry has got to.

Senator DI NATALE: So the royal commission doesn't share that view, and you are suggesting that they are not going to make any recommendation to change lending practices?

Mr Byres: They may well. There are still areas where we think the industry can improve.

Senator DI NATALE: Where are they, and why haven't you been focusing on them?

Mr Byres: We have been focusing on them. One of the issues where there has been a lot of discussion in the royal commission and that is also the subject of court action by ASIC is the use of the so-called HEM, the household expenditure measure, as a way of setting borrower expense numbers when you are calculating whether someone can afford a loan. We've been saying for some time that we think the use of that has been too high. The royal commission has flagged concerns about that, and ASIC has flagged concerns about that. The question is: what do you do about it? What's the replacement? All of the banks have committed to us to reduce their reliance on it. One way you reduce reliance on it is to make much more effort to verify customer expenses, even though that's going to take time and effort and probably irritate lots of customers, who are now saying, 'This is an annoying process.' But it's the right thing to do and so it has to be done. But a bank always needs to have a fallback option, because, even with the best will in the world, you will still get information from customers that a bank feels is too low, and it will want to use a benchmark or a floor in place of what the customer has given it.

Senator DI NATALE: APRA basically continues to allow the banks to use their own models to determine capital requirements; is that right? Why do you continue to do that? Isn't that a big free kick to the major banks?

Mr Byres: It's not a free kick in the sense that they've put in the investment, they've done the analysis, they've produced the verification—

Senator DI NATALE: It's led to where we are. It's part of the problem, isn't it?

Mr Byres: No, I don't think so. And, in any event, it's not as though it's a sort of *carte blanche* in terms of the use of those models. As things stand today, we've got significantly more capital in place than the banks' models themselves would produce because of some of the issues that have been identified.

Senator DI NATALE: Going back to the royal commission, do you think there might be an inherent conflict between regulating for the consumers' interests and regulating for financial system stability?

Mr Byres: No. There can be times of tension, that's right, and that's in a sense why we have the twin peaks model in Australia. Twenty years ago the Wallis inquiry said we should have a prudential regulator and we should have a conduct regulator.

Senator DI NATALE: But whose job is it to look after the customers? There's no regulator looking specifically after the interests of customers here.

Mr Byres: Well, I would say it depends what aspect of customers. We are responsible for—

Senator DI NATALE: The aspect where they don't get screwed over; they're not being charged when they die—that aspect.

Mr Byres: Many of those issues fall either under the Corporations Act or other laws that are first and foremost administered through ASIC, so they're consumer protection obligations. We've talked about responsible lending.

Senator DI NATALE: But there's no regulator specifically there to look after the interests of customers. You've identified the two areas, the twin peaks model, but neither of those have a specific mandate like, for example, the ACCC, to look after customers.

Mr Byres: I think in one sense we all think we're serving the community, broadly defined.

Senator DI NATALE: That might be an indirect consequence of the actions that you take, but there isn't a regulator with a specific mandate to look after the interests of customers. Do you think that's a problem?

Mr Byres: No, I'm not sure I see the problem that you are describing.

Senator DI NATALE: You don't think there should be a regulator with a clear, unconflicted mandate to ensure that customers' interests are being met?

Mr Byres: I think in many cases it's there; it might be spread across different regulators in different forms, and maybe that's the issue that you're getting to—

Senator DI NATALE: Yes.

Mr Byres: but I don't think—

Senator DI NATALE: Well, the royal commission is getting to it; I'm not getting to it.

CHAIR: Mr Byres, surely the ACCC, who is responsible for implementing consumer laws—

Mr Byres: They have a competition perspective and they are clearly looking at competition issues, but they've only recently had a particular mandate to look into the financial sector. They haven't had a strong focus there, within their previous mandate. They've now got a financial services unit in the ACCC. I think that's a good thing. That has helped us and strengthened our engagement with the ACCC. ASIC has a whole raft of—

CHAIR: Yes, and the three—ASIC, APRA and ACCC—all work together.

Mr Byres: consumer protection functions, disclosure obligations, best interest duties et cetera on financial advisers. There are a whole raft of protections in place.

Senator DI NATALE: I suppose the royal commission has got to the heart of it, in that there may be this conflict when you're regulating for financial system stability, and you're hoping the outcome of that is that you're looking after the interests of consumers. But there isn't a regulator specifically looking after the interests of consumers, and the royal commission is asking: can that conflict be reconciled within the current system? I'm asking you your view of that.

Mr Byres: Well, I think it can be, but I agree it's not to give APRA more of those responsibilities. The twin peaks model of financial stability, institutional safety, consumer protection, disclosure, conduct et cetera, generally speaking, works well.

CHAIR: Now that we're moving into opinion—

Senator DI NATALE: I think I'm out of time. Thank you for indulging me.

CHAIR: That's a pleasure, Senator Di Natale. Thank you very much to APRA for appearing before the committee today. We will let you go. That concludes this committee's consideration of the Treasury portfolio. We will return after lunch with the Industry, Innovation And Science portfolios. Thanks very much for being here today.

Proceedings suspended from 12:30 to 13:17

INDUSTRY, INNOVATION AND SCIENCE PORTFOLIO

In Attendance

Senator Canavan, Minister for Resources and Northern Australia

Department of Industry, Innovation and Science

Executive

Dr Heather Smith, Secretary

Ms Mary Ann O'Loughlin, Deputy Secretary

Ms Elizabeth Kelly, Deputy Secretary

Mr Mike Lawson, Deputy Secretary

Ms Sue Weston, Deputy Secretary

Anti Dumping Commission

Mr Dale Seymour, Commissioner

Mr Paul Sexton, General Manager, Investigations

Mr Nathan Zhivov, General Manager, Economic and Strategic Services

AusIndustry – Industry Capability and Research

Mr Duncan McIntyre, Head of Division

Ms Joanne Mulder, General Manager, Research and Development Tax Incentive Program

Ms Sue Cattermole, General Manager, Centre for Defence Industry Capability

Ms Sarah Kosciuk, Acting General Manager, Industry Research and Investment

AusIndustry – Support for Business

Ms Teena Blewitt, Head of Division

Ms Lisa Hind, General Manager, Service Strategy and Governance

Ms Annie Ryan, General Manager, Department of Industry, Innovation and Science Grants Administration

Ms Jayne Facey, General Manager, National Outreach and External Grants Administration

Mr Steve Stirling, General Manager, Entrepreneurs' Programme, Program Management and Delivery

Ms Emma Greenwood, General Manager, Entrepreneurs' Programme, Governance and Partnerships

Australian Building Codes Board

Mr Neil Savery, Chief Executive Officer

Australian Space Agency

Mr Anthony Murfett, Deputy Head

Ms Anntonette Dailey, Executive Director

Corporate

Ms Janean Richards, Chief Operating Officer

Mr Brad Medland, Chief Financial Officer

Ms Rachael Jackson, General Manager, People and Planning

Ms Virginia Cook, General Manager, Communications

Mr Robert MacLean, General Counsel, Legal, Audit and Assurance Branch

Ms Janice Wykes, General Manager, Ministerial and Shared Services Branch

Digital Strategy and Operations

Ms Rebecca Lee, Chief Information Officer

Mr Clive Rossiter, General Manager, Information and Communications Technology Operations and Security

Economic and Analytical Services

Mr Mark Cully, Chief Economist

Ms Melissa Bray, General Manager, Economic Advice Service

Industry Growth

Mr Trevor Power, Head of Division

Dr Gary Richards, General Manager, Advanced Technologies

Mr David Lawrence, General Manager, Sectoral and Place Based Policy

Mrs Jessica Carew, General Manager, Industry Transition

Ms Rebecca Manen, General Manager, Business Facilitation and Food Policy

Mr Darren Atkinson, Manager, Advanced Technologies

National Measurement Institute

Dr Bruce Warrington, Acting Chief Executive Officer and Chief Metrologist

Northern Australia and Major Projects

Ms Sam Reinhardt, Head of Division

Mr Mark Coffey, Head of Office of Northern Australia

Mr Nick Purtell, General Manager, Major Projects

Ms Sam Chard, General Manager, National Radioactive Waste Management Facility (NRWMF) Taskforce

Office of Innovation and Science Australia (OISA)

Dr Charles Day, Chief Executive Officer

Questacon

Professor Graham Durant, Director

Dr Bobby Cerini, Acting Deputy Director and General Manager Science and Learning

Resources

Mr Paul Trotman, Head of Division, Resources Division

Mr Michael Sheldrick, General Manager, Onshore Energy Branch

Dr Gino Grassia, General Manager, Resources 2030 Taskforce

Mr Jason Russo, General Manager, Onshore Minerals Branch

Ms Lisa Schofield, General Manager, Offshore Resources Branch

Mr Bruce Wilson, Principal Advisor, Resources Division

Mr Graeme Waters, General Manager, National Offshore Petroleum Titles Administrator (NOPTA)

Science and Commercialisation Policy

Ms Jane Urquhart, Head of Division

Dr Sarojini Mitchell, General Manager, Science Policy Branch

Mr David Wilson, General Manager, Commercialisation Policy Branch

Ms Clare McLaughlin, General Manager, Science Agencies Governance Branch

Mr David Luchetti, General Manager, Australian Square Kilometre Array Office

Strategic Policy

Dr Chris Locke, Head of Division

Mr Wayne Calder, General Manager, Business Environment

Mr Martin Squire, General Manager, Trade and International

Ms Narelle Luchetti, General Manager, Digital Economy and Business Simplification

Ms Anthea Long, General Manager, Strategic Policy

AGENCIES

Australian Institute of Marine Science (AIMS)

Dr Paul Hardisty, Chief Executive Officer

Mr David Mead, Executive Director Strategy and Development

Australian Nuclear Science and Technology Organisation (ANSTO)

Dr Adi Paterson, Chief Executive Officer

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Dr Larry Marshall, Chief Executive

Dr Peter Mayfield, Executive Director, Environment, Energy and Resources

Dr Dave Williams, Executive Director, Digital, National Facilities and Collections

Mr Trevor Heldt, Acting Executive Director, People

Mr Nigel Warren, Acting Executive Director, Growth

Mr Tom Munyard, Chief Finance Officer

Dr Jack Steele, Director Science Impact and Policy

Mr Marcus Zipper, Director Services

Geoscience Australia

Dr James Johnson, Chief Executive Officer

Dr Andrew Heap, Chief, Resources Division

Dr Andy Barnicoat, Chief, Positioning and Community Safety Division

Dr Stuart Minchin, Chief, Environmental Geoscience Division

Mr Trent Rawlings, Chief Operating Officer

Ms Tanya Whiteway, Acting Chief Information Officer

Dr Adam Lewis, Acting Chief Scientist

Ms Vanessa Graham, Chief Finance and Human Resources Officer

Dr Martine Woolf, Acting Branch Head, Resources Advice and Promotion, Resources Division

IP Australia

Mr Michael Schwager, Director General

Dr Frances Roden, Deputy Director General, IP Rights Division

Mr Doug Pereira, Acting Deputy Director General, Policy and Corporate Division

Mr Kieran Sloan, Acting Chief Financial Officer and General Manager, Finance, Quality, Reporting and Property Group

Dr Benjamin Mitra-Kahn, General Manager, Policy and Governance Group

National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)

Mr Stuart Smith, Chief Executive Officer

Mr Cameron Grebe, Head of Division, Environment

Mr Derrick O'Keeffe, Head of Division, Safety and Integrity

Northern Australia Infrastructure Facility (NAIF)

Ms Laurie Walker, Chief Executive Officer

Mr Adam Thatcher, General Counsel

Ms Carol Bellettini, Chief of Staff

Department of Industry, Innovation and Science

CHAIR: I declare open this meeting of the Senate Economics Legislation Committee. The committee will begin with the Department of Industry, Innovation and Science. The hearing will then follow the order as set out in the circulating program. I welcome the Minister for Resources and Northern Australia, Senator the Hon Matthew Canavan, and officers from the department. Minister, do you have an opening statement?

Senator Canavan: I don't.

CHAIR: Dr Smith?

Dr Smith: I don't have an opening statement, but I would like to introduce some new executives to the committee, if I may. I would like to introduce Mary Ann O'Loughlin, who has recently joined the department as the deputy secretary looking after science and corporate matters. Mary Ann joins us from the New South Wales public service. Sue Weston, who has been on long-service leave for a period time, is in the department working on some strategic and administrative issues. I would also like to introduce Janean Richards, who is the new chief operating officer. Janean takes the position of Michael Schwager, who for a period of time was in CSIRO but has been recently promoted as director-general of IP Australia. He is not appearing before the committee today. I just wanted to introduce those new staff to the committee.

CHAIR: Thank you very much. Welcome to new faces and returning faces. Nice to have you back, Ms Weston. We might kick off questions with Senator Carr. Senator Carr, do you want to start the first 15 minutes or so? There is no-one else here, so I will put my questions on hold for 15 minutes.

Senator KIM CARR: I normally put on notice questions in regard to discretionary spending, underspends and those matters—so there will be table. Ms Weston is familiar with the table that we are seeking to put on notice, so I will just indicate at this point that that will be put as a question on notice of some priority for return, if that's possible.

Ms Weston: Yes, as we have done in almost all estimates.

Senator KIM CARR: That's exactly right. Thank you very much. I will begin with some questions regarding the complementary medicines industry. There are matters that have been raised with the ACCC today in regard to the 'Made in Australia' logo. Some issues have been raised with me, particularly to do with complementary medicines. A new set of guidelines have been issued by the ACCC following some complaints. The consequence has been that the ACCC guidelines have followed some changes to the legislative framework, which has meant that the complementary medicines industry will not be able to use the 'Australia Made' logo. Are you familiar with this, Minister?

Senator Canavan: I am. There have been, as you said, some changes to, I believe, definitions around substantial transformation, and the government is aware of some discussions that we are undertaking with the complementary medicine sector. But I might ask Mr Lawson to give a bit more about the detail on that.

Senator KIM CARR: What is the current status of that?

Mr Lawson: We are aware of the concerns that some companies have raised. They're in conversation with government about that. We are aware the ACCC appeared earlier today and correctly answered that the changes in the legislation are a matter for parliament and that they interpret that legislation and provide guidelines. We are also aware that a company has gone to court challenging the AMCL, the people who run the mark. That will go through a court process to check on the definitional stuff.

I should say that this was a series of changes that occurred over quite a period of time, with the country of origin labelling of food triggering the exercise. Parallel to the changes to the country of origin labelling information standards for food, there were changes made to the safe-harbour defences under the Consumer Law as to what 'substantially transformed' means to make them consistent with international practice. So, 'substantially transformed' means things need to be fundamentally different in their identity, nature or central character. The question here is: prior to these changes, there were concerns that 'Made in Australia' didn't mean what people

thought it meant. People in the food area were talking about things being made in Australia from local and imported ingredients, and that wasn't well regarded by the community. So, an enormous amount of consultation was done with consumers and with industry.

The changes were a COAG process. The consumer affairs forum of consumer affairs ministers went through the process of agreeing to these changes. All the states participated in that process. However, there have been concerns raised by some of the companies within the complementary medicines sector, and we're aware of those concerns and are looking at them with the industry.

Senator KIM CARR: Mr Lawson, you need to do more than look at them. We're looking at the 'Australian Made' organisation having to remove licences, withdraw or cancel a licence for the complementary medicine manufacturers for the use of the logo, which is having a material impact on these manufacturers. We are talking here about a \$5 billion industry that is likely to suffer serious material injury. Would you agree?

Senator Canavan: I thought I'd just quickly say, Chair, that I don't think Mr Lawson can answer whether we should do more or look at them or not. That's a policy question for government—

Senator KIM CARR: Then I'll ask you.

Senator Canavan: Yes, and I'm happy to say that the information I have, given that I'm the representative minister here, is that before the changes were made to the country of origin labelling definitions extensive consultation was engaged in. There was a regulatory impact statement, a full RIS process, that did that. Of course, though, the government is engaging with further feedback. I can't pre-empt any decision that may or may not be made, but we're obviously engaging with the sector in good faith. But Mr Lawson might be able to answer the question in regard to what the discussions involve and where they're up to but without commenting on future policy changes.

Mr Lawson: These concerns have been raised relatively recently in an intense way. But it should be noted that there are other companies that do use Australian ingredients and make complementary medicines and are able to meet the standards. The standard is about providing correct information to consumers about whether things were made in Australia or not. So, we will go through that process. But that can depend on the specific sector. In complementary medicine, for example, the ACCC has provided advice that, if different ingredients are put together and pressed into a tablet, that is made in Australia, but if a single ingredient is encapsulated, they don't believe that to be made in Australia. We had to go through that process and investigate because—

Senator KIM CARR: Mr Lawson, it's a bit more complicated than that. How long have you been engaged with Sanofi?

Mr Squire: The various companies that made representations to the minister and/or the Australian Made Campaign Ltd—I'd have to take on notice and get the exact date when those concerns were raised.

Senator KIM CARR: All right—and Swisse, Blackmores, Vitex. All of these companies, which employ thousands of Australians, have been engaged on this issue for a very long time. The New South Wales Liberal minister has described this as 'madness' and 'a bureaucratic own goal that removes one of industry's biggest marketing advantages when selling in the hotly contested overseas markets'. Would you agree with that proposition?

Mr Squire: That's certainly the industry's claim, yes; that's correct.

Senator KIM CARR: And they've made that point to you for how long?

Mr Squire: The changes, as you would recall, were debated in parliament in February 2017 and flagged with industry back at least as far as June 2015, when the reforms were first—

Senator KIM CARR: So you've had a fair while to appreciate that when things go wrong you've got an opportunity to get them right.

Mr Squire: I'm not sure that we're accepting that things have gone wrong—

Senator KIM CARR: Oh, I see. You think that Sanofi, Swisse and Blackmores are not correct in their representations?

Mr Squire: Some of the media reporting is incorrect.

Senator KIM CARR: No, no. I'm not relying on media reporting; I'm relying on what these companies have put to me directly. I've got no doubt, and I put the same case to you: are you saying that they're not correct in the presentations that they've put to you that they have transformed these products but don't meet the current ACCC guidelines?

Mr Squire: If they have substantially transformed the product then they're entitled to make a 'Made In Australia' claim.

Senator KIM CARR: But that's not what the ACCC says, based on legislation this parliament has passed, which has been demonstrated to have put these companies at a severe financial disadvantage.

Mr Squire: That's not the correct interpretation of the ACCC's guideline.

Senator KIM CARR: Is that right? That's not what the ACCC says.

Mr Squire: The ACCC guideline points out that some complementary medicine processes, such as manufacturing a tablet, are likely to meet the substantial transformation test. Other processes, such as simple encapsulation, are unlikely—

Senator KIM CARR: Where it's a single ingredient.

Mr Squire: It's not correct to say that the complementary medicine industry isn't able to sustain 'Made In Australia' claims at all.

Senator KIM CARR: For those tablets with one ingredient, they cannot. You're saying that?

Mr Squire: I'm advising you what the ACCC has said. The ACCC is the regulator. That's its interpretation of the law. As Mr Lawson indicated, it's now before the courts to test whether the ACCC's interpretation is correct.

Senator KIM CARR: And these companies can't wait till 30 November? That's correct, isn't it?

Mr Lawson: No. The AMCL has advised the companies that they would need to change their arrangements by 1 July next year. So, there is time to address this issue. We are providing you with the factual material, but the government is certainly apprised of the issue, and concerned about the issue.

Senator KIM CARR: What is the government prepared to do to rectify what is clearly an administrative error?

Senator Canavan: I can't give credence or otherwise to the claim you have just made. I'm representing the minister here. The advice I have is that the government is engaged with the sector, and, as officials have outlined, has been for years on these matters. There is an appropriate balance that needs to be struck here, obviously, with maintaining the integrity of a 'made in Australia' claim, along with also allowing businesses that do substantially transform products in Australia to be able to make that claim. We are continuing to discuss these matters with the sector, but, as has been outlined, these changes were thoroughly and rigorously investigated before their introduction, and there is a court case.

Senator KIM CARR: And they got it wrong. You got it wrong.

Senator Canavan: I'm not going to give credence or otherwise to that claim. I am the representing minister here. The definitions that have been changed have gone through the parliament. The appropriate regulator is the ACCC.

Senator KIM CARR: What are the policy options that are now available? Is there a matter that can be dealt with by regulation or does it require legislative change so that the ACCC can issue new guidelines?

Senator Canavan: I don't have advice on that.

Senator KIM CARR: Does the department have advice on that matter?

Mr Lawson: Those are matters for consideration by government—as to what options are available.

Senator KIM CARR: Is it a matter that requires legislative change, or can it be addressed by legislative instrument—other than by act of Parliament?

Mr Lawson: Those are the complicated issues we are examining. We also have to examine whether it is appropriate to make a change, because the changes are saying, about substantial transformation: is it different in identity, nature or essential character? If Italian tomatoes were imported and put in a can, would you want them to be called 'made in Australia'?

Senator KIM CARR: No. Of course that's right.

Mr Lawson: It's got to be consistent. These things are particular to each sector.

Senator KIM CARR: We're not talking about tomatoes. We are talking about complimentary medicines.

Senator Canavan: The point Mr Lawson is making is that these laws are generically applied, or the test at least is applied in other sectors. So, obviously, decisions made in regard to one sector need to be consistent with how the approach is across others as well. There is a balance here of considerations that must be made.

Senator KIM CARR: The problem we have here is that there is a matter of urgency. There are 29,000 Australians employed in this industry. They are directly affected by these decisions. My anxiety is that you don't seem to be taking this as a matter of urgency.

Senator Canavan: I don't agree with that. We are engaging the sector, as Mr Lawson as outlined. The changes would only need to be made by 1 July next year. We are happy to take it on notice and check with the minister for more detail about what the government is considering at the moment. I understand your interest in it. The government also takes this matter seriously. That is why we are engaging the sector.

Senator KIM CARR: Can you take on notice whether or not it is possible to achieve this by regulation—

Senator Canavan: I'm happy to take it on notice. I don't know myself.

Senator KIM CARR: My anxiety is that if it does require legislative change there's no way that is going to be dealt with in the current parliamentary environment in that time period.

Senator Canavan: I couldn't comment. I am not familiar with this legislation. I will take it on notice.

Mr Lawson: One point to note is that there is a court case going on at the moment and if that court case goes to the position the company has put, and says the AMCL's actions aren't appropriate, that would change the circumstances. There are a range of possible—

Senator KIM CARR: It could take months.

Mr Lawson: There are a range of possible ways that need to be explored to address this issue. Ministers are very apprised of the issue and very concerned about it and want to make sure that a good, well-principled solution is found as quickly as possible.

Senator KIM CARR: Sure. The problem is that this is a matter that can't wait for months for resolution. It has been going on now well over 12 months. You would have been advised about this certainly for as long as I have been, and I suspect well before I was. This has been going on for well over 12 months directly for me, and I suggest much longer for you. Minister, you'll take that on notice presumably.

Senator Canavan: Sorry, what was the question?

Senator KIM CARR: How long has the parliament known about this problem? It is my contention that you've known about this for well over 12 months and now you're waiting on the outcome of a court case, which in itself could take months.

Mr Lawson: I didn't say we are waiting on the outcome of a court case. That case is going on. We are also in parallel looking at the issues and providing advice to the minister.

Senator KIM CARR: I'd like to know if it's possible for this to be resolved by regulation as distinct from legislation.

Senator Canavan: Yes, we've taken that on notice.

Senator KIM CARR: Thank you very much. I want to turn to the Defence Trade Controls Act. This is another matter that I raised with the defence department. The matter here is pretty straight forward. There is a review at the moment of the Defence Trade Controls Act. The defence department put in a submission after submissions had closed. The review gave them an extension of time to allow them to do that. At the Senate defence estimates two days ago I asked the Department of Defence who they had consulted about this matter and they said they had consulted with the department of industry, among others. That's the context of this. Madam Secretary, when was the department consulted?

Dr Smith: I'll ask the officers to answer that, but I'm aware that we have been consulted.

Senator KIM CARR: Yes, but I'd like to know when.

Ms Urquhart: Senator, can you repeat what you said Defence said about—

Senator KIM CARR: Defence have indicated that they put in a late submission on the Defence Trade Controls Act—it was after the normal close of submissions—because they were consulting with people. One of the agencies they said they consulted with was the department of industry. When was the department of industry consulted?

Ms Urquhart: I know that we have been in conversations with Defence about the review. Obviously we are very interested in it from the point of view of our science policy and in particular because we supported Professor Ian Chubb, former Chief Scientist, when he undertook the chairmanship of the committee involved in the original legislation. I'm not aware of the specifics of consultation in relation to a late submission, so that particular matter I would need to take on notice.

Senator KIM CARR: Thank you. It's a highly controversial submission. As you know, a wide range of organisations disputed very strongly the contentions put by the defence department, which was seeking to broaden its powers. The Academy of Science, for instance, described it as a power grab and said that it was an overreach. I'm interested to know who in the department was consulted and at what level the department was consulted. How did that occur—was it by meeting, phone, email or letter? What advice was tendered? I would have thought the submission was in sharp contrast to the advice you've tendered to this committee in regard to the operations of the Defence Trade Controls Act—namely, that there have been no breaches of the current act. I'm interested to know whether different advice had been tendered to the defence department.

Ms Urquhart: As I said, I need to take on notice that specific matter in relation to the late submission. There have been many conversations in particular between my division and the Department of Defence around the review, in particular at manager level as the review has progressed. I'm aware of those conversations and I've taken a particular interest in them, but I would need to take on notice the specifics of those exchanges about that late submission.

Senator KIM CARR: Thank you. Have you spoken to the reviewer, Dr Vivienne Thom?

Ms Urquhart: I have not specifically, no.

Senator KIM CARR: Has the department or any officer of the department?

Ms Urquhart: I believe the manager of the section involved has—

Senator KIM CARR: When would that have occurred?

Ms Urquhart: but I'd want to confirm that.

Senator KIM CARR: What date did that occur?

Ms Urquhart: I would need to confirm that. I believe it may have been email exchanges, but I'll need to confirm.

Senator KIM CARR: Did the department consider making a supplementary submission to the review, following the defence department's late submission?

Ms Urquhart: The department hasn't made a submission, but CSIRO and ANSTO had as agencies, obviously, undertaking the sort of research that would potentially be impacted by the operation of the act. We have been aware of those submissions.

Senator KIM CARR: Did you consider making a submission following that?

Ms Urquhart: I think we felt that as an agency not undertaking the sort of research that would be directly impacted there wasn't a need for a submission from the department and, in particular, because of the exchanges between our team making sure that the review and the Department of Defence were well aware of the activities that we had undertaken in supporting Professor Chubb as chair of that steering committee engaging with stakeholders. In particular what we sought to do was encourage deep stakeholder engagement. I felt reassured by the responses we had had in that regard.

Senator KIM CARR: So you geed up the others, did you, to make submissions?

Ms Urquhart: Sorry. Geed up—

Senator KIM CARR: Geed up other people—

Ms Urquhart: Senator, I've not been in conversations with stakeholders about—

Senator KIM CARR: When you say you encouraged them to participate—

Ms Urquhart: We encouraged the Department of Defence and the review to ensure that there was consultation with stakeholders.

Senator KIM CARR: It appears they're not, because the actual liaison committee that did this work wasn't consulted.

Ms Urquhart: The liaison committee that undertook—

Senator KIM CARR: The stakeholder group in the Department of Defence. The defence trade liaison group wasn't consulted about their submission.

Ms Urquhart: Senator, that question—

Senator KIM CARR: It's not your problem, though.

Ms Urquhart: would obviously have to be one answered by the department.

Senator KIM CARR: I understand that. Have you had any representations from various stakeholders since the Department of Defence submission was published?

Ms Urquhart: Not that I'm aware of.

Senator KIM CARR: Have you briefed the minister, current or former, on the implications of the proposals advanced by the Department of Defence?

Ms Urquhart: I don't believe so, but I would need to confirm that.

Senator KIM CARR: Why not?

Ms Urquhart: We haven't seen the report, Senator.

Senator KIM CARR: Hang on. The submission is public. The defence department's submission is public.

Ms Urquhart: That's correct.

Senator KIM CARR: It is highly controversial. It has been the subject of widespread commentary. It has encouraged a wide range of organisations within the research sector to adversely comment on the report, and you've not briefed the minister?

Ms Urquhart: I should be clear, Senator. Obviously, CSIRO and ANSTO have made submissions.

Senator KIM CARR: Yes, and so have Universities Australia, so has the Academy of Science and so have a substantial number of individual universities.

Ms Urquhart: Just in relation to our portfolio and the minister, there would have been briefing associated with those submissions.

Senator KIM CARR: But you wouldn't have given the minister a situation brief on something like this?

Ms Urquhart: Obviously, there would be briefing when submissions are being put into review like that to set the context for the minister responsible.

Senator KIM CARR: Sure. So you are still responsible for research here, are you?

Ms Urquhart: We are responsible for science policy.

Senator KIM CARR: Science policy is part of research, surely. You provided the minister with no advice on this matter?

Ms Urquhart: Just to be clear: the responsibility for research policy and funding rests with the Department of Education and Training.

Senator KIM CARR: And science. You've provided no advice to the minister for science on this highly controversial matter?

Ms Urquhart: No, Senator. What I indicated was that in the submissions being submitted from CSIRO and ANSTO the usual process is for context setting and for advice to the minister about those submissions.

Senator KIM CARR: And no issue brief? Was there an issue brief presented to the minister on this matter?

Ms Urquhart: We are talking about CSIRO and ANSTO submissions. There would have been briefing for the minister about those submissions. They would have discussed the issues and provided background.

Senator KIM CARR: That's it? That's the only advice this department has provided to your minister?

Ms Urquhart: I'm not sure that—

Senator KIM CARR: Do you want to take that on notice?

Dr Smith: We'll take it on notice.

Senator Canavan: We'll take it on notice. I have no advice on that.

Senator KIM CARR: Dr Thom's report has been with the government since 15 April. Have you got a copy? Has this department been given a copy?

Ms Urquhart: No, Senator. When we talk about briefing to the minister, obviously, it's often to support a position. Without having seen the report, the briefing would appropriately come with that.

Senator KIM CARR: I'm surprised. I seem to recall there were issues briefs provided on a regular basis, and this is a pretty significant issue for the portfolio. I'm surprised that you're not—

Senator Canavan: Just to be clear, we have—

Senator KIM CARR: I'm just expressing surprise.

Senator Canavan: taken that question on notice. I don't think we've established yet exactly what briefs—

Senator KIM CARR: Thank you very much, Minister. I appreciate that. And you've not received a copy of the report?

Ms Urquhart: No, we haven't.

Senator KIM CARR: I'm surprised by that as well. Thank you very much. Madam Secretary, you've made some administrative changes, as you've indicated to us today. Thank you very much for that. I see that Deputy Secretary Sue Weston's a strategic adviser. What's that about?

Dr Smith: Ms Weston has just come back from leave, as I indicated. She's been back in the department for a week or so. Sue is going to be looking at some of our international engagement approaches as well as looking at how we focus on greater alignment across our policy and program areas.

Senator KIM CARR: Right. I see. So what units does she have responsibility for?

Dr Smith: She doesn't have responsibility for particular divisions. With Mary Ann O'Loughlin now having responsibility for science and corporate policy, I've asked Sue to, if you like, work across the department on those issues and other issues as they emerge. And I'm happy for Ms Weston to also expand on that, if you like.

Senator KIM CARR: Does she want to?

Ms Weston: Yes, I'm very pleased to be back from leave—

Senator Canavan: Don't mislead the Senate, Ms Weston.

Ms Weston: and feel very refreshed. It was a great opportunity to have that leave. As you know, I've been working with the department for quite some time and I do have quite an understanding of how it works across the board. I'm looking forward to having the opportunity to look at how we might align some of the programs and policies better and also work on international engagement, particularly the Asian international engagement.

Senator KIM CARR: Ms Weston, I say that without any criticism at all. As you know, I regard you very highly in terms of capabilities. I'm just concerned that your skills are not being used properly. But you're assuring me they are?

Ms Weston: Indeed. I feel comfortable with the work I've got to do, and already I've been engaging with the other divisions and receiving terrific support in that.

Dr Smith: May I add that Ms Weston is very highly regarded across all of the Public Service, and her skills and capabilities are highly sought by many other departments. It is normal for senior staff to take time off and reflect on what their interests are and what they may like to do going forward.

Senator KIM CARR: She's not on gardening leave then?

Dr Smith: She's not on gardening leave. There is enough, as you would well know, in this portfolio to keep someone of Sue's capabilities very, very busy.

Senator KIM CARR: I'm pleased to hear that. What's happened to the CRC programs? They are not listed anymore. Who has responsibility for those?

Dr Smith: That would reflect some cleaning up of titles and programs. I'll ask the relevant deputy secretary to take you through that.

Ms Kelly: Policy ownership for the CRC programs hasn't changed, but program delivery for those is in the AusIndustry Industry Capability and Research Division, in the Industry, Research and Investment Branch. I have Duncan McIntyre, the head of that division, who can provide any further detail that you need in relation to that.

Senator KIM CARR: All right, so that's where we find them. Growth centres and the food business: what's happening to those?

Ms Kelly: Growth centres are in the Industry Growth Division under the Sectoral and Place Based Policy Branch. That's the policy owner. Delivery of aspects of those is, again, in the Industry Capability and Research component of AusIndustry and, again, in the Industry Research and Investment Branch.

Senator KIM CARR: Thank you. I see there's a new Support for Business Division. Is that a name change?

Dr Smith: That's AusIndustry. We've divided AusIndustry into direct support for firms and the programs that provide direct support for firms. That's the division headed by Ms Teena Blewitt. That's Support for Business. Then we have Industry Capability and Research, which is the capability-building and the connection between industry and research. That is dealt with in the other part of AusIndustry, headed by Duncan McIntyre.

Senator KIM CARR: Was that a change in philosophy or a different approach? It seems to have grown another division. Is that right?

Ms Kelly: No, AusIndustry has had two divisions in recent years. Prior to 1 July, there had been a split between program management and program delivery. The new arrangements for AusIndustry are to bring delivery and program management together so that all of the people who work on one program are in the one branch. That gives staff a greater alignment. They understand the purpose of the program that they're working for and are connected to that at every point. The realignment was really to do away with the split between program management and program delivery.

Senator KIM CARR: Are you using more consultants in the administration of grants?

Ms Kelly: Grant are done through the Support for Business Division. The restructuring that we've done hasn't had any particular impact on the use of consultants, but the grants hub is run by Ms Blewitt, who can provide you with any detail in the use of consultants in the grants hub if you would like that.

Senator KIM CARR: Yes, I would, please. Thank you. So it's the same staffing numbers?

Ms Blewitt: Yes, the business grants hub and administration is within my division. The number of staff that actually work on grants does vary, but the number of contractors that we have at the moment—

Ms Kelly: While Ms Blewitt's getting that: staffing in AusIndustry as a whole has actually gone up this financial year because we did, of course, get additional staff as part of the additional compliance work on the R&D tax incentive scheme. So, in fact, our numbers have increased over the year.

Ms Blewitt: At the moment, we've got eight contractors in the division.

Senator KIM CARR: That's stable, is it? You've had eight contractors?

Ms Blewitt: It would vary. It depends on the work. We've got a head count of 324 staff, 276 of which are ongoing. Forty-eight are non-ongoing. Non-ongoing can be periods from six months to 12 months, depending on the nature of the work. And then we've got eight contractors.

Senator KIM CARR: I see.

Ms Blewitt: The contractors we normally just bring in for short periods of time—it might be for a month or two—or specialised sorts of work.

Senator KIM CARR: I see. You said you've employed additional staff for the tax compliance issue. How many are those?

Ms Kelly: I might get Mr McIntyre and Ms Mulder to provide you with that.

Mr McIntyre: The R&D tax incentive staff as at 17 October had 82.8 ASL working. Ms Mulder may be able to provide some additional breakdown if you're interested.

Ms Kelly: This is in relation to the new staff.

Senator KIM CARR: How many are new staff?

Ms Mulder: As you know, we received additional funding in the May budget for our compliance and integrity measure. Through that we've received around 11 or so ASL directly to the program and an equivalent of 75 FTE across the program in terms of the whole range of activities that we have from the budget measure.

Senator KIM CARR: Right. Where have you got those people from? Are there any from labour hire?

Ms Mulder: At this stage, no.

Senator KIM CARR: Are you planning to get any from labour hire?

Ms Mulder: At this stage we're looking at a range of options in terms of how we will fill those positions. We have undertaken some recruitment already through the normal APS recruitment process and we've got some rounds open at the moment.

Senator KIM CARR: So how many have you got from labour hire?

Ms Mulder: At this stage—

Senator KIM CARR: none?

Ms Mulder: We might have one or two contractors in the branch.

Senator KIM CARR: So the eight are from labour hire, are they?

Ms Mulder: No, they're permanent employees.

Mr McIntyre: The eight that Ms Blewitt referred to are in her division. The R&D tax incentive is in a separate division.

Senator KIM CARR: Okay. How many people in the department have you recruited through labour hire?

Ms Kelly: We might have to get someone to provide that information if that's available.

Mr Medland: Indicatively, we've got about 300 contractors working in the department.

Senator KIM CARR: And all 300 are on short-term contracts?

Mr Medland: Yes. They'd vary depending on the needs of the relevant division.

Senator KIM CARR: Can you tell me where they are—perhaps on notice?

Mr Medland: Yes. My preference would be to take that on notice.

Senator KIM CARR: Of course.

Mr Medland: We captured that information through our onboarding system and we'd need to do a bit of an analysis of that.

Senator KIM CARR: Thank you. How many are recruited through labour hire?

Mr Medland: I would say the bulk of those would be recruited through labour hire, but we'd need to look at our onboarding system and then reconcile that with the contract in the finance system.

Senator KIM CARR: Thank you. Is there a particular savings involved with the employment of contractors in this way?

Mr Medland: I think the employment—or engagement, I should say—of a contractor would really be to meet the needs of the relevant division. It might be for a short-term period. For example, at the end of the financial year we might have a spike in accounts payable, which means we need to engage additional contractors to try to deal with that peak, and then, as we move into the new financial year, there's no need for that. Again, you'd look at the costs and the benefits of engaging a contractor over, say, a non-ongoing or ongoing staff member.

Senator KIM CARR: But it's only for the short term.

Mr Medland: Generally it's only for the short term and it's to meet a specific need, but you'd need to look at each individual engagement.

Senator KIM CARR: Sure, but you will be able to tell me how many long-term labour hire engagements you've got.

Mr Medland: Again, we'd need to look at every—

Senator KIM CARR: Sure. Can you take that on notice then?

Mr Medland: We can take that on notice.

Senator KIM CARR: Thank you.

I turn to the ministerial arrangements with regard to staffing. On the website it seems to be the case that, Minister, you're listed as the portfolio minister instead of Minister Andrews. Can I have read that correctly?

Senator Canavan: That is correct.

Senator KIM CARR: That is correct, is it? How does that happen?

Senator Canavan: My understanding is that, before the recent ministerial reshuffle, there were joint ministers, but subsequent to the reshuffle I am the appropriate portfolio minister. Of course, Minister Andrews is a fellow cabinet minister, but I'm the relevant senior minister within the portfolio.

Senator KIM CARR: How does it work? You've got the portfolio as a whole but not—

Senator Canavan: But not the whole portfolio, no.

Senator KIM CARR: Yes. I'm just trying to follow it.

Senator Canavan: I don't think it's unprecedented, but you might have more experience with this than me. The division hasn't changed at all since the reshuffle of responsibilities within the department. Minister Andrews has taken on board the roles that Minister Cash had previously. The difference—and Dr Smith might enlighten more on this—is that previously there were some joint departmental arrangements with the jobs and employment department. Minister Andrews now, I believe, simply has responsibility for roles in the Department of Industry, Innovation and Science.

Senator KIM CARR: Perhaps you could explain this to us, Dr Smith. How does it work?

Dr Smith: As the minister said previously, the department was part of the jobs and innovation joint portfolio. Now, under the new arrangements, we are obviously a separate department with portfolio, with no change in responsibility or program or any machine of government changes following the change in minister. We work to two ministers: to Minister Canavan on resources and Northern Australia and to Minister Andrews on industry, innovation and science matters.

Senator KIM CARR: Does Minister Canavan get all briefings?

Dr Smith: No, Minister Canavan does not get all briefings.

Senator KIM CARR: Clearly, Minister Andrews doesn't get Minister Canavan's briefings.

Dr Smith: There will be some crossover on some issues with the portfolio agencies—ANSTO, CSIRO—but the lines of responsibility are pretty clear-cut.

Senator Canavan: Just to clarify, the arrangements haven't changed at all in this regard since the ministerial reshuffle. Sometimes I do see briefings that are for the minister for industry. They usually, as Dr Smith outlined, relate to matters of some crossover, be they industry growth centres which relate to the resources sector, or CSIRO and ANSTO and the roles we're taking on radioactive waste, which come to my portfolio area. Otherwise, the areas of responsibility are quite clear and there is a very cooperative relationship. I had a cooperative relationship with Minister Cash, and likewise now with Minister Andrews.

Senator KIM CARR: The charter letters have been issued, I'm told. Is that the case?

Senator Canavan: That's my understanding, although I can't comment for Mr Andrews directly.

Dr Smith: I think the ministerial arrangements have been issued. I'd have to take it on notice on charter letters.

Senator KIM CARR: I understand that charter letters have been issued. I'm seeking on notice copies of those charter letters.

Senator Canavan: Happy to take it on notice.

Senator KIM CARR: The other thing that interests me is that I see that Minister Andrews has nine personal staff—MOPS staff—and you, Minister, have 12. Is that correct?

Senator Canavan: I can't comment on Minister Andrews but my understanding is I have 12 ministerial staff and that has been the case for some time. If it's different I'll correct it.

Senator KIM CARR: I just wonder why the difference.

Senator Canavan: I can't comment on why. Those staffing arrangements are obviously set by the Prime Minister's office.

Senator KIM CARR: I have the public document. There are some variations. Some ministers have 13. The Minister for Defence has 16. The Treasurer has 17. The Prime Minister has 32—that's always been an interesting one, I've found—sorry, 52. How could I get that wrong! The Deputy Prime Minister has 32. Why do Minister Andrews's staff numbers appear to have gone down?

Senator Canavan: I can't answer that question. It's a matter for the Prime Minister's office and the Department of the Prime Minister and Cabinet.

Senator KIM CARR: Would you take that on notice?

Senator Canavan: I'm happy to take it on notice. We'll obviously have to consult with PM&C.

Senator KIM CARR: Are there any APS staff who have been seconded to Minister Andrews's office?

Dr Smith: At this point in time there are two officers, APS staff, in Minister Andrews's office in addition to the two DLOs. I understand one of those will be returning to the department next week. It's normal practice, as you know.

Senator KIM CARR: It's a standard convention. The three months convention.

Dr Smith: That's right. There is one officer who will go on to MOPS very soon, I think, or could already be on MOPS.

Senator KIM CARR: A transfer?

Dr Smith: Yes.

Senator KIM CARR: Really, a secondment. They are not going to resign from the public service, are they?

Dr Smith: No.

Senator KIM CARR: It would be silly to do that in this environment, wouldn't it.

Ms Richards: Maybe I can assist. We have one staff member who will be on leave without pay from the department while she joins the office under the MOP(S) Act.

Senator KIM CARR: Again, that's a standard convention. How many DLOs are there?

Dr Smith: There are two DLOs in Minister Canavan's office and two DLOs in Minister Andrews's office.

Senator Canavan: Just to clarify matters, I've been advised that charter letters have been issued for both ministers.

Senator KIM CARR: I thought that was the case. I'll leave that question on notice, if we could.

Senator Canavan: Yes.

Senator KIM CARR: That concludes my cross-portfolio questions. Thank you very much for that.

CHAIR: I have some questions about the Industry Growth Centres Initiative. I probably should have jumped in when Senator Carr was asking about them. How long has the Industry Growth Centres Initiative now been in place?

Mr Lawrence: The growth centres initiative was announced as part of the industry competitiveness agenda back in 2014. The growth centres became operational from 1 July 2015.

CHAIR: What is the role of the Growth Centres Advisory Committee? It should theoretically be obvious through its name, but I know that each of the industry growth centres has its own board. How does the Growth Centres Advisory Committee operate?

Mr Lawrence: The Growth Centres Advisory Committee provides advice to the minister and the department on the operations of the initiative. It also provides strategic policy advice to the minister based on the insights and activities of the growth centres, so it compiles the insights that all six growth centres develop and brings them together to provide strategic policy advice.

CHAIR: Are the members of the advisory committee also the members of each of the boards of each of the industry growth centres?

Mr Lawrence: The advisory committee comprises four independent members—Mr John Grill, Catherine Livingstone, Carolyn Hewson and Andrew Liveris—and the chairs of the six growth centres.

CHAIR: I know we've had this conversation before, and you've told me about a few of the success stories that have come out of the industry growth centres, and I think that's terrific. They do sound like they're doing some very interesting and innovative work, but which of those growth centres are, in fact, meeting all their KPIs and doing what they're supposed to be doing, and which ones are perhaps a little less organised? Did you notice that I was putting that politely?

Mr Lawrence: Sure. The first growth centre started operation on 1 July 2015, so it's a lot further through its program than say the Cyber Security Growth Centre, which started in late 2016. They're all at different stages of development. Therefore, you can't really compare and say one is better than the other; they're all doing different things. They're all at different stages and, therefore, they're delivering at different stages. As I said, the food one started first, so it has, you could say, more runs on the board than the cyber one that started two years ago. That's not to downplay the cyber one, which has made great strides in the less than two years that it's been operational, having worked with the TAFE system to develop a national curriculum for cybersecurity students and having run a number of events and activities that have seen firms win work overseas and find their first customers here in Australia.

CHAIR: When you talk about 'runs on the board' and outcomes and everything else, obviously the KPIs for each of the industry growth centres are going to be different, are they not? Or is there some sort of universal KPI for the industry growth centres?

Mr Lawrence: Each growth centre sets its KPIs against its own activities, but all those activities must relate back to the overarching objectives of the initiative, which are to improve collaboration and commercialisation in their sectors, improve or address workforce management and skills issues, improve access to global supply chains and international markets, and identify opportunities for regulatory reform.

CHAIR: How much does the Industry Growth Centres Initiative cost on an annual basis?

Mr Lawrence: Each growth centre gets, over their current four-year period, about \$15.6 million in operational funding—so that's \$3.5 million per annum operationally—and then they get around 15.6 in project funding. That is split over four years, but it fluctuates, because they get less money in their first year because they're establishing themselves. That money ramps up into the second and third year, then tails off as they are coming to an end of government funding. But, as Mr Lawson was reminding me, in the budget, the government has agreed to extend the funding for the initial six growth centres for another two years. Under that, subject to a review of their performance, they'll be eligible for \$5 million per year for two years.

CHAIR: I wanted to ask you about the review of their performance. When you review their performance, can you measure their performance in dollars? Can you say, 'This has generated X number of dollars for that particular industry or X number of dollars for the economy overall'? I know it's a big ask. It does seem like it runs

pretty lean, which is terrific, but, when you put together a program like this, you want to be able to demonstrate outcomes. obviously.

Mr Lawrence: I think at this early stage, you can see some green shoots. You can see some changes occurring. The growth centres themselves have spent, I think, \$40-odd million on projects and have attracted around \$60 million in funding from outside organisations. I think that's for 110 projects to date. Let me check the numbers here. They've done 137 collaborative projects. They've contributed \$46.4 million and have leveraged more than \$63.2 million from industry or the research sector to help with those projects. In the way of outcomes around jobs or improving industry value-add, it's always very difficult, because you're working with a smallish number of firms in those sectors overall. Employment changes and external factors can have a large play on that. For example, the food growth centre has worked with a number of firms that are exporting for the first time that have added employees. In the overall sector, that would be quite a small number of employees, but, in their own regional areas, they would be quite important jobs being added.

Mr Power: I can just add some information on top of that, if you'd like. Mr Lawrence has talked about some of the collaboration projects that the growth centres have undertaken. One of the other objectives they have is integration with international supply chains, exports et cetera. I can tell you that, across the growth centres, they've undertaken about 36 international delegations and about 1,500 firms have participated in those. As a result of those, in terms of outcomes, the data we have at the moment from the growth centres is that there are at least 150 firms who, as a result of those delegations, have either undertaken exports for the first time or expanded an existing export line. One of the other things that the growth centres are required to focus on is skills and skills development, so the growth centres also run skills workshops, particularly in industry. In many cases, they partner with the department's programs through the Entrepreneurs' Program. They've undertaken around 350 skills workshops. They've done those over 17 different topic areas and had over 10,000 participants. So there's quite a lot of activity that goes on, in addition to the granting of funds, because it operates on each of those lines. So some of that work is work that really facilitates both skills, which will then lead to growth and jobs, and, obviously, exports as well.

CHAIR: I think this is a terrific initiative, but one of my problems with it is that, any time I've tried to get those success stories or good news stories, it takes about 20 different clicks on a website to get there. I would love it if there were some way that the information on how this program is in fact producing outcomes was in one location. I don't know whether that's something that you produce or publish. Am I looking in the wrong spot? The website does seem to be very opaque.

Mr Lawrence: I suppose the website is to provide factual information about the initiative, and then we tend to push people towards the individual growth centres for them to tell—

CHAIR: That's right. So is there a consolidated story somewhere?

Mr Lawrence: The department provides that in many forms to many constituents, but we can have a look at putting some of that up onto the website.

Mr Lawson: One of the messages we have had about this program is that we are not adequately communicating it. I think we are working on that. There are various activities that go into doing that. They haven't yet delivered on our desire to more clearly and in an easier way explain exactly what is going on and what has been achieved. So I think we should take the criticism and say that we are working on it.

Senator Canavan: It is a fair point, though; and, as Mike Lawson has outlined, as was said, a lot of the evidence and case studies are located on the websites of the individual growth centres and not particularly engage with the METS and NERA growth centres, which relate to the resources sector. NERA, as I've seen before, has some nice case studies on their website. So you can go to individual growth centres and look at what they are doing. But the department doesn't have that consolidated approach because the groundwork is being done by the individual sectors.

Mr Lawson: We do have about 26 case studies in different forms of development. My understanding is that that the first eight of them are either on the department's website or about to be published. So the information is coming. It does take time for these case studies to come through, and some are in development, but we are still waiting for the companies that are being case studied to actually sign off on the content as well.

CHAIR: Terrific. Thank you. Senators Ketter and Carr, are you happy for us to move to program 1 now?

Senator KETTER: Yes.

CHAIR: If no-one has any further questions on cross-portfolio, corporate or program 3, we will move to program 1. Senator Carr.

Senator KIM CARR: Can I turn to this R&D issue. On page 22 of the annual report you say the initial target for business R&D for 2017-18 was \$16 billion. Is that correct?

Ms Mulder: Certainly the estimate for 2017-18 was \$16 billion, noting that the income year relevant to that financial year is the previous year, 2016-17.

Senator KIM CARR: Sure. But the published result in the annual report was only \$14 billion.

Ms Mulder: That's correct.

Senator KIM CARR: Why was the target not reached?

Mr Lawson: A range of factors affect the amount of R&D that the business sector does. We always like to be aspirational in our targets, but the downturn in the mining investment sector had an impact on, in particular, mining R&D because R&D is part of the general investment. There were also some declines in other sectors—financial services and manufacturing. The amount of private sector investment depends on expected profitability, which declined.

Senator KIM CARR: So you are saying it is structural shifts in the economy?

Mr Lawson: It is structural shifts and there are some cyclical impacts.

Senator KIM CARR: Do you expect that decline to continue?

Mr Calder: The R&D tax incentive program is a demand driven program, so it really depends on what the business community wants to undertake with R&D in terms of how much R&D activity will be supported and the number of companies that will be participating the program.

Senator KIM CARR: Sure. But you must have a target now, though. You managed to publish one last year, for this year's annual report, so you must have an expectation of whether these factors, as you put it, will continue or otherwise.

Mr Lawson: That annual report was only just published, so it has the 2017-18 target and result in it.

Senator KIM CARR: For registered entities, the target was 15,500. The number that actually registered was 15,200. That is not a huge differential. So you must have an idea of whether you can expect a continuing decline in R&D spending in Australia.

Ms Mulder: I am happy to take it on notice, but I'm pretty sure that our estimate for this year is on par with what we have this year. At the moment, in terms of registrations, we are on par with the 2016-17 income year.

Senator KIM CARR: So you expect it to be \$14 million?

Ms Mulder: Yes, I think so. But I would like to clarify that.

Senator KIM CARR: The government's policy is obviously to encourage additional R&D, isn't it?

Senator Canavan: We of course would like to see a strong and vibrant research and development sector. That's why, in the budget this year, we have a range of investments towards supporting research and development infrastructure.

Senator KIM CARR: But there is a decline.

Senator Canavan: These particular figures relate to the investment from businesses, which of course the government does not have direct control over. And the change in economic circumstances in the last two years, as was outlined, particularly in the mining sector has led to a more subdued environment than perhaps was expected.

Senator KIM CARR: The decline in mining investment has been going on for a little while now, hasn't it?

Senator Canavan: Yes, it has.

Senator KIM CARR: You are not going to blame it on just last year?

Senator Canavan: That's right. But it is also the fact that, over the last few years, the government has initiated a reform program on our R&D policy settings. We commissioned an inquiry, the report of which was published in 2016, and in this year's budget a number of changes were announced to the R&D tax incentive as a result of that inquiry. So we absolutely are focused on making sure we have the right policy settings in place to encourage R&D.

Senator KIM CARR: Sure, but you would have to say it was a disappointing result then.

Senator Canavan: I would always like to see more business investment and research and development but, not being fully across all of the statistics in this area, I am not in a position to characterise it one way or another.

Senator KIM CARR: It is pretty straightforward here. It has gone down from \$16 billion to \$14 billion.

Senator Canavan: It hasn't gone down—

Senator KIM CARR: But you've substantially undershot the target and you've now lowered the target for this year as well.

Senator Canavan: Those are the facts, and I'll stick to the facts during estimates.

Senator KIM CARR: And it would suggest that the ABS has also pointed to these facts about a 12 per cent drop in business R&D. Would you say, then, that the government's policies are disappointing?

Senator Canavan: Obviously business decisions around investment in research and development are affected by a range of measures. Certainly the economy overall has remained strong. As has been outlined, there have been different circumstances in different industries. The policy settings that affect business plans for R&D are affected not just by specific policies in this departmental area but also by the general economic settings. That's why the government is very focused on trying to lower taxes for businesses. Unfortunately we haven't been able to lower them as much as we would have liked to. If we had a different outcome there, that would have encouraged greater business investment, including in research and development.

Senator KIM CARR: You have also reduced the R&D concession by about \$2.4 billion.

Senator Canavan: I don't have those figures in front of me. As I have mentioned, a number of reforms were announced in this year's budget which followed on from recommendations from the research and development inquiry that was undertaken. The government invested significantly in research and development infrastructure in a range of areas in this year's budget as well.

Senator KIM CARR: Since you've drawn this to my attention, let's go through some of these numbers and see if I have got this straight. The Office of the Chief Economist has obviously done a bit of research in this area. What are they saying about the desirability of additional business R&D for the economy? Are they making that point? Can you enlighten me in terms of the research?

Mr Cully: We report on the latest available R&D statistics from the ABS, which was in 2015-16. That was the last time it was published in our annual innovation system report.

Senator KIM CARR: What do you say in terms of the desirability of additional business R&D for the economy?

Mr Cully: What we've done in our research is show that there's a positive association between businesses that invest in R&D and their subsequent performance—be that productivity, employment or what have you—and the businesses that spend the most on R&D are also the ones that generate the biggest increase in performance.

Senator KIM CARR: Sure, that's what the innovation reports have been saying now for many years. So what's the impact on industry innovation and performance of a decline in research and development expenditure?

Mr Cully: There are a whole range of factors which influence how businesses perform. It is not simply a matter of R&D. It is investment in—

Senator KIM CARR: I am specifically interested in the impact of a decline. You have indicated to us what the positive is, but what is the impact of a decline?

Mr Cully: You would have to look—which we haven't done—at where, in the distribution of firms across the economy, the decline had occurred. One of the things we showed in our innovation system report which we published last year is that some businesses that invest in R&D in fact have a negative return on their investment. So it is not a matter of taking an aggregate number and imputing any aggregate impact on the economy as a whole.

Senator KIM CARR: I was recently reading the British business case study for their nurse review. They were putting a figure of 20 per cent on the general return for R&D. Would you agree with that assessment?

Mr Cully: I am not aware of that report—

Senator KIM CARR: Perhaps you could take that on notice and see.

Mr Cully: I will take that on notice. There are a range of contested estimates—

Senator KIM CARR: They have certainly put that on the public record. That is the Department of Business in the United Kingdom. Mr Lawson, in terms of the reduced target you have put forward here already, have you calculated the effect of the government's budget measures in that target?

Mr Lawson: Our PBS statement doesn't have four targets on the number of—

Senator KIM CARR: You've just told me you've got the target for next year.

Mr Lawson: The 2017-18 numbers that are there.

Senator KIM CARR: Sure.

Mr Lawson: The changes that have been introduced are designed to increase the incentives for companies to do additional R&D. They will cost less because they are not paying for business-as-usual R&D by companies. I would expect that they will—and they are designed to—increase the amount of R&D.

Senator KIM CARR: That's your policy intent, but that has clearly been demonstrated to be not quite as successful as you would like.

Mr Lawson: The 2017-18 data refer to the claims in 2016-17, well before any discussion about changes to the current situation.

Senator KIM CARR: That's my point. Let's go to the current situation. You have taken \$2.4 billion out. What are the consequences of that?

Senator Canavan: Sorry, we haven't taken \$2.4 billion out. Businesses have spent \$2.4 billion less on R&D than was expected.

Senator KIM CARR: No, that's the—

Senator Canavan: Sorry, I thought you were going to the decrease from \$16 to \$14 billion.

Senator KIM CARR: I am glad you have corrected that, but \$2.4 billion of government incentive is being withdrawn.

Mr Lawson: Over the forward estimates, two different measures—whether it is accrual or accounting—

Senator KIM CARR: We can play those games, Mr Lawson.

Mr Lawson: No. Absolutely. But it's—

Senator KIM CARR: I want to know what your effect on the target is.

Mr Lawson: But we've been comparing annual numbers. The 2.4 is—

Senator KIM CARR: No. What's the effect on your targets?

Mr Lawson: We haven't published targets, but, as I said, the intensity measures are designed to encourage companies to do additional R&D, unlike the review that was done that said business-as-usual work by large companies wouldn't get any benefit. They still get the base 4c in the dollar. They get more for additional. There should be an incentive to do additional R&D. But, as these past changes have indicated, the broader economic conditions have a very significant impact on the amount of R&D that's done.

Senator KIM CARR: Sure. But you must be able to tell me what the impact of the government changes will be.

Mr Lawson: Treasury does the modelling of the impact before—

Senator KIM CARR: And they haven't told you?

Mr Lawson: The Treasury estimates of what is happening in future take into account other changes that are going on in the economy as well as these changes.

Senator KIM CARR: We've been down this track before. You can go around the track as many times as you like, but I'm looking for a simple answer. What's your expectation of the increase in R&D we are going to see as a result of the government's reductions?

Mr Lawson: We haven't got an estimate of the future level of R&D in that—

Senator KIM CARR: There has been no modelling done on the forecasts for future expenditure on R&D tax incentives?

Mr Lawson: No. I think there was—we've been through this before. Treasury did modelling. That leads to those numbers about the potential save from the changes. They were the modelled results.

Senator KIM CARR: Presumably we will get that through the Senate inquiry. Let's turn to the SRI tables which were released last week. There, I'm told that the non-refundable tax incentives available for firms over \$20 million is forecast to fall from \$710 million in 2017-18, to \$420 million in 2018-19, and to \$330 million in 2019-20. Can you confirm those numbers?

Mr Lawson: That's correct. Those are the estimates published in the SRI budget tables, along with the changes to the refundable amount.

Senator KIM CARR: These are, by anyone's guess, substantive reductions.

Senator Canavan: You're asking the witness for an opinion.

Senator KIM CARR: Would you describe it, Minister, as a substantive reduction?

Senator Canavan: As was outlined, the changes the government has made have the intention of increasing the quality of the R&D spend, particularly focusing on companies that are smaller and more intense with their R&D budgets. My understanding of the reduction of the totals is that it is a consequence of the reforms that the government announced. They are in line with the recommendations of a significant review into our R&D tax incentive settings. It was conducted by eminent Australians such as Bill Ferris, Alan Finkel and John Fraser. So we are confident that the changes will lead to better quality R&D spending and also increased R&D spending, given that they target or try to target spending which is not business as usual.

Senator KIM CARR: We look forward to that. You've given us these figures in terms of firms over \$20 million, in terms of the forecasts. You must be therefore able to forecast the level of business research and development expenditure by larger firms that underlie these forecasts.

Mr Lawson: As we explained before, these forecasts come from Treasury, so they reflect their modelling. Underpinning those estimates, there would be a number about the amount of R&D that was done. But it also depends on the rate at which different R&D by different intensity companies are rewarded, so companies with a low R&D intensity get 4c in the dollar. Companies with a very high R&D intensity get a lot more in the dollar. The net result of those changes, the implications of how R&D can—the changes in the total tax revenue also depend on interactions within the imputation system. It's sort of complicated.

Senator KIM CARR: So just remind me: Treasury have given you their modelling, haven't they?

Mr Lawson: We've been through this before.

Senator KIM CARR: Yes, I know. That's why I'm asking you to remind me. Have they given you the modelling or not?

Mr Lawson: They give us the results of the modelling.

Senator KIM CARR: Not the modelling itself?

Mr Lawson: Indeed.

Senator KIM CARR: I see. You do have the forecasts for the levels of business research and development by larger firms that underlie that forecast?

Mr Lawson: No.

Senator KIM CARR: You don't? All right.

Mr Lawson: We don't. The material in the SRI budget tables gives the cost-to-revenue estimate of the—

Senator KIM CARR: Is it the case that you are assuming that business research and development expenditure will rise—or fall—in coming years?

Mr Lawson: I'm not able to answer that question. We don't have a forecast—

Senator KIM CARR: You don't know? You just don't know?

Mr Lawson: I'll take that on notice.

Senator KIM CARR: Isn't the intensity threshold actually designed to induce more research and development expenditure? Isn't that what the minister said?

Mr Lawson: Yes. The intention of increasing the reward for companies that do an increasing amount of R&D is designed to encourage them to do additional R&D, consistent with a range of analyses that have been done on—

Senator KIM CARR: Yet you can't tell me whether or not research and development expenditure—

Mr Lawson: Because the research and development expenditure depends not just on the incentive that's provided through the R&D tax concession; it depends on incentive to earn profits, which depends on the company tax rate; it depends on other things that drive profitability about the state of the economy; it depends on the sectoral changes, because different sectors have different R&D intensities. It's a—

Senator KIM CARR: Is it fair to say it is at best negligible, the impact of these changes?

Mr Lawson: I don't think that was your implication—

Senator KIM CARR: No, certainly not. But I just want to know. I'm trying to elicit information from you, because I'm not getting very much at the moment.

Senator Canavan: I'm happy for Mr Lawson to answer further but, as has been described, these estimates are formulated by Treasury, so I think it's best to ask them exactly the assumptions and parameters of how they have generated those. My experience—without commenting specifically on these measures—is that often so-called second-round effects are not captured in modelling by Treasury, usually to be conservative or to come down on

the conservative side of things. But, obviously, the detail in this particular case needs to be put to Treasury because the modelling has been done by them.

Senator KIM CARR: Sure. But this is the operational department. This department actually knows whether or not these measures work or otherwise. That's been my direct experience. They actually know a lot more about this scheme than Treasury. In my experience, Treasury has not been able to get these predictions forecast right on one single year since this scheme was introduced. Mr Lawson, that's correct, isn't it?

Mr Lawson: I would have to take those on notice.

Senator KIM CARR: I can assure you, my assessment is correct—not one single year. We are relying on a group of people that provide you with forecasts and assessments, and they won't give you the detail, despite the fact that this department has the operational experience of actually how this scheme functions. I'm just wanting to know, if you can't provide us with the forward data, you must be able to provide us with the data on the previous three years. I would ask that you provide on notice the estimate of research and development expenditure claims against non-refundable and refundable offsets for the last three financial years.

Mr Lawson: Senator, we have the cost-to-revenue of those claims over last year but we don't have available to us the tax. We have registration data that we get, but we don't have—

Senator KIM CARR: Well, give me what you have.

Mr Lawson: Yes.

Senator KIM CARR: I understand that there are 15,500 firms registered for the scheme at the moment. That's correct, isn't it?

Mr Calder: I think there are currently about 13,400 registered.

Senator KIM CARR: So that figure I mentioned of 15,500—

Mr Lawson: There are a number of registrants but each registrant can include multiple companies. So there is a 13,000-odd number and a 15,000-odd number.

Senator KIM CARR: So how many are registered? Let's get that straight.

Ms Mulder: The number of research and development performing entities/companies—which is what is referred to in the PBS—for the 2016-17 income year is 15,258 whereas the number of registrants is 13,406 for the same income year.

Senator KIM CARR: And that's just a measure of the different structures?

Ms Mulder: That's correct.

Senator KIM CARR: Are you able to tell me the level of taxable income that has been generated by these companies that have received the refundable R&D tax incentive over the past seven years?

Mr Lawson: No, Senator, because it is confidential. We don't have—

Senator KIM CARR: You don't have individual—

Mr Lawson: We don't have individual details. Should the parliament pass the legislation, there will be transparency of the program.

Senator KIM CARR: You don't have it in aggregate?

Mr Lawson: We don't have in aggregate the taxable revenue of those.

Senator KIM CARR: Who does?

Mr Lawson: I presume Treasury.

Senator KIM CARR: So it is an ATO matter? Is that a question that I should put to the ATO?

Mr Lawson: It is.

Senator KIM CARR: Is not a question you can take?

Mr Lawson: We wouldn't be able to—

Senator Canavan: Let's take it on notice. Obviously, we will do what we can.

Senator KIM CARR: If you don't have the data in your system, would you ask the Treasury to provide it?

Senator Canavan: Happy to try.

Senator KIM CARR: Thank you very much. Are you able to tell me how many jobs have been created by those, I think, 10,000 companies in this cohort?

Mr Lawson: Again, we'd have to take that on notice.

Senator KIM CARR: There are a series of questions here that I will put on notice. You will answer the same way, because they go to a level of detail that I don't expect you to have readily available.

CHAIR: I have a question on the SRI tables. On an initial reading of those SRI tables, it seems that there has been an reasonable increase in the funding for science and research agencies since 2013 compared to the six years prior to that. I am wondering if the panel could outline the details of the increases for the CSIRO, ANSTO and AIMS specifically.

Mr D Wilson: The Commercialisation Policy Branch are responsible for compiling the SRI budget table. As to your question with regard to the science agencies, CSIRO, ANSTO and AIMS, for 2018-19, ANSTO and AIMS will all increase and then, over the forward estimates, beyond the 2018-19 year—so 2019-20, 2020-21 and 2021-22—there will be further increases. For CSIRO, from \$1,833 million up to \$1,837 million, ANSTO, \$242 million to \$225 million. In terms of the collective for the major direct R&D support programs from the government, from 2018-19 estimate through to 2021-22 we are going to see a net \$854 million increase over those three years.

CHAIR: It is day four of estimates and my brain is not as sharp as it was on day one. What percentage increase is that?

Mr D Wilson: On the increase from the 2018-19 year through to 2021-22, I'll have to come back to you about what that is as a percentage for that collective group. But in some of the other key major programs will be increasing. The research block grants, for example, will be increasing by 10.7 per cent over those years. The National Health and Medical Research Council competitive grant will be increasing by 4.1 per cent. The ARC competitive grant will be increasing by 7.5 per cent. One of the most significant increases is in the Medical Research Future Fund. That is increasing in 2018-19 from \$220 million up to \$646 million in 2021-22, recognising that government is making a significant investment into medical research through the Medical Research Future Fund over this forward estimates. That's, in effect, nearly a 200 per cent increase just in that program alone.

CHAIR: So it's fair to say the government is making a significant and sustained commitment to R&D and science research generally over the forward estimates.

Mr D Wilson: Absolutely. What's been a key policy position is that we are really looking to make long-term strategic and stable investment. That's what the research sector and the science community have asked for. I think the government has really put in place those long-term settings. We've just talked about that, over the forward estimates, the government has made some significant decisions and put in place some significant investments that go out beyond that and over the next decade. In the budget, there was a commitment to national research infrastructure, which was \$1.9 billion over the next 12 years. It's made a long-term investment into Antarctic science. It's made long-term investments around, as I just mentioned, the Medical Research Future Fund. Health can tell you more about that fund, but at the moment close to \$10 billion has been invested into an endowment fund. Over the forward years, there's \$1.9 billion, if you include 2018-19. Then, beyond that, it's ongoing. So there's some significant funding.

It's important to ensure there is stability and certainty for researchers and scientists to be able to plan effectively for their research programs. In particular, for example, with research infrastructure, which really underpins so much of our world-leading research, the government has made investments not only in the capital in those facilities but also in the operating funds to ensure the right staff and that equipment can be maintained and really kept at its maximum operation.

CHAIR: Can I just ask about the SRI tables, I understand—and correct me if I am wrong—that they are based on a very specific definition of science, research and innovation. Can you tell the committee what types of investments aren't necessarily captured in those tables that actually contribute to science and research?

Mr D Wilson: Certainly. The SRI budget tables have been collected for nearly 40 years. In terms of the core measures, it's a census across all of government. The definition of R&D as experimental R&D is in accordance with the OECD and what's referred to as the Frascati manual. So there's a fairly tight definition of what counts as R&D to ensure that there are comparatives on what investment has been made into R&D. But, as you pointed out, the government makes a number of investments across lots of portfolios that do not fit into that definition of R&D. In the last two years, as part of the SRI budget tables, we have been collecting information from portfolios on those programs that do not fall within that definition. This includes this portfolio. In that regard, I'll give you some examples: there's the Defence Innovation Hub, which government is making an investment in 2018-19 of around \$108 million. But that doesn't meet the definition of R&D, which is reported in the main tables, but the

tables now include detail of a range of other programs. They include Questacon's based funding; they include programs such as the early stage tax offset for encouraging investment into early-stage start-ups and the like.

CHAIR: So what's the difference between the funding that's outlined on the SRI tables versus the overall funding into research in Australia?

Mr D Wilson: Reported in the last table, this additional amount, for 2018-19, we expect that to be around \$600 million. That's over and above the R&D figure. That's up \$470 million from last year. It is the case—you mentioned before the Industry Growth Centres—part of that program is captured in that other part. It is the nature that, across government, there is a lot of investment being made into what would be commonly, and departments refer to it as, science, research and innovation activities. Definitional issues are something that will grow the understanding of what really we are capturing there. But \$600 million to some degree would probably still be an underestimate of how much is being invested. It doesn't include Education as to what the education portfolio would provide outside research funding.

CHAIR: Thank you, Mr Wilson.

Senator KIM CARR: I'll come back to R&D, but since the Chair has raised this matter, why were they so late?

Mr D Wilson: The tables were released, as you are aware—

Senator KIM CARR: I know, and I moved for return to order in the Senate. Why were they so late?

Mr D Wilson: The compilation of the tables is a large exercise across the Commonwealth. My branch commences the process—

Senator KIM CARR: Every other year it's been a large exercise. Why were they so late?

Mr D Wilson: The process starts after the budget. That was a change made six or seven years ago. That process takes time to get the right data on—

Senator KIM CARR: Six or seven years. You don't move quickly. Is that what you are telling me?

Senator Canavan: As has been described, there is no set time frame for the release of the tables.

Senator KIM CARR: Yes, there is. Yes, there is. This is late, Minister. This is late—much later than every other year.

Senator Canavan: Actually, I dispute that. I don't have the exact dates in front of me, but I can remember being briefed about this a few weeks ago when you had raised this. In fact, in previous years the tables have been released at later date, but I don't have the specific dates in front of me.

Senator KIM CARR: It's only because I moved a return to order that they were dropped; they were dropped out after I moved to return to order. Is it because they were so embarrassing?

Mr D Wilson:

To your earlier question about whether they are late, I think as Minister Canavan stated, there is no set time for when the tables go out. Last year, for example, they were early October—

Senator KIM CARR: They were embarrassing then too!

Mr D Wilson: I'll make the statement that last year's was a record investment in R&D.

Senator KIM CARR: You've got to look at the difference between real and nominal numbers. All the numbers you've read out here were nominal; they're not real. The analysis, if you look at the real dollars, there is a drop in expenditure for science and research on like-for-like. What you are trying to do now is bodgie up the tables. You want to put a few extra things in. Takes you time, does it, to bodgie up the tables?

Senator Canavan: I don't think that's a fair characterisation.

Senator KIM CARR: It's unfair to the officer, but it's not unfair to you, Minister.

Senator Canavan: I don't accept that characterisation; let's just leave it at that. You are free to put whatever claim you like here.

Senator KIM CARR: I certainly am. This is the problem: there has been a reduction in real terms in science expenditure on like-for-like. Now the government's trying to find a few other things to put in there to make the figures look a bit better.

Senator Canavan: As we have outlined, we've made a number of reforms in the R&D tax incentive system. We believe those reforms will lead to a better R&D system. The reforms are before the parliament at the moment, as I'm sure you're aware. And, as has also been outlined, we are investing record amounts of money in our premier scientific agencies, such as the CSIRO—

Senator KIM CARR: That's not true.

Senator Canavan: and AIMS.

Senator KIM CARR: That's not true, Minister. In real terms, you've got a decline. On top of that, you've got \$2.4 billion reduction in the single biggest item in terms of the innovation spend—the R&D tax concession.

Senator Canavan: But, as we've outlined, the changes we have made are intended to deliver higher quality R&D and also to better incentivise companies to invest in additional R&D. Of course, it's good practice to try to avoid taxpayer dollars going towards investments or spending that would have occurred otherwise.

Senator KIM CARR: Can I turn to the R&D tax concession. Page 17 of the annual report says that there were 3,000 firms new to the program. What can you tell me about these firms? What sectors are they in? What sorts of firms are they?

Mr Lawson: Over the years, there are movements in and out of the program by companies, and there are new entrants. There are firms that are completely new to the program. These are not firms that have previously been in the program, dropped out and come back in. These are firms that are new to the program, so they tend to be early-stage, not long-lived companies, but they may be companies that turn to doing research. So it's an ongoing feature of the program that there are movements in and out. I don't know if Ms Mulder would have anything to add to that.

Senator KIM CARR: Is this just a churn factor here?

Mr Lawson: No, no. Those are new to the program.

Ms Mulder: They're first-time registrants.

Senator KIM CARR: All right. I trust you are seeking to get an increasing number of firms spending on themselves and claiming this. The figure from memory is that less than 45 per cent of companies spend money on themselves in terms of their innovation. A few years ago, the number of firms registered was about 7,000, so you've got it up to, with individual firms, 13,000, which is a good thing. Can you tell me where these 3,000 firms are coming from?

Ms Mulder: I would have to take that on notice. I can tell you their expenditure as an aggregate, if that's useful, but in terms of the sectors I would have to take that on notice.

Senator KIM CARR: How many of these firms are multinationals or altogether international firms?

Ms Mulder: I would have to take that on notice

Senator KIM CARR: I take it you're saying they're all entering the program for the first time—the 3,000 new firms.

Ms Mulder: That's correct.

Senator KIM CARR: In terms of the audits that you undertake, are they separate from their general tax audits, or do you do specialised R&D claimant audits these days?

Ms Mulder: We undertake compliance activity on registrants—so registrations—which is separate to what the ATO would undertake.

Senator KIM CARR: Separate?

Ms Mulder: We undertake assessments which are—

Senator KIM CARR: Undertaken by the department of industry?

Ms Mulder: By AusIndustry. That's correct.

Senator KIM CARR: How many tax audits—how many audits did you undertake last year?

Ms Mulder: We undertake assessments and findings, as opposed to tax audits—

Senator KIM CARR: I'll come to that—but audits themselves?

Ms Mulder: In terms of the compliance activity that we undertake, we don't tend to reveal that level of information because we believe that it would compromise the integrity of the program. It's also very linked to the ATO activities, and so, obviously, we want to ensure the integrity of the program.

Senator KIM CARR: Okay, but you're saying they are separate. The AusIndustry audits are separate from ATO audits.

Ms Mulder: They are separate. The registrations come into AusIndustry. We look at those registrations in terms of: are there any risk factors that would identify them for assessment? We may then take them through that compliance process, which means we may make a finding on that assessment which then obliges the Taxation

Commissioner in terms of that finding. But, likewise, we do work closely with the ATO in terms of identifying risk factors and a compliance strategy. So, yes, this is done separately by AusIndustry, but we do work closely with the ATO and we do, at times, share information.

Senator KIM CARR: Would you know how many individual firms have been in receipt of the incentive while in a tax loss situation?

Ms Mulder: For the 2016-17 income year, I can tell you the number of registrants in tax loss, noting that these are AusIndustry figures versus the ATO's. That figure is 7,173.

Senator KIM CARR: For how long did you say?

Ms Mulder: That was the 2016-17 income year. But it is worth noting that that's what they tell us, versus—

Senator KIM CARR: I understand that. But that was for that year. That's the number of firms that were in tax loss. Can you tell me for how long they were in tax loss?

Ms Mulder: No, I can't.

Senator KIM CARR: That's not known?

Ms Mulder: I'm happy to take that on notice, but I'm not sure that we would know that at the point of registration.

Mr Lawson: It's worth noting that our data is tax loss in the year that they make that claim. The other point that should be added into that is that the refundable offset could take somebody into tax loss from being in tax profit. The R&D tax concession can take people into tax loss as well.

Senator KIM CARR: Can I come back to this question of audits? You say you don't want to reveal how many audits you undertake—is that the proposition?

Ms Mulder: The number of assessments that we undertake is very much linked to our compliance strategy and the integrity of the programs, so we don't tend to publicly go into that level of detail and that amount of information.

Senator KIM CARR: But the ATO tell us how many audits they undertake. Why can't the department of industry? This is post facto. I can understand why you would say it's confidential because of your compliance strategy for the forthcoming year, but it must be a matter of public record how many you undertook in the last year.

Ms Mulder: I understand it's not a matter of public record, but, certainly, I'm happy to take it on notice and explore what we can.

Senator KIM CARR: Thank you.

CHAIR: Senator Carr, I'm conscious of the fact that we were due to break at three o'clock. How many more questions do you have?

Senator KIM CARR: I think I can finish this section on the R&D tax matter pretty quickly if you can tolerate a few more.

CHAIR: Yes.

Senator KIM CARR: There were five taxpayer alerts issued by the ATO and AusIndustry in 2017 regarding the R&D incentive. They dealt with the usual: R&D, software development, construction activities and agriculture. What do you regard as the impact of those alerts?

Ms Mulder: I would have to take that on notice.

Senator KIM CARR: How many tax alerts in 2018 have been issued?

Ms Mulder: I don't think there have been any taxpayer alerts in 2018.

Senator KIM CARR: None at all?

Ms Mulder: I'm happy to check that, but I don't think so. Obviously, they're undertaken jointly with the ATO.

Senator KIM CARR: Sure, but why not? Why wouldn't you have any?

Mr Lawson: Those taxpayer alerts have an educational role. As I understand it, there were sectors where there were some concerns about what was going on. It was felt that they were priority areas.

Senator KIM CARR: That's 2017, right? You have no concerns this year?

Mr Lawson: Those sectors—that advice holds in 2017-18, 2018-19 and so on.

Ms Mulder: Correct.

Mr Lawson: It's not a taxpayer alert for just the purpose of the year. This was a change to have a joint educational and compliance role.

Senator KIM CARR: Right. We assume that they're still there. You don't feel the need to reissue those?

Ms Mulder: Not at this point, Senator.

Senator KIM CARR: They used to provide preassessment advice. Do you still do that?

Ms Mulder: We certainly have workshops and information sessions to communicate with businesses who are contemplating applying for the program.

Senator KIM CARR: But individual companies could apply for preassessment.

Ms Mulder: My apologies. Do you mean an advanced finding?

Senator KIM CARR: Yes.

Ms Mulder: We do still have that.

Senator KIM CARR: They still happen?

Ms Mulder: Yes.

Senator KIM CARR: Are they still current in terms of enforceability?

Ms Mulder: They have a particular period of time that they're valid for depending on the assessment, but, yes, they are valid for the period of time that we sign off on.

Senator KIM CARR: I'm just wondering: given the current legislation that has been proposed, how do you see the improvements in compliance in the administration of these incentives actually working? What's the intent?

Ms Mulder: The intent of the funding is to ensure that we increase our communication and our guidance advice to businesses so they're enabled to understand the eligibility of the program. It's about increasing our levels of compliance activity so that we can ensure the integrity of the program.

Senator KIM CARR: Sure. You indicated that more staff have been provided.

Ms Mulder: Correct. Well, they're in the process. Also, there's work with the ATO, systems work, improved ICT systems—a number of areas by which we believe that the integrity of the program can be improved.

Senator KIM CARR: Specifically in terms of multinationals, what action are you taking?

Ms Mulder: I would have to take that on notice.

Senator KIM CARR: Because that's the name of the bill: making sure multinationals pay their fair share of tax in Australia. How are multinationals being targeted?

Mr Lawson: It's a standard omnibus bill name, that name and other measures.

Senator KIM CARR: It's misleading?

Mr Lawson: The full title of the bill was the part that you described plus 'and other measures'.

Senator KIM CARR: So it could mean anything? I just want to know how multinationals have been targeted with this particular measure.

Ms Mulder: Our compliance approach is based on a risk assessment. We look across all sectors and all sizes of business.

Senator KIM CARR: Sure, but in particular—and you've taken this on notice—how are multinationals particularly affected?

Ms Mulder: I'm happy to take that on notice.

Senator KIM CARR: How much money is going to be saved by this measure?

Mr Calder: There is no separate estimate provided by Treasury. The estimates were for the full savings over the forward estimates for the whole package of measures.

Senator KIM CARR: You don't have one specifically for compliance?

Mr Calder: No.

Senator KIM CARR: How much more tax will multinationals be paying as a result of this measure?

Mr Calder: We don't have an estimate. I think you would have to talk to Treasury in terms of the estimates of multinational taxation. The title of the bill—it's an omnibus tax bill.

Senator KIM CARR: Yes, I understand that. Can you take that on notice, please? I'd like to know how much more tax multinationals will be paying, particularly as a result of this measure. You've said how much in savings

is going to be made. I would like to know how much more tax multinationals are going to be paying, particularly for measures in regard to research and development.

Mr Calder: In terms of the level of taxation to be paid, I think that would be a matter for Treasury to address.

Senator KIM CARR: You're responsible for the administration of this. Surely they've given you an estimate?

Mr Calder: No.

Mr Lawson: I can add that the transparency measure, should it be passed by the parliament, will make us much more able to answer these questions, because—

Senator KIM CARR: When it's passed?

Mr Lawson: The transparency measure, if it is passed—

Senator KIM CARR: I understand the point of what you said. I'm interested to know, Mr Lawson, at what point your information systems improve.

Mr Lawson: We're improving our systems now, but the transparency measure will give us the ability to publish the names of companies and the amount of money they claim. That will give you a lot of information about sectoral multinational businesses and those sorts of things.

Senator KIM CARR: I see what you mean.

Mr Lawson: It's a transparency measure. Because under the tax act individual company names are secret, that leads to misconceptions and so on. That transparency will help to clear up those notions to see exactly what the impact is. With a two-year lag.

Senator KIM CARR: Minister, do you anticipate that this bill will actually be before the parliament this session?

Senator Canavan: I don't have that information. It has been introduced.

Mr Calder: It has been introduced.

Senator KIM CARR: It has been referred to a Senate inquiry.

Senator Canavan: In terms of the scheduling of the legislation, that would have to be put to the government.

Mr Calder: It was scheduled for debate this afternoon.

Senator KIM CARR: In the House.

Prof. Krause: Yes.

Senator KIM CARR: I know this might trouble you, but there is another chamber.

CHAIR: A very important one.

Senator Canavan: That we're in at the moment. I can't answer that. That's a matter for the manager of government business.

Senator KIM CARR: It's not actually carried until it has passed that other chamber—I want to draw that to your attention.

Senator Canavan: I think we're well aware of that.

CHAIR: We will resume program 2. Is that correct Senator Carr? Do you have any more questions for program 1?

Senator KIM CARR: No.

CHAIR: With no other questions for program 1, we will move to program 2.

Proceedings suspended from 15:09 to 15:25

CHAIR: The committee will now resume. We've moved on now to program 2. I would like to ask some questions about the recently announced Automotive Engineering Graduate Program. Who's the right person to ask—Mr Power again? This was a recent announcement, Mr Power. My understanding is that it's part of the Advanced Manufacturing Growth Fund. I'm wondering if you can explain the thinking behind that particular allocation and how that particular program, the graduate program, is going to assist in ensuring that we've got an appropriate number of qualified, job-ready engineers in the automotive sector in Australia.

Mr Power: Yes, Senator, you're correct that it's part of the bigger fund, that being the \$100 million advanced manufacturing fund. What this component is, Senator—as you may know, the R&D-in-design elements in Australia are in some cases expanding. For example, Holden has expanded employees in its R&D design business, moved up to around 500, both—

CHAIR: That's the venture it's got in Fishermans Bend, is it? Is that where the Holden one is located?

Mr Power: Holden has design centres, not necessarily all located at Fishermans Bend. The other companies do as well. Ford has an R&D business. It has engineers and design engineers here in Australia, about 1,700. So does Toyota. But the point I was making is that the businesses are expanding some of those areas, particularly in Australia. What this program is for is to ensure that, for those R&D components and design elements, the businesses have a supply of students coming out of our universities so that the skills are able to be deployed into those parts of their business.

It's a \$5 million program to support stipends and students using facilities outside the universities. It will be targeted at particular areas that have been identified by the automotive sector that are important for skills to be developed. Some of those areas include autonomous vehicles; electric vehicles; energy storage, of course; batteries; autoelectronics; hydrogen fuel cells; thermal propulsion; safety; and other materials. It's a program that will provide grants between \$200,000 and \$1 million to universities to provide that support for students.

CHAIR: Where does the graduate program sit? Is it alongside the automotive innovation labs in South Australia and Victoria, or are they entirely separate?

Mr Power: Physically, we'll deliver the money through the department here, through AusIndustry. The entities who can apply are universities, so they will be wherever they are located, obviously, and students who are engaged with those universities will be beneficiaries of those funds.

CHAIR: The labs themselves, though—are they government run or are they industry run?

Mr Power: The labs are separate. It's going to be set up by industry. The AAAA is going to set those innovation labs up, one in Victoria, which will be the first, and another in South Australia, which will commence subsequent to the Victorian lab. There'll be a shopfront initially also in South Australia to enable access immediately to the Victorian lab, but there will be a lab separately in South Australia.

CHAIR: Thank you.

Senator KIM CARR: I think we might have made a mistake here. I have some questions on the science tables and the Commonwealth Science Council, which I presumed were in this program, but we haven't—

CHAIR: Program 2? Didn't we agree that we were moving to program 2?

Senator KIM CARR: I don't know where they are. What program are they in? I do want to ask questions about them. I don't care what program you call them. I want to ask questions about them. Is that clear?

CHAIR: That's fine.

Senator KIM CARR: Is that a problem?

Mr Power: Yes, it's program 1. The Commonwealth Science Council is program 1.

Senator KIM CARR: If that's the case, I will just follow up what you were asking on the auto program, so long as we can go back to those matters.

I'm just wondering. In regard to this new announcement, this is the funding coming out of the advanced manufacturing fund; is that correct?

Mr Power: Yes, Senator, that's right.

Senator KIM CARR: How much of that \$100 million has been distributed?

Mr Power: These are the last two components of that \$100 million program.

Senator KIM CARR: Sorry?

Mr Power: They're the last two. The \$100 million had six components. The first component was a grants component, which was \$47½ million. There were two rounds of grants that occurred under that component. Both of those rounds have been run now, and contracts for round 1 have been negotiated. Round 2, I understand, is in the process of being negotiated, but we can give you some more information on that.

Senator KIM CARR: Thank you. That will be picked up in the previous question I put on notice. I just want to be clear. Has all the money been committed for the fund?

Mr Power: All of the measures under it have been. Another component was a tariff concession. That has been put in place. That was a reduction in revenue, if you like. There was \$20 million for CRCs. That round has been run, so money would be committed under that. There is also a \$4 million fund for early-stage research, run through the Advanced Manufacturing Growth Centre. That program is underway, and those moneys have been provided to the growth centre. They are distributing those. And the programs that we've just spoken about, those

being the graduate program and also the innovation labs, are both open now and are in the process of receiving applications.

Senator KIM CARR: I'll just be clear about this then. How much of that fund is uncommitted?

Mr Power: I would say, Senator, that for the specifics of that we'd take it on notice.

Senator KIM CARR: Thank you.

Mr Power: Certainly for the graduate component, which we just talked about, which is \$5 million, we're just taking applications on that, so that wouldn't be committed as yet. A component of the innovation labs is \$7 million to support businesses to access services. Again, that's just opened. We're in the process of receiving applications, so we won't have committed funds to particular contracts as yet. I would expect that the bulk, if not all, of the \$47 million grants has been committed, but we can take that on notice, unless my colleagues can add anything.

Senator KIM CARR: Thank you. When do you expect to enter into contracts for these hubs?

Mr Power: Are you talking about the innovation labs, Senator?

Senator KIM CARR: Yes.

Mr Power: For the innovation labs we, at the moment, are in discussions with the AAAA, who will provide us a detailed project plan, and we will strike a contract with them, subject to that plan meeting all the requirements. That will occur quite quickly over the next period.

Senator KIM CARR: What's 'the next period'?

Mr Power: We have an initial proposal from the AAAA, and we indeed do have a contract in relation to the Victorian lab. AAAA has also got a contract with the Victorian government, which is also contributing funds. When we receive the final details of that, which I expect to be in the next 30 days—but I have to take on notice the exact date—

Senator KIM CARR: Thank you.

Mr Power: and we receive that proposal, then the contract will be written soon after that.

Senator KIM CARR: I'll come back to that. There are a series of questions. I'll come back to those, so thank you.

Can I ask you to just clear up these matters on the science tables. Is it possible to get the officer back? Thank you. In regard to the release of the science tables, what's the process? Is there a ministerial sign-off?

Mr D Wilson: Yes, Senator, there is.

Senator KIM CARR: What was the date on which you completed compiling the tables?

Mr D Wilson: I'd have to take that on notice. If I recall, I would say it was around mid to late August where we may have had the close-to-the-final version of the tables.

Senator KIM CARR: When you say you had the final version—

Mr D Wilson: Close to final, yes, that's right.

Senator KIM CARR: What do you mean by 'close to final'? It's either final or it's not.

Mr D Wilson: As I think I said in my earlier evidence, the process involves a census right across government. There are a large number of agencies and a large number of entries into the tables.

Senator KIM CARR: Let's be clear then, Mr Wilson. When were the tables finalised?

Mr D Wilson: I will take that on notice.

Senator KIM CARR: When were they delivered to the minister's office?

Mr D Wilson: I will take that on notice.

Senator KIM CARR: They would have been presented as a brief for signature, would they not?

Mr D Wilson: That's correct.

Ms Urquhart: We brief about the science tables with the minister commencing in the portfolio, as you'd expect, but, in terms of formal briefing, that came sometime later. The initial briefing was mainly focused on the process of the budget tables. You'd expect some backgrounding. Just in terms of the specifics of when exactly we finalised the tables and provided the briefing, we really do need to take that on notice.

Senator KIM CARR: Do they go to Minister Cash, or do they go to the new minister?

Ms Urquhart: We have briefed successive ministers in respect of the process of the budget tables. The process, as you would expect, commences early in the year. We frequently have discussions about—

Senator KIM CARR: I understand all that. I want to know when these tables were finalised.

Ms Urquhart: We are unable to tell you now, Senator. We are happy to take it on notice.

Senator KIM CARR: I also want to know whether or not they went to Minister Cash. That will tell me, won't it, when you finalised it?

Mr D Wilson: The final tables did not go to Minister Cash.

Senator KIM CARR: You said they were close to being finalised in August.

Mr D Wilson: I think my evidence earlier there was that it was mid to late August when they were close to being finalised.

Senator KIM CARR: All right, mid to late August. Let's be precise. What happened between then and now?

Ms Urquhart: Senator, to be clear: Mr Wilson is talking about when we were finalising the tables, we think, but we are unable to be precise about when exactly they were finalised. We need to check our records.

Senator KIM CARR: It's an awfully long time to finalise these tables, isn't it?

Ms Urquhart: We would need to confirm that with you, Senator.

Senator KIM CARR: Did you discuss with the minister's office the release of the tables?

Ms Urquhart: Yes, Senator.

Senator KIM CARR: That would have been contained in the brief: 'Recommendation: sign these tables.'

Ms Urquhart: Yes, Senator.

Senator KIM CARR: You'll give me the date of that brief, won't you?

Ms Urquhart: We can certainly advise you when we informed the minister formally about the budget tables.

Senator KIM CARR: And how long they sat in the minister's office—you can tell me precisely that, can't you?

Senator Canavan: I think we've taken that on notice. We're happy to take that on notice.

Senator KIM CARR: When the order for the production of documents appeared in the Senate, did you discuss that with the minister?

Mr D Wilson: What documents are you referring to?

Senator KIM CARR: These documents; the science tables. Did you notify the minister that the notice of motion had been put down in the Senate?

Mr D Wilson: I think the minister's office were aware of that information.

Senator KIM CARR: They were aware? You didn't have to notify them?

Ms Urquhart: That is correct.

Senator KIM CARR: The advice from the department was there prior to presentation of that Senate notice?

Mr D Wilson: That is correct, yes.

Senator KIM CARR: It could have been the case that you were negligent and the minister had to ring you up and say, 'Where are the tables?' but that's not the case, is it?

Ms Urquhart: No, that's not the case.

Senator KIM CARR: They had been sitting in the minister's office for some time, hadn't they.

Ms Urquhart: The brief was provided before the Senate motion.

Senator KIM CARR: How long had they been sitting in the minister's office.

Mr D Wilson: We'll take that on notice and get the dates for you.

Senator KIM CARR: When did the Science Council last meet?

Senator Canavan: It was last year, August 2017.

Ms Urquhart: 17 August 2017.

Senator KIM CARR: Why has it not met since 17 August 2017?

Dr Mitchell: The government's *National science statement* recognises the critical role of expert scientific advice, including through expert advisory groups, and the Commonwealth Science Council has provided useful advice on a range of policy initiatives.

Senator KIM CARR: The question is why the Science Council has not met, not why it is important.

Ms Urquhart: The timing of council meetings depends on a number of issues, primarily the availability of council members, including ministers, the Prime Minister and its other individuals of high calibre.

Senator KIM CARR: There was a proviso that the council meet twice a year, wasn't there?

Ms Urquhart: That's correct.

Senator KIM CARR: It hasn't met twice a year, has it.

Ms Urquhart: No, it hasn't.

Senator KIM CARR: Can you give me an explanation as to why.

Ms Urquhart: The timing of the meetings depends on availability of its members, ministerial and otherwise.

Senator KIM CARR: My memory is probably not as good as it should be, but I do recall quite sharp criticism in the past about PMSEIC not meeting as often as the parliamentary Liberal Party would like, and this council hasn't met for 14 months. Minister Canavan, is it simply because you can't find a science minister that's been there long enough to know that they have to call it?

Senator Canavan: My understanding from the advice I have here is no different from what has been tendered—that it is dependent on the availability of the members, and that involves the Prime Minister. What is more important in my view, though, is the advice the government is receiving from eminent scientists on a range of issues. We have engaged Dr Alan Finkel, the Chief Scientist, on a range of issues. He's currently preparing a hydrogen strategy for COAG. The government has a wide-ranging science agenda. This particular council is one that it is sometimes hard to arrange, given the Prime Minister's broad commitments.

Senator KIM CARR: Especially when you change the Prime Minister.

Senator Canavan: You would know all about that.

Senator KIM CARR: I certainly would, but you've taken the Prime Minister out of this one, so how important is the Prime Minister's attendance?

Senator Canavan: I thought—sorry, I might ask the witnesses; it's not my area.

Senator KIM CARR: Given that your evidence is so consistent.

Ms Urquhart: I think I mentioned the Prime Minister amongst the ministerial members. The Prime Minister chairs the Commonwealth Science Council.

Senator KIM CARR: How often has the National Science, Technology and Research Committee met?

Ms Urquhart: I would need to take on notice the list of meetings of the National Science, Technology and Research Committee since the Commonwealth Science Council's establishment, but they are publicly available.

Senator KIM CARR: You can tell me when it last met.

Dr Mitchell: It last met on 27 July 2017.

Senator KIM CARR: What was its agenda?

Dr Mitchell: I would have to take that on notice.

Senator KIM CARR: When is the Science Council next to meet?

Ms Urquhart: That is under active consideration.

Senator KIM CARR: Do you have an agenda?

Ms Urquhart: The work program of the Commonwealth Science Council and the timing of the next meeting are both under active consideration as we speak.

Senator KIM CARR: How long have they been under active consideration?

Ms Urquhart: In order to be precise with you, from initiation of formal consideration, when Minister Andrews came into the portfolio, we briefed her about the Commonwealth Science Council, and there has been consideration in different forms since then.

Senator KIM CARR: You can confirm that Minister Andrews has approached the Prime Minister with the proposal for another meeting?

Senator Canavan: I think we might have to take that on notice.

Senator KIM CARR: And the date on which that approach was made.

Ms Urquhart: There have been discussions between ministers about the Commonwealth Science Council, its value, the work program, the benefits to date, so I can say—

Senator KIM CARR: That's not the question I asked you. I asked when did the minister—does she call herself the minister for science or the minister for industry? What's her title?

Senator Canavan: Industry—

Ms Urquhart: She's the Minister for Industry, Science and Technology.

Senator KIM CARR: She is formally responsible for science. When did she approach the Prime Minister about the next meeting.

Ms Urquhart: We need to take that on notice.

Senator KIM CARR: And the agenda?

Ms Urquhart: Yes.

Senator KIM CARR: The council was scheduled around August, and I take it that the leadership coup got in the way of that. Is that right? Was it proposed to have a meeting? Was it planned? Was a meeting scheduled?

Senator Canavan: I don't believe so.

Senator KIM CARR: Ms Urquhart, was a meeting actually scheduled?

Ms Urquhart: I don't believe so.

Senator KIM CARR: When was the last time a meeting was discussed? Was it back in August 2017?

Ms Urquhart: No, sooner than that.

Senator KIM CARR: When was the last time a scheduled meeting was discussed?

Ms Urquhart: It would depend on who that discussion was with.

Senator KIM CARR: Because there have to be ministers as well, I agree.

Ms Urquhart: I'm aware of discussions within the last week or two, and prior to that.

Senator KIM CARR: The ministers had the discussion, not the department officials. When did the ministers propose a meeting? Can you tell me that?

Ms Urquhart: To be clear on your question: are you asking me when the minister proposed—

Senator KIM CARR: Not this minister; I already asked you when she contacted the Prime Minister to seek or propose a meeting. When did the previous minister, who was actually a parliamentary secretary responsible for science, canvass a proposal with the Prime Minister about a meeting?

Ms Urquhart: I need to take that on notice. The secretariat for the Commonwealth Science Council is the Office of the Chief Scientist. There have been discussions at different times about scheduling. You asked about the previous minister, what conversations occurred, when and in what form. We would need to take that on notice.

Senator KIM CARR: There's a big difference between the Chief Scientist saying, 'What about a meeting?' and the minister doing anything about it, isn't there?

Ms Urquhart: It would depend on the conversation.

Senator KIM CARR: When was a formal proposition put forward for a science meeting after 17 August?

Senator Canavan: We might take that on notice. I have been informed by the minister's office that the minister and the Prime Minister have discussed a date for a new meeting of the Science Council.

Senator KIM CARR: I hope that my inquiries will speed that up. I won't be surprised if that's the case. How many female nominations were received for the Prime Minister's science prizes this year?

Ms Ryan: Sorry, I'm just finding that.

Ms Urquhart: I can assist Ms Ryan with that question. In 2018 a total of 128 nominations were received across the seven prizes—that's the highest number of nominations in the prize's history.

Senator KIM CARR: How many women were nominated?

Ms Urquhart: I understand it was just over 27 per cent.

Senator KIM CARR: I was fortunate enough to meet the winners after the dinner. I'm just wondering. There were 10 prizes, weren't there, in the end?

Ms Urquhart: Seven.

Senator KIM CARR: And how many were women, who received those prizes?

Ms Urquhart: One of the prize winners was.

Senator KIM CARR: Do you think that's a fair proportion? I know you don't have quotas, but 27 per cent of applicants—

Senator Canavan: I think that might be asking the officials for an opinion.

Senator KIM CARR: Yes, it might be.

Ms Urquhart: What I would say is that we had hoped for a higher rate of nominations than we received, and we put considerable effort into communications, around encouraging nominations, in the run-up to the 2018 process. I can also say that the 27 per cent result represents an improvement on the year prior, which was 23, and stands in contrast to the 10-year average for female nominations of 16 per cent. But I think it's fair to say that in my division we're not satisfied with that result and looking at it together with our colleagues from AusIndustry who manage the process.

Senator KIM CARR: In the past, you've told me that you moved Questacon aside, in the promotion of the prizes, and you wanted to use your channels 'that we have through our Strategic Communications Branch, to broaden the strategic communications, including the nomination process'. So would you say that that's not worked very well?

Ms Urquhart: I would describe the different workgroups involved differently. In fact, what we've sought to do is bring different skills from different areas into the science prizes. The communications branch within the department delivered the logistical arrangements around the Prime Minister's prizes dinner. They also advised on the communication activities around the nominations. AusIndustry worked with the communications branch in relation to the process and the process of calling for nominations. My division also takes close interest because it goes to science policy responsibilities, and Questacon continues to be involved. There was consultation with Questacon during the process and, in fact, to the dinner as well.

Senator KIM CARR: Who appoints the prizes committee?

Ms Urquhart: As I mentioned before, AusIndustry manages the process. I can give you the make-up of the committee for last year: representatives of the Academy of Science and the president of the Academy of Science; the president and representatives of the Academy of Technology and Engineering; representatives from the business sector; and the Chief Scientist chairs the committee.

Senator KIM CARR: The Chief Scientist. I see. And who are the representatives from the business community?

Ms Urquhart: I don't have those names with me.

Ms Ryan: I can help you with that one. The business community representative represents the physical science sector. That's Ms Denise Goldsworthy from Alternate Futures Pty Ltd.

Senator KIM CARR: I see. Can you give me a list of the names on the committee, please?

Ms Ryan: Yes, I can give you that.

Senator KIM CARR: Thank you very much. And do you know what the terms of service are? There must be a—

Ms Ryan: I'll take that on notice and give you a terms of reference.

Senator KIM CARR: Thanks. In regard to the compere, I see a change in compere this year. They're very good people, I see you've appointed. Why was the previous compere not re-engaged?

Ms Urquhart: We have changed comperes year to year, in relation to the science prizes, in discussion, as you would expect, on planning for the science prizes, which I believe commenced at the end of 2017. We discussed how there was work underway, in relation to some appointments, that would assist us in science communication and advocacy. As you know, Professor Fred Watson has been appointed Astronomer-at-large. He works from within my division, assisting us with science communication, and Professor Lisa Harvey-Smith was recently announced as the Women in STEM Ambassador. Given they know each other well and have undertaken similar activities together in the past, and we have seen them in those activities, we thought it would be a nice change to have working scientists MCing the event.

Senator KIM CARR: Very good.

Ms Urquhart: The feedback's been very good.

Senator KIM CARR: The feedback's terrific. Is it true, though, that a minister complained about the previous compere's humour?

Ms Urquhart: Not to me.

Senator KIM CARR: Not to you, no, but to anyone else? They thought the humour was a bit too humorous, in fact. It didn't appeal to their taste. Is that right? Was there a political intervention asking for a change in the compere?

Ms Urquhart: No. The idea for the MCs came from discussion within my division.

Senator KIM CARR: No political intervention at all.

Ms Urquhart: No.

Senator KIM CARR: I heard that people were concerned that the previous compere's jokes were not to the minister's taste.

Ms Urquhart: The development of the idea for the two co-MCs was one that came from within my division, as I have outlined.

Senator KIM CARR: Very good, thank you.

CHAIR: Senator Carr, do you mind if send the call to Senator Patrick—

Senator KIM CARR: Yes, sure; of course.

CHAIR: Before I send the call to you, Senator Patrick, I just want to follow up on that, because I think Senator Carr has a very good point. Twenty-seven per cent of applicants for the prize coming from women is disappointing. Since I've been elected I've been to a countless number of Women in STEM programs or events or whatever they might be. It's been quite extraordinary, the level of focus that this government has had on increasing the number of women in STEM. We can all be hopeful that there will be more applicants in the future, but perhaps you can talk me through, a little bit, Ms Urquhart, about Professor Lisa Harvey-Smith's appointment as the STEM ambassador and exactly what her role, other than MCing events, is going to be?

Ms Urquhart: Certainly. Can I just, though, respond to your point about the female nominations? As I stated before, we're not satisfied with the rate of performance there. We have had informal conversations at the event and subsequently—and before that, in fact—with Lisa Harvey-Smith, as the Women in STEM Ambassador, but also colleagues in the Academy of science and other places, where we feel there may be lessons to learn that we can share with each other and ideas for increasing the proportion of nominations from women. So you can be assured that that's an active piece of work in my division.

You asked, though, about the Women in STEM Ambassador. I might ask my colleague to outline her responsibilities for you.

CHAIR: Certainly, thank you.

Dr Mitchell: Professor Lisa Harvey-Smith was announced on 13 October as the inaugural Women in STEM Ambassador. Professor Lisa Harvey-Smith is an astronomer. She has postgraduate qualifications in astronomy and astrophysics and serves on the Science Advisory Committee to the Australian government on the Square Kilometre Array. She also won the department's 2016 Eureka award for promoting Australian science research.

In terms of the role and what the inaugural Women's STEM Ambassador will do, Lisa is charged with advocating for women and girls in science, providing advice on issues affecting girls and women in science and technology, and promoting action among the many existing initiatives and activities operating in Australia to do exactly this. The aim, through her role, is to assist the government to increase women and girls' understanding of the opportunities available to them and increase the participation of girls and women in science and technology.

CHAIR: Can I ask what the role of the Australian Academy of Science is there and where Professor Harvey-Smith sits within that framework? I know that they're putting something together on women in STEM or women in science, aren't they?

Dr Mitchell: That's right, Senator. The Women in STEM Ambassador was part of the 2018-19 budget where the government committed \$4.5 million over four years to support long-term strategic approaches to encourage and enable more girls and women to pursue STEM education and careers. I mentioned the appointment of the Women in STEM Ambassador was part of that measure. There was also the development of a women in STEM strategy, which will help to coordinate the government's efforts; a Girls in STEM Toolkit, which will be developed by Education Services Australia to help school-age girls understand and match their interests to the diverse array of STEM careers; and, as you highlighted, we're working with the Australian Academy of Science to develop a decadal plan for women in STEM to allow the sector to take ownership of a comprehensive strategy

to encourage more women and girls to pursue studies and careers in STEM, and to reduce the systematic and cultural barriers that prevent them doing so.

CHAIR: A decadal plan, so we'll hope that in a decade or less we will see far more women awarded the Prime Minister's Prizes for Science—I would hope.

Dr Mitchell: I would hope sooner than that.

CHAIR: Fantastic.

Senator O'NEILL: I have a couple of questions along the same lines, but I'll come back to that after Senator Patrick.

Senator PATRICK: Just for logistics, I'm going to ask questions very briefly about the Advanced Manufacturing Growth Fund; the seafood origin information working group; the radioactive waste management facilities; and then space agencies.

CHAIR: And then we're going to have dinner.

Senator Canavan: Just for process, radioactive waste is—

CHAIR: Not until after dinner.

Senator Canavan: If you're able to wait, Senator Patrick.

Senator PATRICK: I'll put that folder aside—that takes us to afternoon tea then, doesn't it?

CHAIR: With such a long agenda, Senator Patrick, can we give you a time guide of approximately 15 minutes or so and then we'll go to Senator O'Neill.

Senator PATRICK: Some have only got one question, so we're good. Going to advanced manufacturing: Mr Power, I heard all the evidence you gave to Senator Carr. Just a couple of supplementaries to that: when is the Victorian site—my understanding is that both sites do different things; they have different specialties at each site—likely to kick into operation; and when is the South Australian site likely to?

Mr Power: The details of the exact dates we've still got to pin down with AAAA. Before we were speaking about when proposals come in and we'll write more detail of those contracts. They should come in hopefully within the next 30 days, and we'll lock down exactly the date when each will commence. As I said earlier, Victoria, we expect, definitely will commence first and then a shopfront in South Australia.

Senator PATRICK: Maybe I'll ask it in a different way: when are you expecting the money to have been expended by—are we talking five years, two years, one year?

Mr Power: No, not at all. There's a lot of planning that's gone in already, as you're probably aware, into particularly the lab in Victoria. What I'm expecting from the AAAA is that that lab would be set up in early 2019. Then, obviously, I haven't got the detail about when the South Australian lab would be set up, but I'd expect that a shopfront would be stood up quite similarly in 2019. It will depend on the timing that comes in from the proposal.

Senator PATRICK: My understanding is that the AAAA have looked at what is the best specialisation or capabilities in Victoria and the same for South Australia, but clearly that won't be perfect. What is the arrangement if someone in South Australia needs access to the Victorian lab and someone in Victoria needs access to the South Australian lab?

Mr Power: We've talked about the fact that the Victorian lab might be set up straightaway. What the AAAA have proposed is that they'd have a shopfront, in South Australia, for example, where they can come in. They'd also be able to access services. There have been grants—we talked about it a bit earlier—that are being released to fund access to services, both at these labs and external services. They'll be available immediately. They're available to firms all over the country. But, say for example, a firm in South Australia could access that funding, and then access some other facilities that are available at the Victorian lab. That could commence from as soon as, for example, the Victorian lab is stood up.

Senator PATRICK: I'll be keenly watching this whole thing; you know that some of this resulted from negotiations with Senator Xenophon a year or two ago. Thank you very much: it sounds very promising. Can I turn to the Seafood Origin Information Working Group. My understanding is the group was established on the 28 November 2016 in response to a debate regarding the Competition and Consumer Amendment (Country of Origin) Bill, and that the group last met in November last year. There was an undertaking that there would be a response from government, or some sort of report, that would flow from the group. Ms Manen, could you please give me an update on what's happening on that front?

Ms Manen: Certainly. As you said, the government undertook extensive consultations throughout 2017 on the issue of origin labelling for seafood in food service. There was a paper and subsequent addendum which were

provided to inform that working group's considerations. Those documents are available on the department's website. Those papers highlight that any misperceptions about seafood origin are mainly confined to low-cost food service segments, and only affect a small percentage of Australia's total edible seafood production, that any misperceptions from consumers do not appear to result in any detriment, and that there are commercial opportunities for businesses to increase consumer awareness through marketing and education.

Senator PATRICK: Is that this working paper here, the *Seafood Origin Working Group Paper*?

Ms Manen: That's correct.

Senator PATRICK: I have read it. But there was to be a report that was to come out of the department.

Ms Manen: That's correct. The government's currently considering the outcomes of those consultations.

Senator PATRICK: What does that mean in terms of time frames? I note the chair will describe a situation where it took me 15 minutes to get a date out of someone—I hope that doesn't happen. What's your aim point here? This is to get something out from this group that's been stood up since November 2016—that's two years, basically.

Ms Manen: What I would say as well is that Minister Littleproud is also taking consultations with the fast-food sector on voluntary adoption of the origin labelling, and so the consideration of the outcomes of those consultations will feed in.

Senator PATRICK: How long has that fast-food sector consultation been going for?

Ms Manen: I understand Minister Littleproud is holding another consultation in November, but you'd be best to direct those questions to him.

Senator PATRICK: November, fantastic. And then there'll be some further consideration. What then happens? What's the next step?

Ms Manen: I'd also note that, just recently, state and territory food ministers have sought advice from the Consumer Affairs Forum to consider and provide any further information in light of new evidence on the matter of seafood origin.

Senator PATRICK: What's the deadline for those submissions?

Ms Manen: I'm not aware of any issues related to that. CAF consideration would need to be directed to the Treasury.

Senator PATRICK: Once again, I'm trying to get an understanding. I don't think anyone would have a feeling that it's okay for government to just coast along with no deadlines. That's really perfunctory, and it's not what is expected by taxpayers. I'm a former project manager: you work out what it is you need to do, you assign resources and you set yourself a deadline. Have we been through that process in relation to this group?

Mr Power: We definitely have. As you are aware, there was a lot of work done by the department, both consultation with Minister Laundy and analysis. As Ms Manen just said, there are a couple of processes undertaken, one by Minister Littleproud. The fact that the food ministers have referred it to the consumer affairs forum now means that it's a process not within the department's control. That will now need to be considered by the consumer affairs forum, the dates of which we don't have here in front of us.

Senator PATRICK: Can you get a hold of them?

Mr Power: We will be able to, from Treasury. That process is not within the department's control; it will need to play out. We can get those dates for you on notice about when those meetings will occur, and the departments will facilitate it as quickly as possible. But there is the consideration of ministers. It's a COAG forum so it will be about getting it on that agenda.

Senator PATRICK: I understand there can be some difficulty there. In that planning process, can you provide the committee with the relevant planning documents that set out your strategy to getting to the conclusion of this task? Would you be able to provide those on notice to the committee?

Mr Power: We could but I could let you know that, for example, the referrals to different committees were things that were not planned.

Senator PATRICK: I understand that. A plan is just that: a plan, and you have to react to changes. If you could provide us with what the plan was, what the deadline was, what you were thinking of, or perhaps any updates on the way. Dates always seem to be a problem for government. Coming from private industry, for every task, you are assigned a deadline. You might not always get there but it focuses everyone. It worries me that people don't have a date in their mind as to when this might be concluded. That's what I am trying to get to. Can you have a look through documentation that will inform the committee when that will occur?

Australian Space Agency

[16:12]

Senator PATRICK: The first statement I made at the last hearing was: 'I was out of the room and missed the date that the headquarters is moving to South Australia.' Has it been determined yet?

Mr Murfett: The public announcements about the location of the agency were on 1 July 2018. The government then asked the head, Doctor Megan Clark AC, to consult closely with state and territory ministers, and we were to provide advice back to the government by the end of the year. I'd like to pass on the apologies of Doctor Megan Clark—she is not in the country at the moment.

Senator PATRICK: Is she on the earth is the next question?

Mr Murfett: That is a good question. We haven't quite got there yet. She is on the planet. We have undertaken extensive consultation across all states and territories. Megan has met with most first ministers personally. And we are at the stage of providing that advice to government by the end of the year.

Senator PATRICK: Perhaps on notice, could you provide some details of that consultation—who you have consulted with, who has been met with—to get a feel for that.

Mr Murfett: I'm happy to run through the broad construct now if that is of use; otherwise, I can take it on notice.

CHAIR: Are you comfortable with that, Senator O'Neill and Senator Carr?

Senator KIM CARR: On notice, thank you. We don't want to hear a report on her diary.

Mr Murfett: No, I understand.

Senator KIM CARR: We get the story that every state has put a bid in for it. I can tell you now, we have a policy position of opposing that proposition. Minister, we will be seeking a formal briefing from the Space Agency's CEO. I understand one of the normal conventions is six months within the regular date of an election, we get access to senior public servants. That is the case, isn't it?

Dr Smith: I'll take that on notice. It depends on the timing. But, yes, I'll take that on notice.

Senator KIM CARR: Sure, but I think you'll find that we're really awfully close to that measure. But I will be seeking a formal briefing on this matter.

CHAIR: I think, Mr Murfett, you can take that on notice.

Senator PATRICK: Just to help me out, in terms of the considerations, are you coming to any sort of interim conclusions as to what is important in where this agency might be located?

Mr Murfett: I think that would constitute advice to government, but what I could say is that, when we were asked to consider the location arrangements for the agency, we were to consider the responsibilities that were given to the agency and our purpose, which is to grow and transform a strong Australian space industry. So those considerations were some of the key parts as we formulated our advice.

Senator PATRICK: So there is no looking at where there's a mass of industry players? There are different considerations here: there can be the closeness to government, which might say Canberra, or closeness to industry. I know South Australia has got a lot; I don't know where it stands in terms of the rest of the country. It might be launch sites—those sorts of considerations. That's what I'm trying to get to. What's the thinking at this point?

Mr Murfett: Under the responsibilities of the agency, as to the advice we provide to government, we were set up to grow and transform the agency, and we were set up to be a single voice, domestically and internationally. Other things we're doing are about our domestic obligations under our regulation. There are activities about: 'How do we inspire Australians and the broader community?' and, 'How do we meet our international obligations and, importantly, engage internationally?' So those responsibilities are a key part as we formulate our advice to government.

Senator PATRICK: All right. That's about it for me.

CHAIR: Obviously the space agency sounds very sexy indeed, and I know it's the final frontier and all, but I am just wondering what it is about space technology that makes this investment so important. Can you explain to the committee the benefits of space technology to other industries, like agriculture, or to marine workers or emergency services or whatever it might be.

Mr Murfett: We are witnessing a real transformation in the space economy. When people originally start thinking about space, they think of rockets; they think of the *Saturn V*; they think of the 1960s, and we've also got

the movie *First Man* out there that is demonstrating some of this. But I think the exciting thing we are seeing about space is this real transformation where there is the miniaturisation of technology, and low-cost of launch, which means space is more accessible. What that means, and what we are seeing around Australia, is that there are companies now that are creating small CubeSats. A CubeSat is 10 centimetres by 10 centimetres by 10 centimetres, a little device, and they stack them so they can be up to 30 centimetres long. They put on new sensors which can receive radio signals, or small cameras that look down, back at the earth. There are companies that have a little chip that they can put on a piece of infrastructure or equipment in the middle of nowhere, and that can send a little signal up to satellites that are now being launched—and we call them flocks or constellations of satellites—and that signal can then be relayed down to someone, like an engineer who will look at their phone and say, 'Hold on; the oil level in my equipment is now low, and I'd better get out there,' where previously they had to drive out and have a look at this stuff. That's an example in the engineering context.

For farmers, it means that they can look at salinity. It can help them look at where they can plant their crops. We can look at some of the technology that Geoscience Australia, for example, is putting in place to improve the resolution of the GPS signal, so you go from something like 10 metres down to around three centimetres. There is the ability to undertake precision agriculture. So farmers then can use robotics and precisely work out where they are going to put their seeds. It means we get increased productivity and crop generation. They are the types of technologies that are out there. The agency is looking at how to tell that story, but also how to grow our industry to capture some of those opportunities.

CHAIR: Thank you, Mr Murfett.

Senator Canavan: Could I just add to that, too, to pick up where it was left off there on the Geoscience Australia work? That has required a significant investment from the government as well in the budget. Some \$260 million was put towards improving the accuracy of our GPS systems. As was outlined, our current system really has been accurate to only about five to 10 metres, making it not suitable for some of the applications that were described, like precision agriculture. These investments will take our system to at least 10-centimetre accuracy and, in areas where mobile phone connections are available, it could be as accurate as two centimetres, making it one of the world's most accurate GPS networks in the world. All of these benefits will be freely accessible to all Australians who use equipment that can hook up with existing GPS networks. It's a public good that we see and a very significant investment for our country.

Senator KIM CARR: Can I follow up some questions? Mr Murfett, can you just remind me: you have some experience at estimates, haven't you?

Mr Murfett: I've been here before.

Senator KIM CARR: Yes, that's right. What was your job prior to your appointment and your current position?

Mr Murfett: I was the minister counsellor for industry, science and education in Washington, DC, in the embassy.

Senator KIM CARR: So you're not unfamiliar with the way in which governments work.

Mr Murfett: That would be my opinion I suppose I'd be entering there, Senator. But I have been in government for quite a while.

Senator KIM CARR: The answer is years, I would have thought.

Senator Canavan: I find him an experienced official, Senator Carr.

Senator KIM CARR: That's right. Can you tell me, Mr Murfett: has the minister issued a statement of expectation to the space agency?

Mr Murfett: The minister hasn't issued a statement of expectations. But, in the government response to the establishment of the Australian space agency, we were asked to prepare a charter.

Senator KIM CARR: So why has there been no statement of expectation issued?

Mr Murfett: We've been asked to prepare a charter within three months of establishment. That charter has now been approved, and that sets the guidelines in our government's arrangements for how we will operate.

Senator KIM CARR: So you presented that to the minister, and you say it has been approved; is that right?

Mr Murfett: That's correct.

Senator KIM CARR: Does it require cabinet approval or just a ministerial approval?

Mr Murfett: It was approved by the minister and, through government, up to the Prime Minister.

Senator KIM CARR: Was it a prime ministerial letter? What was the form of approval?

Mr Murfett: It was a letter to the Prime Minister seeking approval of the charter.

Senator KIM CARR: I must have missed this. Where is it published?

Mr Murfett: It has not yet been published.

Senator KIM CARR: It has not been published. Why not?

Mr Murfett: It'll be published very soon.

Senator KIM CARR: When was it approved?

Mr Murfett: It was approved on 24 October.

Senator KIM CARR: I see. So it is very recent.

Senator KIM CARR: Why didn't it require cabinet approval?

Mr Murfett: I don't think I can answer that question.

Senator KIM CARR: You're not qualified to answer that.

Senator Canavan: It's a matter for government and an ultimate matter for the Prime Minister's office.

Senator KIM CARR: Minister, why didn't it require cabinet approval?

Senator Canavan: As I just said, that's really a matter for the Prime Minister and the Prime Minister's office.

Senator KIM CARR: I see. In terms of the industry strategy component of the charter, what progress have you made?

Mr Murfett: I'm sorry, Senator, I'm not sure I understand the question.

Senator KIM CARR: I presume there's an industry component in the charter.

Mr Murfett: That's right. A key objective of the agency is to grow and transform our globally respected space industry. What we've been doing since establishment—we're 100 days old, so we've been running pretty fast. The first part is to draw on the work that Dr Megan Clark did under the expert review group, which set the framework for the consideration for the agency and some of the key priorities that we could look at. They're things, as we've discussed, like earth observations: what are the things looked at from satellite data, how do we improve our GPS? Now we've been back out. We've won. We've spoken to state and territory counterparts about the opportunities that exist in the states. We've spoken to industry, because, now that we have the expert review group and the priorities, it's important to get back and understand from industry where they see their opportunities, and we're now in a process of pulling that material together to provide advice to government.

Senator KIM CARR: As you say, it's early days. Have you got an advisory committee yet?

Mr Murfett: That links closely to the charter. Now we have a charter approved, we can work forward with setting up a terms of reference for the advisory group and that appointment process.

Senator KIM CARR: There have been no appointments made at all?

Mr Murfett: Not at this stage.

Senator KIM CARR: Can you tell me: in terms of the organisation's legal structure, is it a statutory authority? What's its authority within the department?

Mr Murfett: As in the government response to the establishment of the agency, we are set up as a non-statutory authority within the Department of Industry, Innovation and Science. One way you can look at how we operate is that it's like the Office of the Chief scientist or the Office of Innovation and Science Australia, in that the head, Dr Megan Clark, is appointed by the minister and we report as an entity to the secretary as the accountable authority.

Senator KIM CARR: I see. So it's a division of the department? What is it?

Mr Murfett: I wouldn't characterise it as a division. I'd characterise it as a separate entity within the department.

Senator KIM CARR: Dr Smith, can you explain to me: what is the status of this agency within the department? It's not a CACAC body. It's not an independent statutory authority. What is it?

Dr Smith: No, that's right. As Mr Murfett said, the CEO is appointed by the minister in consultation with, obviously, the Prime Minister. It does report to me in terms of its accountability of public moneys that have been spent, so I do think it operates very much like the Chief Scientist and also, as was mentioned, the Office of Innovation and Science Australia.

Senator KIM CARR: But the Office of Innovation and Science Australia has a legal basis. What's your legal basis?

Mr Murfett: I will correct the record and say that the Office of Innovation and Science Australia does have a legal basis. We're a non-statutory entity within the department.

Senator KIM CARR: So there's no legislative basis to underpin this body.

Dr Smith: There's not specific legislation.

Mr Power: Senator, just going back, we talked about this a couple of estimates ago, particularly when the review reported to government about setting up the space agency and the government's response to that. The government, in responding to the review, said that it would set up the agency in the way that we've just discussed. It said then it would look at legislation potentially for the agency in a period down the track once the agency had got set up. So that's the process that has been followed.

Mr Murfett: The government response says that we would consider the establishment of the agency as a statutory authority within four years.

Senator KIM CARR: So it'll be required by legislation within four years.

Mr Murfett: As I said, we've put forward advice to consider whether it's appropriate to be a statutory authority within four years.

Senator KIM CARR: When will we see legislation, if that's being proposed?

Mr Murfett: At this stage, we're 100 days old. We've been asked to do that activity within four years, so we haven't started that process yet.

Senator KIM CARR: You've got plenty of time, you're saying. You could, equally, be removed, couldn't you?

Mr Murfett: I think, in the PBS, we've been given an operational budget, and the operational budget is ongoing.

Senator KIM CARR: We'll have a look at that in a minute. You said the charter is going to be published. Can I get a copy of it?

Mr Murfett: I will take that on notice.

Senator KIM CARR: There's no reason it can't be tabled.

Mr Murfett: I can take that on notice.

Senator KIM CARR: The industry strategy I spoke of before is actually a separate document from the charter, isn't it?

Mr Murfett: I missed that question; sorry, Senator.

Senator KIM CARR: The industry strategy from the space agency is a separate document, is it not?

Mr Murfett: That's correct. In the government response, one of the other priorities we were given was to establish an investment plan. That was asked to be developed within six months of the establishment of the agency.

Senator KIM CARR: Has that been developed?

Mr Murfett: We are considering that; it's under active consideration at the moment.

Senator KIM CARR: In regard to staffing, how many staff do you have?

Mr Murfett: We have an ASL cap of 20 for this financial year.

Senator KIM CARR: So how many do you have effectively full time at the moment?

Mr Murfett: I'll take that on notice, more so because we use a variety of different ways. ASL is the one we usually use, which is 20. But we've got people seconded in, for example, from the Air Force to support us, and that goes to our broader mission of how we grow the sector, as a whole, across the whole of government.

Senator KIM CARR: Can I get some understanding of how many staff you've got, what their classifications are and what their roles are. Can you tell me how many comms staff, how many policy staff and how many managers you've got?

Mr Murfett: I can take that on notice.

Senator KIM CARR: Thank you, that would be good. How many staff have come across from the old civil space section of the department, so from the regulatory functions department had?

Mr Murfett: Four staff would have come across from that old section, but I'll take that on notice to make sure they were specifically from that team.

Senator KIM CARR: How many are left in the department?

Mr Murfett: I don't understand the question.

Senator KIM CARR: The department has ongoing statutory responsibilities. How many staff are responsible for space activities within the department?

Mr Murfett: With the responsibilities we have under the Space Activities Act, all of those staff are now within the Australian Space Agency and the Australian Space Agency has responsibility for administering the act.

Senator KIM CARR: So everything has been transferred across to this new entity?

Mr Power: My division, the industry growth division, has responsibility for industries across the whole scope of industries. Within that, from the department's point of view, we maintain a capability, for example, around space. As Mr Murfett said, all of the policy and regulatory functions have transferred to the Australian Space Agency. We work very closely with Mr Murfett and maintain a capability.

Senator KIM CARR: In fact, everyone is a departmental employee, presumably, given the structure that you have outlined. But I just want to get it clear: outside of the agency, there are still officers responsible for space?

Mr Power: The Australian Space Agency is responsible for space. My division will keep a capability to be able to contribute, from the department's point of view, to the agency across all sectors, including space.

Senator KIM CARR: Can you give me a breakdown on the budget you have for the agency, both departmental and administered?

Mr Murfett: I will do that. I just have to bring up the details. We have a total budget of approximately \$41 million over the forward estimates. Breaking them down into departmental and administered for this financial year, which is 2018-19—do you want it as a total for the forward estimates or each financial year?

Senator KIM CARR: I want it across the forward estimates.

Mr Murfett: Those details are on page 19 of the PBS.

Senator KIM CARR: And that includes the administrative as well as the departmental?

Mr Murfett: Yes, that's broken down in departmental and administration.

Senator KIM CARR: Are you seeking any external funding to supplement Commonwealth monies?

Mr Murfett: One of the important things has been that the agency is to be the partner and facilitator for the growth of the space sector. We are talking closely with industry to work out and identify where they see opportunities to invest. One of the examples that I could give is Airbus, which will do some investments in what they call a Zephyr balloon. I'm won't be exactly right on the technical details of this activity, but it will be launched in Western Australia. The reason they've chosen Australia is that we have clear skies and a lot of space.

Senator KIM CARR: How much money is the Australian Space Agency able to attract out of that activity?

Mr Murfett: If you want to grow the space industry, at the moment it's not about the agency itself.

Senator KIM CARR: I understand that. I have seen the target figures. I just want to know whether or not you're able to attract any private sector revenue to supplement the appropriation.

Senator Canavan: You mean directly to the agency?

Senator KIM CARR: That's right.

Mr Murfett: The best I could say is, as we go through and consider policy options, we would look at ways that we would leverage industry investment.

Senator KIM CARR: And charges, for instance, for activities?

Mr Murfett: We do have a charging regime, for example, for when people wish to launch things overseas. We do that on a cost-recovery basis. If we are looking at industry growth and we are looking at policies, what we will be looking to do is how we can support the growth.

Senator KIM CARR: But there have been no decisions made yet on those matters?

Mr Murfett: Not yet.

Senator KIM CARR: Do you intend to publish an annual report?

Mr Murfett: We report up through the secretary. We will provide a contribution through the department's annual report.

Senator KIM CARR: But not a separate report.

Mr Murfett: As you are probably aware, we do an annual state of the space sector report, which talks about all of the civil space activities that happen across the sector. We would look to continue that document, because that's seen as a very worthwhile activity.

Senator KIM CARR: I will just go back to this budget issue. You are saying to me the figures in the PBS are the agency's budget and they're not mixed up with any other expenditure. We can extract from that just what the agency is receiving.

Mr Murfett: On page 19 of the PBS, there is a line under program 2.3 that talks about growing the Australian space industry. It's on page 19; it's called 'growing the Australian space industry'. Under program 2.3, there are two lines: administered and departmental. That is the funding for—

Senator KIM CARR: So the departmental expenses are at \$5.7 million, \$6.7 million, \$6.8 million and \$6.7 million. Administered expenses are \$3 million, \$5 million and \$7 million. Is that it?

Mr Murfett: That's correct.

Senator KIM CARR: That is the total agency appropriation?

Mr Murfett: That totals to just a little over \$41 million over the forward estimates.

Senator KIM CARR: Where are you located at the moment? Which building is it?

Mr Murfett: We are currently within the Department of Industry, Innovation and Science at Industry House.

Senator KIM CARR: Is it a separate area?

Mr Murfett: We have an area where we are allocated with our own signage, entry way, boardroom and other things to demonstrate ourselves as a standalone entity.

Senator KIM CARR: Thank you very much.

Senator O'NEILL: I will just go back, as I have a couple of quick questions to clarify. With the science dinner that I heard about and as to Fred Watson and Lisa Harvey-Smith, what is Lisa Harvey-Smith's official title? Is it ambassador for women in STEM or ambassador for women in science? Which one is it?

Ms Urquhart: It is for women in STEM.

Senator O'NEILL: Did you receive any feedback from the ambassador for women in STEM after she was part of the ceremony where only one out of the seven recipients who received the award was a woman?

Ms Urquhart: From the ambassador or from somebody else?

Senator O'NEILL: From the ambassador.

Ms Urquhart: I had a discussion with the ambassador about the science prizes and the rate of nominations.

Senator O'NEILL: She went ahead and presided over an announcement where there was only one. Did she make any comment about that?

Ms Urquhart: We had a conversation about it.

Senator O'NEILL: How would you categorise that conversation? What would you say about it?

Ms Urquhart: We were sharing information about the challenge of attracting nominations. I outlined the process for her for how we run the nomination process. We discussed the formation of the panel. It was that sort of information. We also talked about how there were similar experiences to learn from in other organisations. It was that kind of information exchange.

Senator O'NEILL: Would you say she was very aware and perhaps not so happy about the fact that it was only one of the seven awards that were going to women?

Ms Urquhart: I would say she was aware and shared our concern.

Senator O'NEILL: Did she make any suggestions for change for next year?

Ms Urquhart: She certainly discussed with me the opportunity to have further discussions about what we could do around the process. That was at my invitation.

Senator O'NEILL: There is no consideration being given to making sure that there are 50-50 awardees? I'm sure there are enough talented women out there who you could find.

Ms Urquhart: There is no consideration being given to a target.

Senator O'NEILL: Gender equity.

Ms Urquhart: But there is obviously active consideration being given to how we can improve the rate of nominations.

Senator O'NEILL: From nomination to actual success, I just wanted to ask about the format of the group. I know you indicated that you would give, on notice, a detailed outline of the people who were on the board who made the decision—that is, the science prizes committee. What is the gender balance of that committee?

CHAIR: We've already had this question, Senator O'Neill, so we are going over old ground. Senator Carr has already asked this question.

Senator O'NEILL: Are any of the members on the committee Male Champions of Change?

Ms Urquhart: The Chief Scientist is on the Male Champions of Change for STEM group. I would need to defer to my AusIndustry colleague and just confirm the names of the panel before I would be able to tell you the other memberships.

Ms Ryan: We can provide a list of the names on the panel. We don't, at the moment, have a cross-reference as to who are Male Champions of Change.

Senator O'NEILL: Maybe, when you're doing that, you could just have a look at that. If you've got Male Champions of Change at the level of the Chief Scientist and you can still only get one out of seven up for women, I expect that's reasonably concerning to women. It certainly is to me.

Ms Ryan: We can provide that on notice.

CHAIR: Can I just ask a question of the panel: I would imagine it would be reasonably concerning to scientists if it weren't the most meritorious application that received a science award from the Prime Minister. While we agree that 27 per cent applications by women isn't enough and we should work towards a better proportion, certainly we wouldn't want to contrive or confect an outcome simply to acknowledge gender equality.

Senator O'NEILL: You just need to look harder, Chair.

Ms Ryan: I can confirm that the prizes are assessed against the selection criteria, and that's how that's determined.

CHAIR: Which are objective criteria?

Ms Ryan: Yes, that's right.

Senator O'NEILL: There's unconscious bias too, but that's a very live conversation.

Senator Canavan: Are you suggesting the Chief Scientist has unconscious bias?

Senator O'NEILL: I don't know, and I don't know about the committee. I'll find out more about them as you provide information.

Senator Canavan: Okay, you can make the allegations.

Senator O'NEILL: I'm not making an allegation; I'm asking a question about the role of Male Champions of Change. When they're in a position to advocate the change, I just wonder how we ended up with one out of seven. That's all. Dr Smith?

Dr Smith: I was just going to say I think the issue was around the feeder group and how we actually keep targeting the feeder group. Actually highlighting that number of how many applications in the entire application set were women is obviously problematic, so we all collectively need to work on that. The MCC STEM group, chaired by Ann Sherry, is also very conscious of that. So I think, without getting into a debate about targets, just highlighting the numbers is really important because it does put some pressure on everyone involved in the ecosystem, particularly in getting more women teachers nominating as well. So I think everyone is very committed to getting more nominations, and we've got, I think, some really good policies now starting to be put in place, but I think it requires a really concerted effort across the system.

CHAIR: I think we're all singing from the same song sheet on this issue. In fact, I think we were all singing from the song sheet three-quarters of an hour ago when we discussed it. Senator O'Neill, have you got some new questions?

Senator O'NEILL: Thank you. That's a good point to shift over to the Women in Science Strategy. Could you give a general update. I know that you made some comments, Dr Mitchell.

CHAIR: Again, we did cover this three-quarters of an hour ago as well.

Senator O'NEILL: I was here, but I don't think we got complete coverage. Could you particularly go to the scope of the work with regard to science, technology, engineering and mathematics—each of those areas.

Ms Urquhart: As I think Dr Mitchell mentioned earlier, the strategy is intended to help coordinate the government's efforts to increase women's participation in STEM—in particular looking at actions to improve gender equality. The department has been in an active consultation process, particularly leveraging the

consultation process run by the Academy of Science for its decadal plan, but also separate to that. Our intent is to consult fully across industry, education and the STEM sector to inform development of the strategy.

Senator O'NEILL: So the scope of the work is not just science. Does it consider technology, engineering and mathematics as well?

Ms Urquhart: That's correct.

Senator O'NEILL: Thank you. With regard to the consultation around that, who is being consulted and when have these consultations occurred?

Ms Urquhart: As I said, we've been leveraging the decadal plan consultations. I don't have with me a full list of participants at each of those sessions. There have been sessions interstate. For that matter, I don't have with me right now the list of people that we've been consulting. But I can say, for example, that I was at ANU only yesterday or the day before speaking to Elanor Huntingdon, a very prominent engineer at ANU. We've had two meetings with her. I was discussing the issues also with Nalini Joshi very recently. That wasn't a formal consultation. Those are just my conversations. The team itself has also been engaging different people in the sector.

Senator O'NEILL: If you can provide on notice an outline of who you've been consulting and when those consultations occurred, roughly, that would be good. Have you undertaken any public consultations?

Ms Urquhart: No, we haven't. We've been seeking to leverage the decadal planning consultations.

Senator O'NEILL: Why is that?

Ms Urquhart: We thought it was useful not to cut across the decadal planning consultations. As I mentioned, the Women in STEM Strategy is meant to be a position, a document for government in regard to its role, but the decadal plan will look at the full gamut of pluses in the system and the opportunities and actions that can be taken from the view of the community in regard to government and also in regard to other players and what they might do.

Senator O'NEILL: Do you really consider that a public consultation about this would really significantly impact the decadal plan? I'm thinking that a public consultation provides an opportunity for the community to be aware of the work that you're doing to enhance awareness of this issue, rather than behind closed doors consultations. I know they can be valuable too.

Ms Urquhart: I know that it's only that the same matters with the same interested parties will be rehearsed through the decadal plan consultation, because there is that overlap. We are also working very closely with the academy about the decadal plan. So it makes sense to leverage that process.

Senator O'NEILL: So you are relying on that to be your public face to feed into?

Ms Urquhart: Not entirely. In terms of public consultation, we haven't at this stage got a separate public consultation process running.

Senator O'NEILL: Are you open to your own public consultations, or are you happy with the processes that you've got?

Ms Urquhart: If we thought it was necessary; but we are getting useful feedback through the decadal plan process. I was speaking to the CEO of the Academy of Science again this week again about how the consultations were proceeding and the sort of feedback we were getting in regard to the government's role, but also actions in respect of some of the challenges facing women, be they in academia or indeed in industry, the start-up sector and so on.

Senator O'NEILL: Do you have a formal interaction with the decadal plan?

Ms Urquhart: We have a formal arrangement with the Academy of Science that relates to the funding that supports them to undertake the decadal plan process. That funding agreement contains milestones and all the things you'd expect in an arrangement of that type.

Senator O'NEILL: And this process is well integrated—is that how you would describe it?

Ms Urquhart: I would consider it so.

Senator O'NEILL: Have you undertaken targeted consultation to consider the influence of intersectionality—for example the LGBTQIE, TI and CALD community?

Ms Urquhart: I have discussed with the CEO of the Academy of Science how there's the opportunity to hear broader views, obviously in regard to Professor Lisa Harvey-Smith's activism and her role as the Women in STEM ambassador. We have the opportunity to hear some input from her as well. I should mention that through our support for the Science in Australia Gender Equity initiative I have also been involved in their annual

conference in facilitating discussion around intersectionality and other forms of discrimination and their intersection with science.

Senator O'NEILL: Will the Women in Science Strategy be made public?

Ms Urquhart: That's the intent.

Senator O'NEILL: When do you think that strategy will be made public?

Ms Urquhart: I expect both the decadal plan and the strategy to be finished in the early part of 2019, and both documents to be public documents.

Senator O'NEILL: Can we separate them out? The decadal plan is not expected until the new year?

Ms Urquhart: I think we would expect both of them to be published early in the new year.

Senator O'NEILL: So you are attaching them to one another. Is it your intention that they would both be released together?

Ms Urquhart: I can't make that decision. They are obviously different processes. One is a strategy for government. The other is a plan being submitted to government through an arrangement. I think it would depend on the decision of government about timing.

Senator O'NEILL: Do you expect any funding allocations in addition to what was in the budget for any of the work that you're considering?

Ms Urquhart: I would obviously hope that the government would have the opportunity to consider further actions in this space.

Senator O'NEILL: When would you expect that to occur?

Ms Urquhart: Following the release of the decadal plan and the strategy.

Senator O'NEILL: Given you said that would be in the new year, and MYEFO generally would happen before that time, are you expecting additional funding?

Ms Urquhart: That's a matter for government.

Senator O'NEILL: Senator Canavan? Is the government's appetite large enough to deliver additional funding to women in STEM?

Senator Canavan: I can't pre-empt any decisions the government may or may not take the MYEFO. These estimates are about spending that the government has already announced. We have a strategy in place and we will obviously consider the results of those consultations, which have been discussed.

Senator STORER: I'd like to return to questions on the Australian Space Agency, on the deciding elements of the decision, relevant processes of the decision and the permanent location of the agency.

Mr Murfett: When the agency was established, the government asked the agency to consider location arrangements. We've been asked to provide that advice by the end of the year.

Senator STORER: Can you summarise the deciding elements on that?

Mr Murfett: I've got to be careful that this is not what constitutes advice for government. In the considerations, what we were asked to do when looking at the location of the agency was to look at the responsibilities of the agency and what are the best location arrangements that would support us to deliver on our purpose, which is to grow and transform a globally respected space industry.

Senator STORER: There is posturing on the permanent location of it. I'm interested in what steps the department is taking to facilitate state and federal cooperation overall, outside of that.

Mr Murfett: One of the first activities that Dr Megan Clark undertook was to quickly engage with all of our first ministers across all jurisdictions. We went out and met to explore and understand what opportunities and capabilities resided in each of the states and territories. We also undertook some industry engagement forums in the August period. At the moment we are pulling that advice together and we will prepare advice to government based on those extensive consultations we've had across Australia.

Senator STORER: The Australian Space Agency has established a number of strategic international links. You've signed agreements with the French, Canadian and UK space agencies, correct?

Mr Murfett: That's correct. We've signed an MOU with CNES, which is the French space agency. That was on 1 September. We've signed an additional two memorandums of understanding with the UK and Canadian space agencies on 2 October.

Senator STORER: Can you summarise the goals to be set in those MOUs and the track record in the last month?

Mr Murfett: We've been running pretty fast. With those MOUs the intent is to set an overarching framework. One of the things the agency is responsible for is to be a front door for Australia's civil space responsibilities, so those MOUs identify those opportunities with those countries in which the two countries could collaborate. If I take, for example, the French memorandum of understanding, some of the areas relate to communications technologies, but one of the interesting ones we are likely to pursue is, for example, how do we get some of our AI smarts onto satellites that they are preparing? That's an opportunity. If we want to grow an industry, how do we get into international supply chains? We have great researchers to look at things like, for example, AI. How do we get some of that into some of the international activities in the space domain? In the case of the Canada or the UK, again, there are opportunities for us to talk about lessons learned at the policy level about how we grow a space industry and how we align the work we are doing, for example, with Geoscience Australia, with their Digital Earth platform, and how can we extend that internationally or look at activities around our mining sector. One thing that the international community has identified in Australia is that a lot of our mining is autonomous, driven by robotics. If we take Perth, the Pilbara 1,500 kilometres away, but a lot of that is controlled in Perth while it operates 1,500 kilometres away. Space is 100 kilometres above us. So how do we take that technology? These MOUs provide a framework for areas in which we have or can build world-class capabilities and work with our international partners to get that overseas.

Senator STORER: I may come back to a question on that. I'm told that the space agency expected to create 20,000 high-tech jobs. Can the department clarify how many jobs have been created so far and what the strategies are for next year in terms of these 20,000 high-tech jobs?

Mr Murfett: I don't think I can answer now about how many jobs have been created. We are 100 days old. In relation to strategies for how we are looking to grow the sector, one of the opportunities we have in the expert review group that Dr Megan Clark put in place identified six or so priorities where Australia really does punch above its weight. We are now developing an investment plan, which is due to government by the end of the year. It's about how we capture those priorities and what mechanisms can be put in place to invest and to grow and create those particular jobs. Some of the examples that were used and the companies we see earlier, I provided evidence to the committee talking about how it's not only space technologies for space, it's not just about us, for example, manufacturing new satellites to launch. Where some of these jobs will actually come from is by the use of satellite data, the use of imagery looking back at the Earth, how farmers can use that, how we can improve our resolution, how we can use the GPS resolution to help shipping coming into Sydney Harbour, for example. Some of that growth will be on the broader economy as people embrace the space technologies there and how we can use them in everyday life.

Senator STORER: The government, in response to the review of Australia's space industry capability, are committed to provide \$173 million from 2016-17 until 2021-22 for better GPS for regional Australians, previously known as the Satellite Based Augmentation System—SBAS. Can the department explain what steps have been taken so far on this matter?

Mr Murfett: That's under the responsibility of Geoscience Australia, so I'd have to take that on notice.

Senator STORER: What space-enabled or space-based applications are considered by the department to be used for the protection of the environment?

Mr Murfett: One of the ways that space data can be used, if we think about Earth observation. Is that we've got satellites that have imagery. There are new technologies that are able to look back at the Earth to identify salinity in soil and a range of other things. It means that if we are looking at tsunamis in the region, you can use data and imagery to identify where those particular activities are. Another, probably better, example is the use in the prevention of bushfire and watching where bushfires are tracking. There are now satellite technologies that are imaging once a day, if not quicker, which means you can look at where fires are spreading to help fire management. I believe areas in the Northern Territory are using technologies such as this to manage bushfire.

Senator STORER: I'm very interested in the statement that 1.4 million companies can benefit from space in Australia, including 170,000 in agriculture. How is the department using the application of space domain to increase efficiency in agriculture and fisheries?

Mr Murfett: I might have to take the details on notice, but the broader statement there is that what we're looking to do as the Australian Space Agency is articulate how we can use the space technologies to actually improve agriculture. As an example, we recently presented to the chairs of the RRDCs—the Regional Rural Development Centres—to say, "These are the space technologies and these are the opportunities that rural

communities could potentially use.' That's the intention of that statement. If that suffices, we'd have to take the rest on notice.

Senator STORER: If you could take the rest on notice, thank you. How is the department planning to build the future pipeline of highly skilled space sector professionals? What steps have you taken so far?

Mr Murfett: I think some of this sort of sits into this. We are providing advice to government on an investment plan. One of key priorities for the agency is the inspirational piece. One thing that's been absolutely fascinating with the establishment of the Space Agency is that we've reached cumulatively 22.9 million people in Australia. I know we have a population of 25 million, so there's obviously some double counting, but the story there is we are really reaching out to the community. People are buying into space and they understand what it is, so part of our job is linking that enthusiasm into STEM careers. How do we reinforce science, technology, engineering and mathematics through the inspiration that space provides—that and dinosaurs, but we are here for space. There's that broader thinking: how do we inspire kids? We're in the early stages of thinking about ways to take that inspiration for what we do in space and how we create the next generation of jobs. Some of the earlier examples we used about the broader economy piece—it's not just space for space; it's how to use space technologies and applications for other parts of the community. Those sorts of things are some of the thoughts we're having about ways we could potentially grow the economy.

Senator STORER: Thank you.

Senator PATRICK: Sorry, I had a poorly named folder, and I have security of payments as well, if someone might want to talk about that. Apologies; it was an administrative error.

CHAIR: I wouldn't know anything about that!

Senator Canavan: Could you explain, for the officials' purposes, is it security of payments in relation—

Senator PATRICK: In relation to building.

Senator Canavan: Building contractors, subcontractors and what have you.

Senator PATRICK: John Murray was commissioned to write a review back in December 2016. It was delivered to government, I think, in December 2017 and was released in May this year. It was quite a voluminous piece of work. To date, the Commonwealth has not responded to that report. It's my understanding that it's been referred to the Building Ministers' Forum. I'm wondering: will the government be formally responding to that report?

Mrs Carew: That detail you have provided is correct, Senator. The report has been referred by the government to the Building Ministers' Forum to collectively respond to that. They did consider the way forward with that review at their most recent meeting on 10 August.

Senator PATRICK: They're meeting again next week, aren't they?

Mrs Carew: No.

Senator PATRICK: Is it an ongoing activity of the Building Ministers' Forum to deal with this report?

Mrs Carew: Yes, it is. The matter largely sits with the states and territories because they all have separate legislation for security of payments.

Senator PATRICK: Yes, I'm aware of that.

Mrs Carew: The BMF is trying to have a national approach, and they're exploring where consistency across jurisdictions can be considered. That's what will come back to the next Building Ministers' Forum.

Senator PATRICK: Sure. I'll go back to my original question: is the government intending to respond to the report formally?

Mrs Carew: That's not my understanding, because the government specifically wrote to building ministers in all jurisdictions to get their agreement that Building Ministers' Forum would respond.

Senator PATRICK: One of the things that has happened along the way, as this report was being written, considered by government and now is before the Building Ministers' Forum, is that Queensland has, in fact, enacted new security of payment laws, and now I think New South Wales has draft exposure legislation. One of the aims was to harmonise these laws, as you said before. Are we not somehow losing the game here? We're now seeing states going off in different directions, and it's kind of contrary to what the aim was in the first place.

Mrs Carew: Yes, one of the aims is harmonisation, but states are considering the best way to respond and deal with the issue. And you're right, Senator, both Queensland and New South Wales have introduced—or Queensland have enacted legislation and New South Wales, I think, introduced legislation yesterday. They are sort of divergent, so that is a challenge when the states are doing that.

Senator PATRICK: I put it to you it's a challenge because we haven't acted on it. You've done a whole body of work, and then the government has sat idle on it. There's nothing been done, apart from meetings. Are we expecting draft legislation from the Commonwealth at any stage?

Mrs Carew: It's not clear that the Commonwealth has constitutional authority to legislate in this area.

Senator PATRICK: Yes, I understand that. Often the states will cede that power to the Commonwealth, but I think the Commonwealth has to have a plan first.

Mrs Carew: I think the states are generally resistant to referring their powers, and it would be difficult for the Commonwealth to act unilaterally on this matter because, without the referral of powers, I think there is a risk that we would have two layers, a state layer of legislation, and Commonwealth legislation. That would actually create further uncertainty.

Senator PATRICK: Minister Canavan, surely the government has to take some leadership on this?

Senator Canavan: Senator, this is not my direct responsibility within the department. I'm a representing minister, so I apologise if I don't have all of the details. I'm familiar, though, with the issues around security payments for contractors and subcontractors. As you've described, this has been a significant issue in recent years, and some state governments are altering their legislation. As has been described, the government doesn't have plans to attempt or to seek a takeover of what are state responsibilities here. I think there would be some obvious difficulties for the Commonwealth regulating and enforcing some of the legislation that exists at state level. We don't really have the infrastructure to do that at the Commonwealth level. What would appear—to me, at least—to be a better response is to improve and for the Commonwealth to help facilitate the improvement of laws and enforcement of state and territory law.

Senator PATRICK: Okay, but we've just heard that Queensland has enacted legislation, and New South Wales is doing something different again. Clearly, we're not getting that harmonisation, and, in the meantime, subbies are going broke.

Senator Canavan: Harmonisation is an admirable goal, but it can't be one that is pursued independently of other considerations. At times there are also benefits from states being able to innovate and more quickly respond to what is, as you have described, a pressing political issue. Normally, if we were seeking a harmonised outcome, particularly where it involves the need for agreement amongst states, that would possibly delay any action while we sort that agreement. I'm not overly familiar with all of the issues here; as I say, I'm not the responsible minister. But it is an area that's fairly firmly within the remit of the state governments.

Senator PATRICK: The report was a very good and very thorough report, and it appears to me almost that it's going to be wasted. The states are going to continue down the pathway that they are on, and the Commonwealth has just dropped the ball on it.

Senator Canavan: I don't accept that characterisation. Official witnesses, obviously, can't provide opinions—

Senator PATRICK: I know. That's why I was directing it at you, Minister. The reality is that I'm a person who focuses on outcomes—not having this process just spinning away in the background with nothing ever coming of it. And, as I said, meanwhile we've a bunch of subbies going broke.

Senator Canavan: As we have outlined, I think it's incorrect to say that action is not being taken by state governments. The question is: who's the appropriate body to do that? You've just got to be a little bit careful about expecting the Commonwealth to solve every issue in the country. We can't do that, and sometimes we're not the best placed body to respond to issues as they arise.

Senator PATRICK: As we saw in energy.

Senator Canavan: That's another issue where it's tough to get state and federal government—

Senator PATRICK: I don't think we can blame that on the state; I think we can blame that on something else. I will leave it at that, other than to put on the record that that's disappointing.

CHAIR: I think that's all we have for the department. Thank you to all the officers who have given us their time this afternoon.

Anti-Dumping Commission

[17:11]

CHAIR: Thank you very much for joining us.

Senator KIM CARR: I have a series of questions that I'll put on notice because we're running late today; I don't mean any discourtesy.

Mr Seymour: Sure.

Senator KIM CARR: In the past, you have given us some assessments with regard to the potential of trade diversion as a result of the disturbance in the international trading system because of what's occurring between the United States and China. Can you update the committee on what the commission believes to be the current situation?

Mr Seymour: As I reported at the last estimates hearing, the Australian government received an exemption by the United States administration earlier in the year from section 232 for steel or aluminium tariffs. That exemption, to the best of my understanding, holds. As a result of the decisions taken by the US in that space—and obviously now much broader than just steel or aluminium—industry stakeholders and others who are invested in the trade remedy system in Australia expressed their concern about diversion insofar as it relates to products that have been dumped in the Australian market. I am actively monitoring all of those products in real time and producing internal reports based on some pretty sensitive and confidential commercial information held by government through the trading system, largely the ABF. And I'm keeping a very close eye on each of the products that currently has measures against it. That information is being held within the Commonwealth, and I will use that information should I believe there is a case to recommend to government what action might be taken under the trade remedy system insofar as that's concerned.

Senator KIM CARR: I appreciate that you are doing that. In the past, though, you've suggested that you thought there would not necessarily be a significant movement. Are you detecting any trends yet?

Mr Seymour: I brought along a handout for you—at least two handouts.

Senator KIM CARR: Thank you. We are not predictable here, are we?

Mr Seymour: One goes to your point directly. One shows the assumptions that underpin the Cadence modelling that we did—we didn't give you this document last time—as well as my commissioner's note that I said to you last time that I would produce. What I'm prepared to say is that there are some discussions going on with certain industry sector players in relation to their interpretation of trade data that they have access to that may cause them concern. I'm talking with them about my understanding of trade flows for those particular products to see whether I believe, as the commissioner, that there might be a concern that the Commonwealth may wish to respond to. I don't want to go any further than that, because—

Senator KIM CARR: Okay, but can you tell me the sectors. Are we talking about steel, aluminium or—

Mr Seymour: At the moment, the sector that is of greatest interest is steel—and the products and steel.

Senator KIM CARR: Steel fabrication?

Mr Seymour: No; mostly long and flat and raw products.

Senator KIM CARR: At what point are you able to report on your deliberations?

Mr Seymour: It's a good question. I have a set of stakeholders who are very keen to see a lot of the information that we are gathering. I'm working with other Commonwealth agencies at the moment on whether or not I can create a publicly available information document or consider other mechanisms that might enable me to provide certain information. At this stage, I'm still considering what that might look like. I'll need to take that to government and obviously brief ministers.

Senator KIM CARR: What concerns me is the time lag. We may well be entering into a period where this parliament doesn't sit for a while. It may well be that we are running into an election period. No-one can speculate about all of that, I know, but the point I'm trying to make is that the political system may not be able to respond quickly. The actions required in terms of trade remedies often require changes in legislation, don't they? You will need a legislative foundation to act. So, in that circumstance, where the political system can't respond quickly, what happens?

Mr Seymour: Under the current system, it's my call based on applications by industry as to whether I initiate an inquiry under either the dumping provisions of the Customs Act or the prevailing provisions. The third trade remedy agreement that's administered by the Commonwealth is the safeguards mechanism through the Productivity Commission. That's managed by DFAT. Insofar as it relates to questions around dumping or subsidy, I can act based on the information provided to me in the application. As I say, the safeguards consideration would be for somebody else to consider in government.

Senator KIM CARR: Who in government?

Mr Seymour: DFAT are the lead agency on the policy and the practice in relation to the safeguards mechanism, and the Productivity Commission is the prescribed investigating authority.

Senator KIM CARR: That's under the current arrangements.

Mr Seymour: Yes.

Senator KIM CARR: We have announced policy in regard to transferring those powers. So, in terms of the current regime, you believe you have sufficient capacity to respond even if the parliament is not able to—for instance, between 7 December—which I think is the last day of this parliamentary year—through to the beginning of the new parliamentary year, which is in February?

Mr Seymour: If it was a concern around trade flows relating to dumped goods or an allegation of dumped goods or subsidised goods, I don't need any parliamentary approval; I already have it through the legislation.

Senator KIM CARR: Suppose an election were actually underway and the parliament had been prorogued—an election has to be called by 18 May and parliament can be prorogued in a period prior to that; parliament may not come back next year—you still can act within these capacities that you have?

Mr Seymour: I can take advice from my lead counsel on this, but the law as I understand it would still apply and I'd still be able to take actions under either the dumping or the countervailing provisions.

Senator KIM CARR: What about during a caretaker period of government for the additional measures you need? What happens then?

Mr Seymour: I'm not sure about the additional measures you're referring to.

Senator KIM CARR: You said DFAT may have to be called upon.

Mr Seymour: That's a question for DFAT as to how they currently manage the safeguards mechanism. It's not within my remit, so I have no comment.

Senator KIM CARR: Minister, what do you think happens in those circumstances? Have you had any advice to that effect?

Senator Canavan: Not on this specific matter, Senator Carr. It is obviously not in my direct remit. I'm sure that, if those eventualities were to arise, the caretaker provisions would be complied with. If there were matters of a significant nature that required action to protect Australia's national interest, the caretaker provisions provide scope for such decisions to be made and there may be a need for consultation with the opposition on those areas as well.

Senator KIM CARR: That's all I'm seeking. It's understood that that's available. There is a sense of urgency and imminent threat I think. I think, Commissioner, that's what you're saying. You're actually concerned as well that the circumstances may not be as they were when you initially issued this note in July.

Mr Seymour: That's correct. It's a dynamic global trading system at the moment. There is a lot going on. Many disputes have been lodged with the World Trade Organization in relation to the policies of certain governments. We ourselves are in a dispute situation as well with another government in relation to a product. That's at the WTO at the moment. It's a very dynamic system and there is a lot of activity.

Senator KIM CARR: Thank you very much. I'll put the rest on notice.

Senator PATRICK: Do we need to formally table this?

CHAIR: We probably do. I'm happy to formally table that. Thank you very much for appearing before the committee today. We'll let you go.

Australian Institute of Marine Science

[17:23]

CHAIR: I thank representatives of the Australian Institute of Marine Science for appearing before the committee today. I have your opening statement in front of me. Would you like to table that? It is quite a long one. Can you give us a truncated version or can we simply table it? What would you prefer, Dr Hardisty?

Dr Hardisty: If nobody wants to hear it, I'm happy for—

CHAIR: I feel very guilty that we bring you down here without allowing you to do it. It's a very long opening statement. Perhaps you could give us a truncated version.

Dr Hardisty: How about I just cut it down a little bit?

CHAIR: That would be terrific.

Senator KIM CARR: Just tell us what you need to tell us.

CHAIR: That's right.

Dr Hardisty: Thank you very much. I appreciate the opportunity. Thanks for having us. I'm the chief executive officer of the Australian Institute of Marine Science.

Senator KIM CARR: Is this your first appearance?

CHAIR: I don't think it is your first appearance.

Dr Hardisty: No, it's my second.

CHAIR: Yes, I thought it was.

Dr Hardisty: Thanks for the opportunity. First I'd like to acknowledge the traditional owners of the sea country in all the places where AIMS works right across the top end of Australia. I will cut some of the paragraphs out, but I'd like to note that we've just released our updated Strategy 2025.

Senator KIM CARR: We can incorporate this in the *Hansard* if that suits you. You can speak to these remarks. Would that be of assistance? The whole statement is incorporated in the *Hansard*—

Dr Hardisty: I see what you're saying, yes.

Senator KIM CARR: but you speak to it in general terms. Get the point across you want to put across.

Dr Hardisty: Okay, great, perfect. Yes, our strategy 2025 was just released. Some of the highlights are that it's focusing on delivering impacts to the nation and measuring those impacts. It was based on a very extensive stakeholder survey. We talked over 200 of our stakeholders across the nation, including industry, government collaborators and communities. We asked what they thought their national marine science agency should be delivering for them? We asked also asked them: what do you think the big challenges are in the next decade for marine science? All of that came together in this document. We've really tried to make it short and concise but also focus on providing real targets that we have to try to meet, so some of them are quite ambitious. But we think it's important, especially at this particular time, to make a clear statement of what we think we should be measured on and what we are going to try to deliver.

CHAIR: Dr Hardisty, do you have a copy of that report?

Dr Hardisty: I do right here.

CHAIR: Have you got one for each of us?

Dr Hardisty: Yes. I should have brought a whole bunch more. We can bring a whole bunch more. Sorry about that.

CHAIR: Thank you.

Dr Hardisty: I think the other thing is that, throughout this process what's become clear to us is that AIMS holds a unique position in the marine research environment, if you want to call it that—our ecosystem. We do the stuff that's right at the front that is difficult and expensive. We put people in the water. We put boats in the water. We take real samples and we do real things with them. It's an irreplaceable service to the nation. Sometimes that becomes difficult.

In my statement I talk a little bit about the market's willingness to pay for that sort of top end service and how that can be a problem sometimes. We are working very hard through that. We hit a record external revenue generation last year, beating the previous year's record by over 30 per cent, which is a pretty outstanding. But we also have to be aware that the market goes up and down, a lot of that is with industry—for instance, the oil and gas industry offshore. I'm sure you are all aware there are ups and downs to those markets. We are currently working very, very hard to maintain and expand that, recognising that there is a fundamental market failure at play that government needs to fill in terms of that unique front-end data acquisition.

I think the other thing that I highlight is the fact that we are, as you probably know, working very hard in the reef space to find solutions through the Reef Restoration and Adaptation program with the best partners available in Australia and around the world to give real options for policymakers going forward, if they so choose to use them, to help reefs recover and adapt from a whole range of impacts. The most significant emerging impact of which is climate change. I'll leave the rest for the *Hansard*. I'm happy to answer questions. Thank you.

CHAIR: Thank you, Dr Hardisty.

Senator KIM CARR: I'll be brief. I'll put a lot of notice because we are so far behind. I mean no disrespect to you in this regard. I noticed that in the past you have talked about the importance of being able to maintain investment in patient science, that is the capacity to have ongoing financial support on a stable basis. You are saying that the challenge for the future is to maintain and expand our capability infrastructure in an increasing cost competitive market, so we can deliver more of the very best science for the nation. You talk about the Reef Restoration and Adaptation program, which is your centrepiece program. Then you say here that, 'the long-term objective is to provide governments with options at scale for reef restoration adaptation should they choose to use them, currently such options do not exist'. Can you explain that?

Dr Hardisty: Yes. The at-scale piece that you emphasise is the critical piece in those two sentences. There are methods that are being applied in different parts of the world at very, very small scale, done by hand, so very expensive and very labour intensive. However, translating these out to a scale that would be appropriate to actually have any real effect on something as big and complex as the Great Barrier Reef—we're not there yet, and therefore there's a lot of research and development, particularly development I would say, that needs to be done. My colleague David Mead is the director of the RRAP program. Is there anything you wanted to add, or is that good enough?

Mr Mead: I'd just add that there's the scaling issue, but there's also a stressor that you're trying to manage there, which is temperature rise, and so techniques also need to factor that in. So there's an adaptation component to this, and in that space very little has been done globally. That's the other component of this program—to look for techniques that increase the rate of natural adaptation and tick the scale and impact criteria.

Senator KIM CARR: I'm concerned about the long-term financial basis of AIMS, particularly what has happened with the Great Barrier Reef Foundation and the controversy around that matter. Because there's no guarantee you'll get any money out of that at all, is there?

Mr Hardisty: There's no guarantee, but what I can say is that we've been working very, very closely with the partners in the RRAP consortium—we had long meetings today—and with the foundation; they're part of that consortium. As time has gone on, we're increasingly aligned in terms of where things are going to go, hopefully, in the next few months and how money is going to flow. We've always been optimistic that we've got such unique skills as an agency that we would get something, and our confidence is improving literally week by week.

Senator KIM CARR: But I read the return to order on this, and I noticed that there was a requirement for you to put money into the fund.

Mr Hardisty: Yes, that's the way it's looking at the moment—that there's going to be co-investment from the research providers.

Senator KIM CARR: So where do you get that from?

Mr Hardisty: We have to find that in our own budget.

Senator KIM CARR: I can't follow that. You're actually short of money, and you're being required to put money into this other fund. How does that work?

Mr Hardisty: Organisations like ours and CSIRO—I'll speak for us—typically will co-invest in a range of projects, including sometimes industry projects. And really, as I'm sure you understand, it's a matter of degree as to the point at which we can justify that without going broke, basically. We have to always judiciously identify what that point is and move forward. It's a common practice—

Senator KIM CARR: In terms of the sea simulator, which is clearly a key piece of infrastructure, I read in your annual report that you've got a 'translation of design recommendations into implementations' planned for 2018-19. What does that mean?

Mr Mead: Sorry, can you repeat the question?

Senator KIM CARR: I read about the RIMReP—they're great terms you have!—on pages 17 to 42 of your annual report. Your report says that this will see 'a translation of design recommendations into implementations' in 2018-19. What does that actually mean?

Mr Mead: RIMReP, the Reef 2050 Integrated Monitoring and Reporting Program, is a different program; that's the reef integrated monitoring program. It's a review of how monitoring should occur on the GBR in light of the Reef 2050 Plan. AIMS and GBRMPA have been jointly leading that program, with a vast range of other stakeholders, to assess all the existing monitoring programs and then come back with a recommendation around what monitoring should occur going forward.

Senator KIM CARR: How much will that cost?

Mr Hardisty: Yes, that's an interesting point. The entire RIMReP program is a collection of work that's currently done by a lot of different players, and so we're for the first time trying to come up with an aggregate value for what's actually being spent on monitoring the reef currently. The best estimates that I've heard—and they're provisional—are something in the order of \$20 million to \$22 million a year currently being spent. As part of RIMReP, we've just completed a trade-off analysis. The background to that is that RIMReP went to a whole range of thematic expert groups—experts in coral reef, experts in dugongs, experts in fish and so on—and asked them: what do you think is needed in terms of monitoring going forward to meet the objectives of the Reef 2050 Plan? They all worked and came up with what they thought was their best guess of what was going to be required to do the monitoring properly, and the result of that was that, when you put it all together, there's a much greater

demand on monitoring than there is available resources at the current state. So this trade-off analysis was about how we tailor down the program to meet available resources. That's always been the challenge.

Senator KIM CARR: That's right. So who's going to pay for it?

Mr Hardisty: At the current state of play, I can't answer that question, because I don't know.

Senator KIM CARR: Let's turn to something else—the sea simulator. I take it you're interested in getting that upgraded. Is that right?

Mr Mead: Yes, we're seeking to expand the capacity of the system. That was submitted into the Research Infrastructure Investment Plan process, and it's our understanding that it's in there as an item in the out-years but it's not in the current expenditure window.

Senator KIM CARR: How much would you need to do that?

Mr Mead: The submission was for \$75 million over seven years, and that was a combination of capital works but also converting a fairly significant component of the facility to run as a national facility, almost free at the door, a bit like the Marine National Facility.

Senator KIM CARR: Yes, it's a standard operation. So you need \$75 million to upgrade it. Is that right?

Mr Mead: The \$75 million was to upgrade and to allow a percentage of the facility to operate under that regime. At the moment, we're not funded to operate it as a national facility in the sense of being free at the door.

Senator KIM CARR: How much of that funding has been allocated at the moment?

Mr Mead: I'll have to defer to the department of education. My understanding is that there's funding allocated in the out-years of the investment program but it's not in the current estimates period.

Senator KIM CARR: Dr Smith, what can you tell me about this? Is there any money allocated in the forward estimates?

Dr Smith: I'll just get the relevant officer for you.

Senator KIM CARR: For the sea simulator.

Ms Weston: I'll ask one of my colleagues if she has a table, but that does sit with the department of education.

Senator KIM CARR: Why is it the department of education?

Ms Weston: Because they have responsibility for research infrastructure.

Senator KIM CARR: They're a charity over there, are they, when it comes to funding agencies in this department?

Ms McLaughlin: All of the research infrastructure funding that was announced in the recent budget is being provided through the National Collaborative Research Infrastructure Strategy, administered by the Department of Education and Training.

Senator KIM CARR: And there's no money in the forward estimates for AIMS, is that right?

Ms McLaughlin: There's no money in the forward estimates for the upgrade to the sea simulator, that's true. It is intended for there to be funding provided after the forward estimates for the upgrade that Mr Mead has referred to.

Senator KIM CARR: That's terrific! So they've got to get by for the next three years?

Ms McLaughlin: There's also a process, which the Department of Education and Training can fill you in on as well, about reviews of the Research Infrastructure Investment Plan. The update to that plan is expected to kick off early next calendar year, so there is an opportunity through that process for research infrastructures that have been identified to be reprioritised.

Senator KIM CARR: Who undertakes that review?

Ms McLaughlin: The Department of Education and Training will lead that work. I'm not aware of any decision so far about who is going to be involved about that.

Senator KIM CARR: Mr Hardisty, did you know about seeking a review?

Mr Mead: Yes, we are aware of that. We've been in discussion with the department to promote the facility upgrade under that process.

Senator KIM CARR: Which department are you seeking promotion from?

Mr Mead: We've been in discussions with the department of industry, because that's our reporting department.

Senator KIM CARR: Madam Secretary, are you making a submission for a review, given that the department of education seems to have fallen short on this matter?

Ms McLaughlin: The government decided in the budget, when the research infrastructure funding was announced, that there would be regular reviews of the investment plan every two years. That's been publicly announced. We would expect that our department would work with the education department on that review, but it hasn't kicked off yet, because we only announced this money in May.

Senator KIM CARR: Righto. Can you explain to me why the sea simulator was not funded for the forward estimates?

Ms McLaughlin: There was a long list of research infrastructure investments that were of relatively high priority, and the Sea Simulator was not considered, at that point in time, to be as urgent as some of the others.

Senator KIM CARR: I see. But there was enough urgency to provide \$443 million to the Great Barrier Reef Foundation?

Ms McLaughlin: That grant, as you know, was from the department of the environment for a particular purpose.

Senator KIM CARR: I see. I'm just wondering how this government works; that's all.

Senator Canavan: Those funds are available to fund—

Senator KIM CARR: Yes, they had to be spent straightaway.

Senator Canavan: Well, it hasn't been spent on particular projects.

Senator KIM CARR: Well, it was transferred straightaway.

Senator Canavan: Yes, it was transferred, and it's available now to spend on science to help protect the Great Barrier Reef.

Senator KIM CARR: Yes. This is an agency that's ideally suited to do that work, and it hasn't been provided with any money at all in this regard, and there's a piece of infrastructure sitting there not being funded. I just can't follow the logic of that.

Senator Canavan: The government's priorities are well set out in the budget.

Senator KIM CARR: Yes, marginal seats.

Senator Canavan: One point nine billion dollars of funding has been provided to research infrastructure for a large grant to help research in the Great Barrier Reef as well. All of that spending will, of course, help our broader R&D infrastructure in Australia. We, of course, cannot afford to fund every priority.

Senator KIM CARR: That's true. I appreciate that, Minister, because we've asked for the money back. At the next election, if we're successful, we've asked for the money to be returned to the Commonwealth, because I think it's a scandal. This agency here is not able to fund its routine and quite serious infrastructure work, and money has been handed out to these characters who had no history in this at all other than running a bloody social function one day of the year.

Senator Canavan: Senator Carr, obviously there's a political disagreement here, but I think that's an unfair slur on the Great Barrier Reef Foundation. They have done considerable work on the reef. The government has made a decision to leverage the expertise and experience of the Great Barrier Reef Foundation to leverage more funding from the private sector as well to maximise—

Senator KIM CARR: But, Minister, it's not the private sector. This is an agency that's been asked to tip into the pot.

Senator Canavan: What the Great Barrier Reef Foundation has asked for is contributions from the private sector to leverage the investment the government has made, and that will maximise the amount of money we spend on the Great Barrier Reef. As I was saying, I don't think it is fair to categorise the previous work of the Great Barrier Foundation as simply social functions.

Ms Weston: I might also note—

Senator KIM CARR: Did you want to add to this enlightenment here?

Ms Weston: AIMS were the recipient of some funding earlier: \$6 million of \$60 million—

Senator KIM CARR: How much? Six?

Ms Weston: Of \$60 million, towards the pilot program of the reef restoration action plan.

Senator KIM CARR: There you go! And you need a boat too, don't you? Isn't that what's happening? You actually need a boat as well?

Dr Hardisty: When we look at the opportunities and the challenges around the far north, in particular, it would be nice, yes. Let me explain. Our current vessel, the *Cape Ferguson*, is very highly used.

Senator KIM CARR: Ms Weston has given us advice that \$6 million has been provided. That covers all your problems!

Senator Canavan: Just to explain, my understanding—and Dr Hardisty might be able to expand—is that the \$6 million is provided to develop a strategy for the Reef Restoration and Adaptation Program. I believe officials have previously, in other inquiries, described how this investment will help inform some of the expenditure from the Great Barrier Reef Foundation and the funding the government has provided to them—in particular, the \$100 million that has been allocated towards funding science within the Great Barrier Reef Foundation.

Senator KIM CARR: I notice that you made a point in your statement of saying that external revenues are up by 30 per cent. Thirty-four per cent of that is from the Australian government.

Dr Hardisty: No.

Senator KIM CARR: That's what your annual report says.

Dr Hardisty: Sorry, of the total external revenue—yes.

Senator KIM CARR: That's what it says here.

Dr Hardisty: Sorry. I thought you were asking a different question. Yes, you're right.

Senator KIM CARR: That's what it says: Australian departments and agencies and Australian industry partners together are 89 per cent. I'm just looking at your table here. It says two per cent is from state governments—state governments are always reliable—and the Commonwealth is providing 34 per cent.

Dr Hardisty: Of the external revenues?

Senator KIM CARR: External revenues. This is on top of your appropriation. It would be fair to say that tends to jump around a bit. I wonder if you could take this on notice and give me a breakdown of which departments provided you with that money. Can you put in the same information you have for the last four years? Has that moved up and down? Finally, I noticed on the annual report that the number of post-graduate students working at AIMS has actually declined. That's right, isn't it?

Mr Mead: I will probably have to take it on notice just to absolutely clarify it. The numbers fluctuate up and down a little bit. In part, it depends on whether or not we're directly employing them or we're providing funding. Generally, post docs are a joint appointment. Often the pointing authority changes quite a lot. There is more fluctuation associated with that than the numbers might show.

Senator KIM CARR: That's all right. I can read the table. It says that of the students working at AIMS there is a relatively small variation of 31, 34, 34, 31 and 29 who are working directly supervised by AIMS. Students working externally supervised by AIMS staff are 46, 43, 37, 39 and 28. Can you explain to me why that is?

Dr Hardisty: I think there are a whole range of reasons why those numbers go up and down. As my colleague has just described, some of them are just financial. Just yesterday we approved a new post doc that's funded by the King Abdullah university in Saudi Arabia, believe it or not. They come in and out. There's also a periodic phasing. Sometimes they come in clumps and sometimes they don't. I don't think it reflects any fundamental change in our policy towards using post docs extensively—we do. The numbers speak for themselves.

Senator KIM CARR: I'll put the rest of my questions on notice. Thank you very much for coming.

CHAIR: I just have a couple of questions, but I promise they won't take very long. You obviously don't just look after the Great Barrier Reef; you look after other areas as well. Can you perhaps outline a little bit of the work that you're doing in marine areas other than the Great Barrier Reef?

Dr Hardisty: Great question. We try to stress that, although we were set up there and our headquarters are in Townsville, we have an operation in Darwin and we have a big operation in Perth, so we cover the whole of the tropics. A great example of a current piece of work that's going on in WA that's absorbing a lot of our attention is that we're doing some of the world's leading-edge work from the oil and gas industry seismic surveys on marine environments. In this particular case it's quite interesting: we're looking at pearl oysters. With big collaboration from industry and growers in that part of the world, we're also looking at the effects of seismic activity on fish—the red emperor—and we hope to expand this in the coming months to quite a significant plankton survey. Again, this is world-leading work, and it's a really topical issue. That's off the coast of Broome. A lot of people based in our Perth office are engaged in that work.

Another great example is that we're doing a lot of work in our Darwin office with some of the big mining companies up on the Top End. We're helping them look at impacts on sea country. We're working really closely with Aboriginal communities and traditional owners so that they're really involved in the monitoring.

Another example would be in the Darwin Port. There's a lot of science that needs to be done to help that port operate properly and improve its throughput and so on and so forth. We're there, right across the tropics. The Gulf of Carpentaria is a bit of a hole for us and for everybody. There's not a lot known about the Gulf of Carpentaria. It's difficult to get to. The water is murky. It's a long way away, so it's expensive to get to. But, yes, we're right across the Top End.

CHAIR: Fascinating. That's all I had for you. Thank you, Dr Hardisty and Mr Mead. I think you guys have a really cool job.

Dr Hardisty: Thanks. We try.

CHAIR: It is very important work. Thank you very much for appearing before the committee today. I now call officers of ANSTO.

Australian Nuclear Science and Technology Organisation

[17:50]

CHAIR: Welcome back to economics estimates, Dr Paterson. I understand you have an opening statement for our committee?

Dr Paterson: Thank you, Chair and committee members. Earlier this week, ANSTO released the *Independent safety review of the ANSTO health approach to occupational radiation safety and operational procedures* report in our nuclear medicine production facility. The review was undertaken at the direction of the CEO of the Australian Radiation Protection and Nuclear Safety Agency, or ARPANSA. The independent panel comprised three nuclear experts from the United Kingdom and Australian experts in the field of human organisational factors and health and safety.

The report contains 85 recommendations that go to safety improvements, everyday practice, risk management and funding, as well as a range of other things. The report praises the dedication of ANSTO staff working in the facility and acknowledges that we have already undertaken a lot of work to rectify some of the shortcomings that led to the review.

As part of its commitment to continuous improvement, ANSTO is now spending 60 days considering the recommendations of the report and developing a comprehensive action plan responding to those recommendations. This process is an invaluable opportunity to help ensure the safety of our all our workers, and for us to continue to make a positive contribution to the health outcomes of Australians each and every day. I look forward to sharing the ongoing progress with you over the coming months.

CHAIR: Thank you. I have a few questions for you, and I know that Senator Carr has questions. I want to ask, firstly, about that safety report. Can you please describe to the committee the relationship between the recent disruptions to generator supply and the findings of the safety report?

Dr Paterson: There is no direct relationship between the generator supply matter and the origins of the report. The report originated from four incidents that took place from 22 August last year and then in the early part of this year, through to the end of April. The first incident was the irradiation of a worker's hand. I have briefed the estimates committee previously, at the last meeting, in relation to that incident. The next incident was a near miss—the spillage of some nuclear material on the floor of the processing facility just outside a QA lab. Then there was the restart of a nuclear medicine production facility without the full authorisation of the regulator and the last item was the transmission of a sample that was too concentrated—it didn't follow the work instructions and the concentration of the sample was higher than it was meant to be from a chemical concentration point of view and from a radiological activity point of view because of that; it wasn't sufficiently diluted. Those four incidents together led to a number of meetings between myself and Dr Carl-Magnus Larsson, the regulator. During the course of those meetings he made a determination that he that he would direct ANSTO to appoint an independent panel to undertake a review of the safety arrangements in building 23A and the association with the rest of building 23. It focused on the nuclear medicine production facility, and the expansion into other areas at ANSTO was in relation to linkages directly with that production.

CHAIR: The findings of the safety report pointed to the age of the facility that you're in. I'm wondering how long ANSTO has been aware that the facility was going to need upgrading? Obviously, you've been in there for a very long time; I'm sure this isn't the first time this has dawned upon you.

Dr Paterson: There has been an emphasis on the age of the facility, and I would emphasise that it was one of the first facilities built on the site. But the original purpose in the late fifties, when it was built, was not the purpose it serves today. As we have gone through various generations of activities in the Atomic Energy Commission through into the transition to ANSTO and now with the development of a much keener interest in nuclear medicine globally, that facility has been through a number of changes of function and upgrades. It is not, however, purpose built as a nuclear medicine production facility. And from a production point of view, it lacks features that you would build into a facility if it were started today, such as redundancy and equipment, if you don't want breakdowns to interrupt supply.

From a safety point of view it meets all current TGA and ARPANSA requirements in relation to safety. The safety nexus with the age of the facility is that you have to work pretty hard to meet all those requirements in a facility of that age, because there are processes that cannot be automated easily, for example, so it becomes more challenging to achieve your certification. But every process associated with that facility and that can impact on a patient in the Australian health setting meets all the requirements of good manufacturing practice. This is quite a challenging thing to do, because it includes validation of all the processes, including if it's not a sterile process—for example, validating staff, that they don't carry infections. These are complicated, detailed processes that we have to work on every day. If we had a modern facility, some of those processes currently undertaken by our very committed and dedicated staff could be automated to a much greater degree, thereby reducing the management of having an older facility that doesn't meet all the modern requirements. But there is no compromise to safety in relation to production for patients, and there is no compromise to safety in terms of any radiological implications, because all the processes, plans and arrangements that take place in that facility are under regulatory jurisdiction and control and therefore it is safe to operate; it is not to the most modern standards.

Senator KIM CARR: I want to go to the same matter. The report that's been provided by ARPANSA points to a number of issues, and I'll come back to those—clearly the issue about the replacement, building B23. But it also deals with some questions about management:

We recommend that ANSTO senior management commits to regular engagement, dialogue and communication with ANSTO Health staff regarding future projects.

It also says:

We recommend that OPAL management and staff are consulted and involved in the process of identifying and implementing any improvements within ANSTO Health where their procedures, training and experience are relevant.

And:

We recommend that ANSTO, in conjunction with ARPANSA, institute a process of "Learning from Experience" within their management processes, including extending the network to include overseas experience.

So, if I can just deal with that first issue—the culture: my reading of the report highlights that you've got a problem in the facility. Would you agree that there's a cultural problem?

Dr Paterson: I think the report was very, very clear that this is an incredibly dedicated workforce that is committed to production and they are very passionate about that production and the way that happens. The report identifies—and indeed I had discussions directly with the five members of the panel on their departure from our site—that culture is not uniform and that there may be instances where it is less than optimal to a significant degree. I've taken that on board. I'm aware that over the years in that facility we have had tough moments where the culture wasn't good. We've had better times. And I think in the aftermath of the supply disruption and these four incidents there's been a significant impact on morale, and that can often impact on culture as well.

Senator KIM CARR: So you've got a morale problem. I think the report demonstrates that. I think the report also highlights that incidents are not being reported, that management may well be reacting incorrectly, that the 'no blame' philosophy is not being followed. There are some serious questions there. Management has responsibility here, not just the people doing the work. Would you agree?

Dr Paterson: The ultimate responsibility for safety and for operations is with management, and the ultimate responsibility for that rests with me. I think that we need to recognise that many things happen well every week in that facility. It has been a remarkably effective producer of a wide range of different nuclear medicines over a long period of time, and that has been done by, I think, quite an effective relationship between management and the workforce. I think that we do need to take account of the impact of these incidents, which are not correlated in relation to time or direct origin. They happened over a period of time. That has led to a decision to really look deeply into the culture. I believe—and this is something where I did engage the panel—that the overwhelming reporting culture in ANSTO Health is better than average for facilities of this type in ANSTO. They have a pretty good reporting culture. We did identify, in relation to the trolley incident, which was the one where there was the

second spill, that there had been under-reporting of similar incidents with trolleys. So that was definitely a signal that management took very, very seriously.

I believe the 'no blame' culture has been substantively well addressed. The full form of that cultural statement, coming originally from the United States, is 'no blame, full disclosure'. So it is important, if we are to have a situation where there is that acceptance of what people are saying, even if they've made a slip-up or an error, that there is full disclosure. If there is not full disclosure, the 'no blame' culture does not operate in the standard way. You then have to have more extensive investigations. Everything slows down. But I think the 'no blame' culture that exists in ANSTO today is highly creditable, and we do have a good reporting culture. I do believe that the overall drop in morale will tend to cause people to feel nervous about reporting. I had a meeting with all of the ANSTO Health staff about two weeks ago to have a discussion about that and invited any staff members who wanted to use any of the channels available to them, including the whistleblower type of channels, to bring anything to my attention or to the organisation's attention.

Senator KIM CARR: You've got 60 days to respond to ARPANSA. I know you well enough to know you will take that very seriously. But that will involve a whole-of-organisation response, will it not?

Dr Paterson: Yes, it will. There are a number of elements of the findings that take place in my office and in my executive. The executive team has been meeting, usually two to three times a week, since the original report was received, to begin to develop responses to the recommendations that have been made. We will be reviewing those with the ANSTO board before it goes back to ARPANSA, because the board is taking an interest in how we respond. It will be a detailed and resourced plan.

Senator KIM CARR: It's the nature of these types of reports that it's by self-declaration, isn't it? People are interviewed.

Dr Paterson: Correct.

Senator KIM CARR: The panel members didn't speak to everyone, did they?

Dr Paterson: About half the people they spoke to were from ANSTO Health—about 20 per cent of the headcount in the facility who had self-nominated. They also identified a number of other people that they wanted to speak to and invited to meet with them, including me.

Senator KIM CARR: But there is no question about how serious the claims are. You're not disputing the findings, are you?

Dr Paterson: It is my view that the best way to handle a report like this is to receive it positively and to not pick the report apart but to regard it as an important line in the sand from which we can proceed forward.

Senator KIM CARR: I agree with that assessment. I want to turn to the issue about the capital, because you can't ask people—which I think they've been doing now—to actually work in an environment which is not fit for purpose. I use that term—I know you haven't. But the report essentially makes that observation—that building 23 is not fit for purpose. What do you say to that?

Dr Paterson: I believe that, in the long-term interests of provision of these isotopes and other nuclear medicines for the benefit of Australian health, we must move towards a replacement facility.

Senator KIM CARR: Yes. You were provided with, if I remember rightly, \$168 million in 2012 for the other building, which is yet to be operational—and I want to deal with that in a minute. But that is the case, isn't it?

Dr Paterson: That is the case.

Senator KIM CARR: The report makes the point:

A replacement facility for B23 has been planned for several years, but federal government budget restrictions have meant that this has not been progressed. A number of additions and modifications have been made to the facility, but these cannot possibly resolve all of the issues associated with a facility not designed for its current use.

The facility has been in the corporate plan for three years, but funding has not been available. The report says that if you had brought it forward, the funding wouldn't have been available. Is that the case?

Dr Paterson: Those are the words of the reviewers. The background from my perspective is that it has been in the ANSTO corporate plan, which is a document which is presented to this committee and to the parliament and which is produced under the PGPA Act. So, from my point of view, there is knowledge in government that there is a future requirement for a facility. At the same time, we have also been involved in the Treasury's longer term planning process, and these indicative amounts are present in that discussion. So I think the government is aware of the need for a future facility. Indeed, the existence of our corporate plan validates that. But, at this point, we do not have an engineered, detailed planning framework that would allow us to put a fully costed—

Senator KIM CARR: Dr Paterson, the reality is that budget rules required you to provide an offset, did they not?

Dr Paterson: The general case for all agencies like ANSTO is as you stated, Senator.

Senator KIM CARR: All right. Madam Secretary, you have read this report. You've got a building that's not fit for purpose. The statutory authority, under the responsibility of this department, has known for three years, at least, because it's been in the corporate plan, that this building needed to be replaced. ARPANSA, the regulator, said that this building is not fit for purpose, but the budget rules require an offset to be found, with \$210 million required to replace this building. What's the department doing about that?

Dr Smith: The budget rules are a matter for government, and all agencies have to adhere to those rules. As Dr Paterson said, the department has had ongoing discussions over a period of time about the capital needs of ANSTO, just as we do with many other pieces of important infrastructure.

Senator KIM CARR: This is an urgent matter, surely. It's now been demonstrated by the regulator that this is an urgent matter, and I put it to you that it has been put to you for some years, or the departmental secretary for some years, that this is an urgent matter.

Senator Canavan: I'm not sure that's a characterisation—

Senator KIM CARR: I would ask Dr Paterson: have you indicated to the department for some years, given that's—

Senator Canavan: No, that's not what you asked.

Senator KIM CARR: I'll ask the CEO.

Senator Canavan: You can change the question you asked, but that's not the question I was responding to.

Senator KIM CARR: I'll ask the question: have you, for some years now, put to the department, the government, that there is an urgent need to replace this building?

Dr Paterson: In ANSTO, we used some of the funding we had available to undertake stability studies and other planning studies in anticipation of detailed engineering design. I have not presented a detailed engineering case to government at this point. But, in our corporate plan, consistent with the original 10-year horizon of the planning framework that is embodied in the corporate plan, we did indeed signal the need for this facility.

Senator KIM CARR: Dr Paterson, the report also says that, if you had put it forward, you wouldn't have got the money. My question to you is a different one—not whether you put it forward in your budget bid, but whether you have drawn to the attention of departmental officials that there is an urgent need to replace this building, not just put a bandaid solution in. You have used various capital programs to try to repair what is a building not fit for purpose.

Dr Paterson: The important thing I think is to convey what the report is saying, which is not words of people from ANSTO. It's the words of the people who wrote the report. But I think it is accurate to say that we need to have a full and frank discussion about the urgency with which we treat this thing.

Senator KIM CARR: The nature of these reports is that they are often written by reviewers who don't understand the processes of government. I was concerned at the criticism that had been levelled at, I take it, you, that staff weren't aware about efforts being made to secure funding to replace the building. That is at the core of the morale problem.

Dr Paterson: I accept that critique from a proportion of staff, because, although I have spoken about this on at least three occasions at the ANSTO health building 23 facility, not all staff attend.

Senator KIM CARR: I must say to you, Dr Paterson, it would be a surprise to me if the CEO went down there and said, 'By the way, this is what I've been banging the drum about in Canberra, and I've had no impact.' You would be subject to a whole series of other criticisms if you'd done that. So I think that criticism actually in this report is unfair, but I just want to know whether or not you have sought representations about the need to replace this building.

Dr Paterson: The main process in which we have sought to replace the building has been the work with the Department of Finance on the long-range funding requirements.

Senator KIM CARR: Madam Secretary, you have read the report, have you not?

Dr Smith: I've read the summary.

Senator KIM CARR: I'm sure you would have. What role do you think the department has in resolving these issues?

Dr Smith: I think it's like a lot of critical infrastructure across all parts of government—that we have conversations with all the portfolio agencies. Agencies are aware of the budget rules. There is an understanding, obviously through the ARPANSA report and through other issues, such as the recent supply disruption, that this needs to be an ongoing conversation that we would be having with ANSTO.

Senator KIM CARR: So, Minister, it's unfair to suggest to you that you should have read this report, but I'm just—

Senator Canavan: I've been briefed on it, Senator, but I haven't—

Senator KIM CARR: It's unfair, but I make that observation. You must gather from the tone of this conversation the nature of the material that's been presented.

Senator Canavan: I put on record that I take this extremely seriously. I think the work that ANSTO does is not only of incredible importance to Australians' own health, but also it is expanding to export markets. The government will take—

Senator KIM CARR: And one in two Australians depend upon it.

Senator Canavan: I know that very well, and the government will take this report very seriously. It has made some recommendations in regard to infrastructure requirements. I agree with your characterisation that, while there are budget rules in place, there are processes—

Senator KIM CARR: There are ways of dealing with this.

Senator Canavan: Exactly. There are processes in place to ensure that priorities do get appropriate attention, so this has been brought to the government's attention. It will be something I'm sure we respond to.

Senator KIM CARR: I take it up from your remarks, and I urge you to take it up with the Prime Minister, because this is really genuinely—

Senator Canavan: I'm sure the Prime Minister is well aware of the importance ANSTO as well. If it's not in his electorate, it's very, very close to it. I'm not exactly sure where the boundary is.

Dr Paterson: He's visited ANSTO.

Senator KIM CARR: The other matter I mentioned to you is the funding that was granted in 2012. The plant is not operating yet; is that correct?

Dr Paterson: That's correct. Well, it's operating in the sense that it's in hot commissioning.

Senator KIM CARR: When will we see production start?

Dr Paterson: The production will start within the next two weeks. The original dates have slipped considerably, as you are aware. In order to mitigate the risk of those dates slipping, ANSTO worked to expand the capacity of building 54, which is the current facility, which is coming to the end of its life as well. That's why the investment in the A&M facility was so important and remains very important. The building 54 facility at the time we started the construction of the A&M facility was producing between three and five per cent of global supply, and it now supplies around 16 per cent of global supply as a result of us taking some of the technologies that were developed for the A&M building and retrofitting them into building 54. That's been a considerable benefit to our international reputation because we have been able to cover a number of international supply shortages over the last two years. In fact, there's an ongoing shortage due to a long outage of the South African production facility. So we have mitigated the delays in the construction to a very considerable degree. But it is true to say that the method that we used to construct this did not allow us to control the time scale to the extent that we should have. We have changed how we do this sort of procurement for the future. These types of time delays are not to do with the quality of the facility or its integrity in any way; the time delays will be mitigated in the future projects.

Senator KIM CARR: Are we experiencing any shortages in nuclear medicines in Australia at the moment?

Dr Paterson: The original supply shortage which arose at the end of June has been substantially covered with a combination of us now producing our own generators—about 53 per cent of the requirement—and importing the balance. Most weeks when the reactor is operating, we are at very close to 100 per cent of supply. Our arrangements with the nuclear medicine industry and the various professional groups that are associated with us allow us, when there is some shortage of supply, us to give them proactive advice at this point, which they can use to either accelerate or delay some of the diagnoses.

With respect to all of the therapeutic isotopes, the supply is not disrupted at this point, and we continue to supply for therapeutic applications.

Senator KIM CARR: I'll leave it there and put the rest on notice. Thank you very much.

CHAIR: Thank you very much, Dr Paterson, for appearing before the committee today. We have now finished with ANSTO and we will have a dinner break.

Proceedings suspended from 18:17 to 19:15

Commonwealth Scientific and Industrial Research Organisation

CHAIR: Welcome, officers of CSIRO, particularly Dr Marshall, back to Senate estimates. Have you got an opening statement for the committee?

Dr Marshall: I do, thank you. I'd like to advise, at late notice, that our director of people could not be here tonight. We'll do our best to answer questions on staffing matters but we may need to take the detail on notice.

I'd like to briefly draw the Senate's attention to our annual report, which demonstrates how your national science agency is solving Australia's greatest challenges with innovative science and technology—challenges like health. In a trial conducted in Queensland we wiped out more than 80 per cent of the disease-carrying *Aedes* mosquito, in partnership with Verily and JCU. This is great news for the millions of people around the world infected with Zika and Dengue fever each year.

We've created new export industries for Australia like hydrogen energy by inventing a metal membrane capable of separating hydrogen from ammonia, which enables renewable energy to be stored and transported as liquid fuel. In Queensland we fuelled and drove Toyota and Hyundai cars using the CSIRO technology. Australia is now a major step closer to a zero carbon economy.

We are also reinventing traditional industries like mining, where we produced Australia's first gold using non-toxic chemical processing, eliminating cyanide and mercury, which are increasingly raising health and environmental concerns. Delivered in partnership with Western Australian small gold miner Eco Minerals Research, the tech was developed inside our national science accelerator, ON, and is now set to be an industry game changer.

Our people and partners are at the heart of delivering this great science, and I would like to thank each and every one of them. We couldn't make the difference we do without them. It's great to see another year of positive feedback both from our customers and our staff in our annual report, through our customer net promoter score and our staff engagement survey. Whether it's clean energy or green gold or becoming the healthiest nation on earth, CSIRO is dedicated to solving Australia's national challenges through innovative science and technology. I look forward to sharing many more success stories with this committee in the future. Thank you.

CHAIR: Thank you, Dr Marshall.

Senator KETTER: Thank you, Dr Marshall. I have a range of questions on Data61.

Dr Marshall: Is this on the special report on Queensland?

Senator KETTER: That's one of the areas I would like to ask questions about. Thank you very much for that report, *The innovation imperative: risks and opportunities for Queensland over the coming decades*. I want to go straight to figure 8 in the report, which is a wake-up call for us all. It indicates that there are 868,000 jobs at risk as a result of digital transformation, and there is a graphic there with the map of Queensland. At a very high level, can you tell us how you developed that graphic, the areas where transformation will be felt most acutely and what policy-thinking could be considered here?

Dr Hajkowicz: I'm the lead author of this report, and I led the study. To develop the map and generate those results, we used data from the Australian Bureau of Statistics on around 470 job types and data from a consulting firm called AlphaBeta that had looked at the likelihood that digital technology would automate tasks and change the way tasks were done within those jobs, which gave us an idea of overall risk associated with jobs. We were then able to merge that with the data on where the jobs exist, also from the Australian Bureau of Statistics, to create a map showing where there were greater risks and lower risks of automation. The jobs at risk are changed by digital technology. They don't necessarily disappear but the digital technology changes the way the job is done, and there is a need for the individuals in those jobs to transition.

Senator KETTER: There are some regions where 46 per cent to 48 per cent of jobs are at risk as a result of digital transformation?

Dr Hajkowicz: That's correct. Some regions have what we call lower absorptive capacity, where, if you lose a job in a major population centre, it's easy to get another job because the economy is larger. But if that happens in a regional area with a smaller economy, it's harder to make that transition. There are some regions with higher risk percentages, yes.

Senator KETTER: You do make the point in the report:

Technology-driven productivity gains may stimulate higher levels of cognitive tasks or service offerings within jobs leading to new roles, or consumers may seek increased human contact in fields where we persuade, negotiate with or care for others.

That's a pointer as to where jobs of the future might be created. What are the recommendations here, and did you make an assessment as to Queensland's innovation and R&D statistics and how they stacked up?

Dr Hajkowicz: We did look at that as well. The report doesn't make specific recommendations; it looks at the issue. It was done to help inform the Queensland government about where it wanted to go. We wanted to look at the issue. As you say, there's an estimate of around one million new jobs getting created at the same time, so there are incredible job opportunities before Queenslanders. It's all about transition and making the transition early. The report didn't focus on R&D expenditure. There are some numbers and data around that. It wasn't really the primary focus of the work. The work looked at what is the nature and the size of the transition ahead of Queensland's workforce, and what do the new jobs potentially look like. That's what the report is trying to do: to show the magnitude of the transition that lies ahead.

Senator KETTER: Thank you for that. I want to move on to the issue of the consumer data right and open banking, and talk about Data61's work in this regard. I have your data standards body advisory committee minutes from 15 August, and I want to thank you for publishing those and making those available. Can you take us through your understanding as to the timetable for the introduction of the open banking legislation?

Dr Williams: This work is work that was given to CSIRO and Data61 in the budget. It's work around developing standards for going forward, initially in the banking field but following on in other fields. It's ongoing work, and, as we stand today, we are working to a conclusion that things can proceed from the end of this year towards the legislation, providing a number of goalposts are met across the piece. We are working under three working groups, and we're producing the products for those working groups on a weekly basis. They've gone out for consultation on a public website. As comments come back in, they'll be refined and go back out again. By the end of this year, we will have covered the input for all three working groups, which are on the application program interfaces, which are machine-to-machine learning. At this moment in time we are about 70 per cent complete on the information security. Then we'll finish with the consumer experience report, which is still to be published.

Senator KETTER: Are there fairly hard and fast markers as to when you're expecting to finish those three work streams?

Dr Williams: Yes. We are working to a timetable where the standards will be published by 2 November, and the final draft by 31 December this year. The standards will then be formally adopted when the bill receives royal assent. The timetable for that is not within CSIRO control but we are assuming that that will proceed. There are one or two other things that have got to be met at the end of the year. The ACCC has got to come up with its part of the work; the firm rules through which we can draft the standards and finalise the specification of the accreditation authorisation directory. There are two or three streams of work, only one of which, the technical and scientific input, is within the role of CSIRO. The committee you referred to is actually an independent committee—it's not a CSIRO committee—and is chaired by an independent chairman. The CSIRO staff who attend those meetings do so in a technical nature.

Senator KETTER: I was interested in the comments of the chair that were recorded in the minutes, under the heading 'Other business', where it says: 'A discussion was held in regard to the time line and whether it is achievable. The chair stated that he is suitably uncomfortable, there's a need to keep the pressure on and there's a lot to do. All parties have the same intent at heart.' Are you able to elaborate on what the chair meant by those words?

Dr Williams: That's language I'd recognise from many a meeting from a chairman. Basically, he's saying you've got to put pressure on to maintain the schedule and work to that schedule, and we can't afford to take time off and stand back. It's the normal pressure a chairman would bring in many committees I've been involved in. We are working to the goal and we have at this moment in time no reason to believe that goal will not be met.

Senator KETTER: But the comments are fairly specific. There are discussions about whether the time line, and whether it's achievable, and then the chair says he's uncomfortable.

Dr Williams: I think he's saying we need to keep the pressure on, and that's exactly what is happening.

Senator KETTER: Are the time lines achievable?

Dr Williams: At this moment in time, we believe—the time lines for the work that Data61 are involved in are achievable.

Senator KETTER: It sounds like there are some risks at play with the time lines that are currently set. Can you tell us what material risks exist that you are actively managing?

Dr Williams: I think from the point of view of the overall procedures, I think CSIRO is not controlling that situation. We control the work of Data61. Within that framework, we are confident that all the reports will go through, providing, as I said, that the ACCC give us a firm rule for the work to be presented against. The work from Data61 will be complete. Whether that then sits in a schedule that runs to time is something that is out of CSIRO control.

Senator KETTER: There is also a reference there to the chair noting that he had met with the Treasurer since the last meeting and had reiterated the government's commitment to the timetable for introduction of the CDR regime. The Treasurer confirmed the Council of Australian Governments would consider the early application of the consumer data right to the energy sector. Do you know what concerns were relayed to the Treasurer, if at all, about the time line?

Dr Williams: No, not at all.

Senator KETTER: Can you tell me what structures are in place so that the ACCC's work on the consumer data right rules framework is consistent with your work?

Dr Williams: I cannot, because that's in the hands of the ACCC. I've not seen the work.

Senator KETTER: You don't liaise with them about this?

Dr Williams: We do liaise with them. In terms of the question you asked about the time line, the work of Data61 proceeds. They will put their work through, it will be reviewed and it will come back as a draft standard. We will then track it across the ACCC and then it will go forward to legislation. The different pieces have got to come together in time, and that is managed through the committee not through CSIRO.

Senator KETTER: Can you tell me what point we should be up to when we get to estimates next year. What should be completed by that stage?

Dr Williams: My understanding is by that stage it should be in draft form and ready to go through to legislation, as a bill.

Senator KETTER: There was a report recently by Startup Muster that suggested that start-ups in Australia were going backwards in terms of the numbers within the ecosystem. Can somebody tell me how Data61 contributes to growing the ecosystem in Australia.

Dr Williams: Data61 do a wide range of things. They got a number of programs. They're involved across the sectors and they're working with industry and other government departments to improve the use of digital techniques in the marketplace. In the last year, there have been a number of spin-outs from Data61 that have gone to market. There are some planned for this year. In addition, for example, they're working with the institute of directors, offering a cybersecurity course, which will improve the level of understanding in large business and business in general about security. So they're doing a whole range of things that are helping the broader community, and specifically the start-up community.

Dr Marshall: More broadly, Data61 is just a small part of CSIRO, of course. Our own ON program, our Innovation Fund and our whole innovation agenda has had a profound boost to the start-up ecosystem in Australia. We've taken hundreds of teams from over 30 publicly funded research institutions through our science accelerator, we've spun out a number of companies from both CSIRO and those other institutions and we house a large number of SMEs and start-ups across CSIRO's 57 sites nationally, so I think we've made a profound difference. Probably most important is the fact that CSIRO stood up a government backed venture fund and outperformed in leveraging the government by almost two to one with professional investor money. That really got the attention of the local community but also the attention of the US community and the attention of the Singapore community. We brought in Temasek and Lockheed Martin to support that fund. I think we've had a profound step change, if you like, in the system as a result of our agenda.

Senator KETTER: I'm not doubting the contribution that you're making. The question, though, remains. Despite that contribution, this report suggests that the number of start-ups is going backwards. Do you have a view as to why that's occurring or do you dispute that?

Dr Marshall: I think there's a bit of a misconception about what a start-up is these days. Start-ups are SMEs after the media has lost attention, once they've become real companies. In CSIRO, we do digital innovation, but we also do deep science innovation—things that people generally don't think of as tech or innovative, like cotton. We're developing, believe it or not, a type of cotton that doesn't need to be ironed. It competes with the properties of synthetics. The amazing science that comes out of this country is the well spring that feeds these great opportunities for innovative start-ups, but for some reason they're not seen the same as digital or the internet or

tech start-ups, but from our perspective they're every bit as innovative and, in fact, in many cases, more so and often have a more profound impact on the economy.

Senator KETTER: That same report noted that there were fewer women working in the space. Does Data61 contribute to promoting and fostering women in the tech space? If so, how?

Dr Williams: CSIRO, in general, promotes the role of women in the workplace and in research. It's more a challenge in the tech space and that's due to the supply chain of people with suitable qualifications, but they are making every effort within Data61 to get the balance right on numbers. Of course, outside that framework, it's out of their control, but within Data61 they do everything they can to improve the ratio of male to female workers.

Senator KETTER: Thank you.

CHAIR: I want to continue the conversation about Data61, if I can, but I will move it slightly towards making the delivery of the government services more efficient. I understand that you've got a program, in conjunction with the CBA, around smart money and using blockchain technology. Can you explain a little bit about that to the committee?

Dr Williams: There's the image of blockchain as a bitcoin currency mechanism, but, in fact, it is a distributed ledger of activity. What Data61 have been looking at is: can you use the blockchain technology to have distribution of money so that, when a department allocates money, the role it's allocated to is understood, the person who can spend it is understood and the time window within which it can be spent is understood and controlled? It allows everyone to understand where the money is, why it's there and how it is spent. It's done in distributed ledger form rather than centralised ledger form.

CHAIR: This has been done in conjunction with the CBA?

Dr Williams: That work is being done in conjunction with CBA.

CHAIR: What's the relationship between CSIRO and the CBA on a project like that?

Dr Williams: In this case, it's just a working relationship. CBA is a bank that has a role in managing money and Data61 is a group with skills in blockchain technology and software development.

CHAIR: But it's about delivering services to NDIS recipients—is that right?

Dr Williams: At the moment, it's to prove the concept of whether it can be done. The reason Data61 is involved is to show whether the concept is workable in a real-life situation.

CHAIR: Is it workable in a real-life situation?

Dr Williams: It's still in the early testing phases, so I think I'll reserve that to a future estimates.

CHAIR: Don't worry, I'm coming back in February and I'll be asking questions about that then. I'll ask very quickly about CSIRO's investigation of the potential of northern Australia's water resources to support regional development and the opportunities CSIRO found in the north. Minister Canavan is going to get very excited when we talk about this.

Dr Mayfield: I can talk a bit about the work that's been doing there. We've recently delivered what's known as the Northern Australia Water Resource Assessment. That's a \$15 million piece of work. We've looked at three different catchment areas and tried to understand what are the actual opportunities in those areas for capture of water, storage of water and then utilisation of that water. We've done that at a range of scales across the basins, to look at the potential development in those areas. That's information that hasn't been available before, and we think we'll unlock some of the potential of northern Australia. That work has been done for the Fitzroy catchment in WA, the Darwin catchment in the Northern Territory and the Mitchell catchment in Queensland. This came from earlier work that was done in the Flinders and Gilbert river catchments, and was also part of the white paper for northern Australia back in 2015. The work looked at a range of things, but it ultimately tried to evaluate what were the soil qualities, the water resources and the climate in those particular areas. As I said before, we were looking at the water capture and storage options and then testing for what sort of irrigation opportunities existed there, whether for forestry, crops or aquaculture. We also sought to understand what were the potential social and economic impacts of that development and provide that information to the decision-makers and the farmers in northern Australia.

CHAIR: Are you ready to provide that information to the decision-makers and the farmers?

Dr Mayfield: The information has been out there. It's publicly available. There is a thing called the NAWRA-explorer, which is a digital tool that people can visit to access that data and utilise it. At this point in time, CSIRO is still working through a process of briefing stakeholders in all those catchment areas and the decision-making groups to understand the information that is available. That continues in the coming months. We're in Queensland

in November talking to stakeholders up there in the Mitchell catchment. We're putting the information out there amongst the community, the farmers and the decision-makers so that they can start to utilise it.

CHAIR: I know it's early stages and there are a lot of hoops to jump through and hurdles to jump over, but how long is it between the research that you've presented and, potentially, seeing some of your recommendations manifest in a policy outcome? Can you tell us that, or am I drawing a long bow?

Dr Mayfield: That's probably outside my remit, but the information is now there and is ready for the people to utilise it and draw it into their policymaking decisions.

Senator Canavan: It does depend on the catchment and the proposals being put forward. As you've outlined, some of the proposals or projects identified by the CSIRO would require significant additional work in terms of assessment, environmental impact, consultation with native title groups, et cetera. There are, though, some imminent opportunities in these catchments. The government, I think, will soon receive a report, a feasibility study, on the Lakeland irrigation scheme, which is partly in the Mitchell catchment—one of the catchments that the CSIRO looked at. Obviously, that project is much more advanced and, upon receiving the report, the government will consider what next steps we might be able to take. I've had some discussion with the Northern Territory government about some of the smaller projects. We've identified the Darwin catchments. I have yet to catch up with the Western Australian minister about the Fitzroy, but they've been working in close consultation with the Western Australian government to make sure the CSIRO's work fits the priorities of that state government as well.

CHAIR: Terrific. I've got some questions about the hydrogen project, and if I've got time I will come back to them. I'm a senator from Victoria and I come from Melbourne. Melbourne is the home of the inner-city hipster. I thought we couldn't get any hipper than we already are, but then I discovered a new thing called a broccoli latte, and I thought: this isn't going to catch on. Then I saw the role model of the Melbourne inner-city hipster, Senator Carr, having a broccoli latte. Now, obviously, it's going to take off! There will be such demand for broccoli lattes that turmeric will be pushed aside! Senator Carr is looking fit and healthy as he sits before us. Something is going on in that broccoli latte.

Senator KIM CARR: Wait till they tell you how it's made!

CHAIR: Why would CSIRO invest in researching a broccoli latte?

Dr Marshall: He didn't look so fit and healthy after his first sip, I have to say! About a third of food is wasted in many countries for various reasons. So CSIRO looked at ways to take waste food that couldn't be sold because it was imperfect in appearance or otherwise and make it fit for human consumption. Part of that is in our processing to turn it into powder. It is also, frankly, a fantastic way to get my children to eat their broccoli and make it much more exciting. It tastes better than raw broccoli. We have done that with a range of foods. It is really about retaining more value. Australia is the driest continent on the planet, and we want to capture as much value from our agriculture as we can. If we can reduce that food waste, we can capture more value from the economy and use our water more efficiently.

CHAIR: Does it have commercial applications that we could start utilising or leveraging immediately?

Dr Marshall: Very much so. We have had a huge amount of interest. The broccoli latte is a bit of a marketing gimmick that caught the attention of the media, but it's the value captured from taking food that would otherwise be completely wasted and creating new value with it. There are also certain applications, for example, in space where you might want to have a very high density source of nutritious food.

CHAIR: Excellent. Well, I'm going to throw my NutriBullet away and wait for my broccoli latte hit.

Senator KIM CARR: Dr Marshall, perhaps on more mundane matters: do you recall the submission that CSIRO put to the Defence Trade Controls Act Review?

Dr Marshall: Not off the top of my head, Senator, but I'm sure we can answer questions about it.

Senator KIM CARR: Do you have someone there?

Dr Williams: I am aware of that.

Senator KIM CARR: Who signed off the submission?

Dr Williams: It was signed off through the system. I think, at the time, it probably went through either Hazell or myself. I'm trying to remember off the top of my head, but I can't remember.

Senator KIM CARR: You said in the submission that the Defence Trade Controls Act is fit for purpose, but you did make some suggestions about improving its presentation, given that there are a number of bits of

legislation that hang around it with regard to customs and other matters—but basically making it more manageable for researchers. Is that a fair characterisation?

Dr Williams: Yes, that is a characterisation. A specific one was that the international transfer of controlled technology between two employees of the same entity should not be treated as a control supply—so if CSIRO sent information to somebody working for CSIRO in another country. That was a clarification that we thought was needed. The second one was that the storage of controlled technology on an overseas cloud server should not be treated as an export where the intent is not to provide access to anybody outside of Australia.

Senator KIM CARR: Given that, what was CSIRO's view with regard to the Defence department's late submission?

Dr Williams: Late submission of what, Senator?

Senator KIM CARR: The late submission to the Defence Trade Control Act review.

Dr Williams: We have not taken a view on the department's late submission.

Senator KIM CARR: Were you consulted about it?

Dr Williams: We had a discussion about whether we should do a separate submission or submit through the department, and it was decided we submit it separately.

Senator KIM CARR: I'm told that the Department of Industry was actually consulted about the Defence department's additional or late submission, which was recalled as highly controversial and was met with very stiff reaction from a range of organisations.

Dr Williams: Is this the late submission where they wanted to make even more things reported?

Senator KIM CARR: Oh yes. They wanted to have what was described as an overreach and a power grab.

Dr Williams: We did discuss that with the department.

Senator KIM CARR: But you weren't consulted about it?

Dr Williams: We were not consulted before it came out, but we made our views known to the department.

Senator KIM CARR: After it was published?

Dr Williams: Yes, after it was published.

Senator KIM CARR: Did you concur with the Department of Defence, did you?

Dr Williams: No, we didn't. We thought increasing control could inhibit the ability to do things unnecessarily.

Senator KIM CARR: You saw the Academy of Science's submission in response to the Department of Defence?

Dr Williams: I cannot recall seeing it.

Senator KIM CARR: Have you spoken to the reviewer, Dr Vivienne Thom?

Dr Williams: No, we haven't spoken to anybody apart from the department.

Senator KIM CARR: So you weren't asked for your views other than those published through your submission?

Dr Williams: Published, and we then picked up on it and went—

Senator KIM CARR: Did you consider making a supplementary submission?

Dr Williams: No, we did not, Senator. We made our view known.

Senator KIM CARR: Have you had any conversations with any of the other stakeholders within the research community about the Defence department's submission?

Dr Williams: No, we've had no formal discussions.

Senator KIM CARR: Have you seen a copy of the report from Dr Thom? It's been with the government—I think it's the 19th of April; I might have given it an earlier date before. Have you seen a copy yet?

Dr Williams: No, I've not seen a copy of that report.

Senator KIM CARR: Has anyone in CSIRO seen a copy of it—it's not been provided to the CSIRO?

Dr Marshall: Not to my knowledge.

Senator KIM CARR: Can you take that on notice.

Dr Marshall: Certainly, Senator.

Senator KIM CARR: It's required to be published within 15 sitting days. You don't expect to get an early draft of the report?

Dr Marshall: I couldn't say, Senator.

Senator KIM CARR: Look, there's been some criticism of the CSIRO with regard to its capacity to handle security matters.

Dr Williams: In what sense, Senator?

Senator KIM CARR: For instance, there was a data breach. *The Financial Review* reported on 3 April 2018 that you spent some millions after it was alleged there was a Chinese data breach. Are you familiar with that article?

Dr Marshall: Vaguely, Senator; I recall it.

Senator KIM CARR: Vaguely; I see. The article makes a suggestion that:

... CSIRO, has spent tens of millions of dollars upgrading its cyber security and information systems since a data breach linked to a Chinese national.

Was there in fact a data breach?

Dr Williams: Senator, I'm not quite sure which Chinese person you're talking about. If it's the one that left the country and we chased them, there was no data breach. But I can say that—

Senator KIM CARR: Sorry, can you repeat that?

Dr Williams: If it's the one who left the country, and I think moved to France, the final conclusion was that there was no breach. However, Senator, I can—

Senator KIM CARR: I'm trying to be clear about that.

Dr Williams: I'm not quite familiar with the specific statement you're talking about.

Senator KIM CARR: Let me be just clear. What you said was that the allegation was that the person returned to China, and you're saying in fact this was an officer of the CSIRO who actually went to France.

Dr Williams: I think on this one, I'd have to take it on notice because I haven't got—

Senator KIM CARR: I want to be clear—if you wouldn't mind. It's quite a serious allegation that's been made against CSIRO.

Dr Williams: Yes, it is. What I would say, Senator, in—

Senator KIM CARR: I think it's important to get to the bottom of it. Is there anyone here that can help you with that article? This is *The Financial Review*, 3 April 2018—maybe someone can get it for you.

Dr Marshall: Senator, we certainly upgraded CSIRO's cybersecurity facilities, but we started that process in 2015 not because of an alleged breach but simply as a matter of good security practice.

Senator KIM CARR: I would expect nothing less. This is an important matter, given that the allegation's been made that our premier science agency has been penetrated by a foreign government. It's alleged that the Parkville facility in Melbourne was essentially rumbled and the person concerned in 2013 fled to China, and you're saying that's not right.

Dr Williams: I'm trying to work out which document we're talking about, because I haven't got the document you have.

Senator KIM CARR: Is it possible for one of the officers to show you the article?

Senator Canavan: I have the article here. What you're referring to is an alleged breach that occurred in December 2013, I think.

Senator KIM CARR: That's the one. Minister. It goes on for page after page—

Senator Canavan: Sorry, November 2013.

Senator KIM CARR: denigrating the CSIRO, and we now discover that it may not be factually correct. It's obviously been provided by—

Senator Canavan: Obviously if there's no-one here, I'd be happy to take it on notice.

Senator KIM CARR: I think Dr Williams is telling us—

Dr Williams: Now we know which one it is. What I would say is that in 2015 we worked with the Australian Signals Directorate cybersecurity board who looked at CSIRO and did find it a high-risk agency in terms of foreign powers' desire to hack into our system. We worked closely with them, and in 2017 they gave us what is effectively a clean bill of health in terms of the security level we operate in.

Senator KIM CARR: Fair enough. It's not unreasonable for you or the security agency to suggest that you are an agency of high interest to foreign governments. I'd suggest not just one government but many governments.

Dr Williams: I'd agree with that.

Senator KIM CARR: But this is an article that spent a considerable amount of energy suggesting one government, pointing to an incident which appears to be factually correct. Is that—

Dr Williams: Can we come back on notice and give you the report of what we did from that?

Senator KIM CARR: Yes, please. I'd like to know your response to these suggestions. I'd like to know your response to the suggestion that you spent millions of dollars after a Chinese data breach, given that that's the thrust of the article.

Dr Williams: We spend millions of dollars every year on our IT systems—

Senator KIM CARR: That's the point—

Dr Marshall: Thank you for your question. We'll definitely come back to you on notice, and thank you also for recognising—

Senator KIM CARR: because there's been a lot of loose speculation about our research agencies, demonstrated since November of last year. A campaign seems to have been launched, I would suggest, by a couple of academics, and a number of newspaper networks seem to have followed them through. You've been subject to that. A number of universities have been subject to that. When I made inquiries about whether or not there'd been breaches of the Defence Trade Control Act, we've not been able to find any. There haven't been any breaches. We understand there might have been one early in the piece when these arrangements were put in place in 2011, but that involved Pakistan. That's my understanding. That's not China. There may well have been interest from a number of governments in espionage. My question is: how well are you protecting our secrets? I think we're entitled to an answer to that.

Dr Williams: We'll come back on the specific case. I can say that in the last 30 days alone—I did get some information on it—CSIRO blocked approximately 13 million attempts to hack the system, most of them automated attacks.

Senator KIM CARR: Where do they originate from?

Dr Williams: We don't always know. We just block them because there are so many.

Senator KIM CARR: But do you have a sense—

Dr Marshall: What you said was very accurate. They come from a range of international locations.

Senator KIM CARR: That's right. Government and non-government sources?

Dr Marshall: We find it very difficult to tell. In fact it's difficult to tell the origin, but often we can see a country—

Senator KIM CARR: Thirteen million?

Dr Williams: Thirteen million.

Senator KIM CARR: In what length of time?

Dr Williams: Thirty days.

Senator KIM CARR: Thirty days?

Dr Williams: Yes.

Senator KIM CARR: How many have been successful in hacking into your systems?

Dr Williams: We believe none have been successful.

Senator KIM CARR: That's your belief?

Dr Williams: Yes.

Dr Marshall: That's, of course, the challenge—

Senator KIM CARR: I know it's a challenge. It's a serious proposition.

Dr Williams: We also blocked 500,000 spam and phishing emails every month as well.

Senator KIM CARR: A bit like my email system, I suspect. I'm not quite so successful at blocking them!

Dr Marshall: I will add that one of the beauties of having so many brilliant data scientists and digital scientists in the organisation—

Senator KIM CARR: Yes, yes, yes.

Dr Marshall: I've seen security approaches that are unique in CSIRO's defence system. We also collaborate with major security companies as well.

Senator KIM CARR: It's just that the defence department is saying that they need these all-encompassing powers because of the growth in technologies. That was the proposition put to me the other day. You're repudiating that. You're saying that you can control your technologies. You're able to secure that technology. Is that the proposition you're putting to this committee?

Dr Marshall: It's a little bit like escalation.

Senator KIM CARR: But it's a balancing act. Have you had any evidence to suggest that you've not been able to control your responsibilities under the Defence Trade Controls Act?

Dr Marshall: Not to our knowledge.

Senator KIM CARR: Has anyone drawn to your attention any breach?

Dr Marshall: Not in my experience during my time as chief executive.

Senator KIM CARR: Have there been any prosecutions?

Dr Marshall: Again, not to my knowledge during my term as chief executive.

Senator KIM CARR: That's in your time. Take it on notice: has any officer of the CSIRO, or anyone associated with the CSIRO, been prosecuted for breaches of the Defence Trade Controls Act or any of the associated acts?

Dr Marshall: We'll absolutely take that on notice.

Senator KIM CARR: And, if it's true, can you give me what the circumstances are. When I've asked this question I've been told there have been no breaches—of all the licences that have been issued, no breaches. If that information is incorrect, I'd ask you to correct it.

Dr Williams: We're prepared to do exactly what you say.

Senator KIM CARR: Thank you. Who does your internal security reviews? Do I take it they are regularly done?

Dr Williams: Yes. We have a senior security officer and a team, and we run regular things in the system to check what's going on.

Senator KIM CARR: Do you have any external reviews?

Dr Williams: The most recent one was the ASD, working with the Australian Signals Directorate. That was a two-year period of, effectively, reviewing how we operate, how we manage and how we work.

Senator KIM CARR: So there was the Signals Directorate. Have any other security agencies had a look at this?

Dr Williams: I'd have to take it on notice as to whether we employ external bodies to—

Senator KIM CARR: I just want to know whether we rely entirely on your word or whether there is any other, external, verification.

Dr Williams: I know exactly what you're saying and I will go back. We do test hacks and we see how it works. But I'll find out whether external bodies are involved.

Dr Marshall: We do have regular meetings with the security agencies and we do request that they test us, but the results of those tests are obviously highly confidential.

Senator KIM CARR: I would expect this is a matter of constant vigilance. We don't be naive about this. But there is a balance required here about your capacity to engage internationally, your capacity to undertake innovative research work. There has to be an issue as to whether or not there is any evidence that you've fallen down in terms of your responsibilities for the security of the country. That's why I want to know: has there been any evidence drawn to your attention?

Dr Marshall: Not to my knowledge.

Senator KIM CARR: Thank you. I turn then to another aspect of your report. The annual report suggests that journal output for the year has fallen. It has declined by 234 publications. You seem to be blaming the drop in staff numbers for that; is that right?

Dr Marshall: Largely, yes.

Senator KIM CARR: What would you say has been the reduction in staff numbers in the reporting period?

Dr Marshall: There has been a significant reduction of staff in CSIRO over the last 20 or so years.

Senator KIM CARR: No, I'm talking about the reporting period in your annual report.

Dr Marshall: I'm getting to your question. The challenge with correlating that is that it often takes a year or two years, even longer, for an article to be published, so a decline today could have been caused by a change in staff numbers one or two years prior.

Senator KIM CARR: What you say is:

This decline is due to the fall in CSIRO's research staff count in earlier years, lagging that change because of the time it takes to conduct and publish research.

That's the proposition you just advanced to us. You then say:

However, productivity has not fallen—the total number of refereed papers is still greater than earlier years when staff numbers were higher.

Dr Marshall: I'd say we've maintained quality but we haven't maintained quantity, and quantity is more related to the number of people.

Senator KIM CARR: Do you believe that these numbers will continue at these trends? What is your expectation?

Dr Marshall: Over the term of the current strategy we've increased our staff numbers by almost 500 people—498, I believe, from memory. So I think what we'll see is certainly a stabilisation and possibly an improvement. Again, there's a lag between the number of people and the time it takes to publish.

Senator KIM CARR: So you would expect an improvement in the numbers?

Dr Marshall: Certainly a stabilisation.

Senator KIM CARR: The Public Research Agency Charter—has the minister issued a statement of expectations?

Dr Marshall: No, Senator.

Senator KIM CARR: When was the last one that you received?

Dr Marshall: Under Minister Hunt.

Senator KIM CARR: How long ago was that?

Senator Canavan: It would have been around a year.

Dr Marshall: About a year.

Senator KIM CARR: Secretary, can you tell me if there is any expectation there will be a new statement issued?

Dr Smith: I'll get the relevant officer for you to check.

Senator KIM CARR: If you wouldn't mind, thank you.

Ms Urquhart: We are just checking on the date for you, Senator, about when Minister Hunt issued the statement of expectations.

Senator KIM CARR: But when is the new one being issued? Is there expected to be a new one?

Ms Urquhart: I don't think there is an expectation in the immediate term. We did brief Minister Andrews on her commencement with the portfolio about the statements of expectation for the science agencies.

Senator KIM CARR: I see. What's the status of the Public Research Agency Charter with CSIRO? Given the blank looks, I'd say none.

Dr Marshall: I might need you to explain your question a little bit more, Senator.

Senator KIM CARR: You don't know what it is?

Dr Marshall: Are you asking about our act?

Senator KIM CARR: The status of the Public Research Agency Charter.

Dr Marshall: The CSIRO charter?

Senator KIM CARR: It's a CSIRO charter, yes. I can see them scramble for the files, so I presume you haven't had one for a while. Is that right?

Dr Marshall: Just give me a moment, Senator. There hasn't been one for quite a while.

Senator KIM CARR: That's right. Tell me when it was. When was the last one?

Dr Marshall: We might take a moment to look that up, Senator. Sorry, Senator, we'll have to get back to you on notice.

Senator KIM CARR: On notice. It hasn't been lost in the archives somewhere, has it?

Senator Canavan: I think you're about to find it!

Dr Marshall: Just the date, Senator.

Senator KIM CARR: It's no good asking you what you've done to implement it, is there? You'd have to find it, for a start. That'll be the first thing—to find it.

Dr Marshall: I believe it was some time ago.

Senator KIM CARR: It was, yes. Does it have any force at all within the department at the moment?

Ms Urquhart: Your reference to the Public Research Agency Charter—

Senator KIM CARR: The Public Research Agency Charter.

Ms Urquhart: I've been working in science responsibility since 2013 and I haven't heard mention of the Public Research Agency Charter in that time.

Senator KIM CARR: Really, haven't you? You'd better check the files as well.

Ms Urquhart: I had.

Senator KIM CARR: You have? You'll find one that I signed.

Ms Urquhart: I said I had better check the files, Senator.

Senator KIM CARR: You'll find it there. You're telling me that was the last one?

Ms Urquhart: I'm not aware of one being issued since 2013.

Senator KIM CARR: So it has no status.

Dr Marshall: I think that charter is also embodied in our public comment policy.

Senator KIM CARR: It's a bit more than that. It actually goes to a range of responsibilities the CSIRO has in government. Perhaps you should take it on notice and see what the status is. I get the feeling it has none.

Ms Urquhart: If I might comment, the statements of expectations that I've seen—

Senator KIM CARR: That's a different thing.

Ms Urquhart: Sure, but they do also go into responsibilities and expectations from government.

Senator KIM CARR: I see. Are you telling me it's been superseded by that?

Ms Urquhart: I can't say that, Senator, because I've not heard mention of the Public Research Agency Charter.

Senator KIM CARR: Why don't you take it on notice and find out what its current status is, and then we'll find out whether or not it has any.

Ms Urquhart: Certainly, Senator.

Senator KIM CARR: In terms of the innovation fund—our chairwoman asked some questions on this before—is there public reporting on the projects you're running?

Dr Marshall: On the ON program, the science accelerator, there is certainly a lot of reporting, mainly to the government.

Senator KIM CARR: But is there annual reporting? Will it find in the annual report the specific projects?

Dr Marshall: For the ON program, it is mentioned in the annual report and on our website. For the fund, we have a separate website, called Main Sequence Ventures, which is the name of the fund. You will find the portfolio investments and other information there.

Senator KIM CARR: Can I get this clear. Is the Main Sequence Ventures fund different again?

Dr Marshall: It's just the operating name of the entity that manages the fund.

Senator KIM CARR: Why do you have two names?

Dr Marshall: Because some of the money in the fund is the government's, some is CSIRO's and the bulk of the money is large private investors, some superannuation funds and so on. We felt it prudent to set up a separate entity to manage the fund and to hold all of the capital.

Senator KIM CARR: There is public money involved. What is the reporting requirement for the public money?

Dr Marshall: I'll try to explain this exactly. Can I just clarify: you are asking beyond the portfolio investments that the fund makes for reporting beyond that?

Senator KIM CARR: I'm interested in knowing what you are doing with public money?

Dr Marshall: Investing it in these portfolios.

Senator KIM CARR: But where do I find that publicly reported?

Dr Marshall: On the Main Sequence Ventures website.

Senator KIM CARR: Not in your annual report?

Dr Marshall: We touch on it in the annual report, but the details of the portfolio are probably fuller on the website than they are in the annual report.

Senator KIM CARR: The public part of this was money from the wi-fi fund was it?

Dr Marshall: Some money from the proceeds of Wi-Lan, yes.

Senator KIM CARR: And money from appropriations?

Dr Marshall: No. We invested approximately \$30 million of CSIRO funds, proceeds from Wi-Lan and another \$70 million of federal government money. The remainder is private money.

Senator KIM CARR: What page do I find it on in the CSIRO report?

Dr Marshall: I'll get that information for you.

Senator KIM CARR: I'll put the rest on notice if you say it's already here and I've missed it somehow. That is what you are telling me, isn't it?

Dr Marshall: The most immediately accessible source of information on the portfolio is on the website, and it's very public.

Senator KIM CARR: That meets the normal Auditor-General's requirements, does it?

Dr Marshall: It's standard practice for all Australian venture funds, so it absolutely meets those requirements and the requirements of the Australian Financial Services Licence.

Senator KIM CARR: Madam Secretary, are you satisfied that it meets the requirements in terms of the Auditor-General's specifications?

Dr Smith: I'll take that on notice.

CHAIR: I want to ask about the hydrogen project and what's been done around hydrogen energy. You mentioned it in your opening statement. Could you expand on it, because it's quite exciting.

Dr Marshall: I'll say a couple of things then hand over to Dr Mayfield. One of the challenges with hydrogen is how to store it safely and how to get enough of it into a small enough volume to efficiently store it and ship it. The innovation that CSIRO made, or the breakthrough, was this unique membrane that essentially filters ammonia in liquid form and extracts hydrogen simply by passing through this metal membrane. It's a very efficient process, compared to, say, trying to cool hydrogen gas to almost zero and liquefy it in order to transport it. It opens up the possibility of staying within the existing paradigm of liquid fuels by using a totally renewable fuel source. That's the reason we are so excited about it. I'll pass to Dr Mayfield.

CHAIR: Is that something you are using with the Kawasaki project in Victoria that is using brown coal to produce liquid hydrogen? Is that something you are familiar with? I know you have been working on other brown coal projects—on carbon capture and storage down there. I don't know if they are associated projects in any way?

Dr Mayfield: I can clarify it for you. The brown coal project you talk about with Victoria, which is in conjunction with a consortium from Japan, looks at producing hydrogen from brown coal through a gasification process and then using cryogenic liquefaction to transport that. At this point in time, that project doesn't include the membrane reactor that Dr Marshall has been talking about. Once you get to Japan, there are fuel cells, turbines and a whole range of end-use applications they will be looking at. The value of the membrane reactor which we are talking about allows you to remove hydrogen or purify hydrogen out of ammonia, which is a different pathway. We are looking at doing that through other opportunities as well. The two may merge in the long run, but, at this point in time, the KHI project isn't using the membrane.

CHAIR: It's fascinating. Senator Ketter.

Senator KETTER: Just coming back to the issue of the consumer data right: the exposure draft that has been released includes derived data within the consumer data right. So, if we proceed on that basis and derived data is included, can you tell me whether there is any algorithms or intellectual property produced by Data61 that would be captured by this derived data?

Dr Williams: In what sense do you mean derived data will be involved, Senator?

Senator KETTER: As I understand it, the consumer data right is looking at the types of data that will be included within the CBA.

Dr Williams: There are three elements to that: one is the machine-to-machine learning, the APIs; the other is the security aspect; and the third is the consumer aspect. Each one has got its own different layer. I would assume that, where Data61 have done some unique development, we would own the IP within CSIRO of that work.

Senator KETTER: Are you telling me that would not be captured by the consumer data right under the heading of 'derived data'?

Dr Williams: That is a question I couldn't answer, because it's a very technical question.

Senator KETTER: Could you take that on notice?

Dr Williams: Yes.

Senator KETTER: This is getting close to being hypothetical: if it is captured, is that desirable from a commercialisation perspective?

Dr Williams: In this context, we are giving advice to government on the technical solution. So, once the data right standards are published, they're the standards which people need to work to. There are a number of areas where potential loopholes in the system have been found. For example, if it were an SME not covered by the rights of public data then they would be outside, and whether you could send the data to those groups is a question that would need to be resolved. There are a number of technical areas and managerial areas as you get down in granularity that still need to be resolved as it moves through. That is why the system is what we call an agile system where the data rights will constantly be reviewed and can be changed. But, in the first instance, the intention is to get to a single set to go to legislation with.

Senator KETTER: Just more generally: is it correct that one of Data61's roles is to develop technology and move it to commercialisation?

Dr Williams: Yes, that has always been the case but it's also true that it's there to help government improve what it does as well. In this case, we are helping government improve the way it sets the standards for data management and data rights.

Senator KETTER: When you are developing technology and moving it to commercialisation, what is the process you go through to engage and understand what is happening within the existing technology ecosystem?

Dr Williams: We have a number of avenues for going out into technologies that we follow. One is spin-out with staff employed, who move out with the opportunity. The second is to identify an SME that wants to take on the opportunity, or a larger company for that matter. In that case, we can do that on an equity basis if it's a small company, an IP stream if that's a better alternative or a straight sale of the total IP to the company involved. So we have several avenues that we pursue to take things out to market. They are not unique to Data61. They are CSIRO standards that we work to.

Senator KETTER: Do the standards that you are talking about ensure that Data61 is supporting existing industry developments, rather than competing with them?

Dr Williams: Yes. With everything we do, the intention is to help establish new industry and new jobs, or to help government improve the way it operates.

Senator KETTER: Has Data61 ever ended up competing with non-government funded start-ups?

Dr Williams: That would be a question I could not answer, and I'm not sure whether I could answer it if I took it on notice.

Senator KETTER: If you could take it on notice—

Dr Williams: I'll take it on notice and try to answer it.

Senator KETTER: Thank you. The other, I guess, tension is that you need to balance the role of advising government on core data related policy issues and seeking revenue and commercialisation opportunities from selling into government. So how do you manage that potential conflict?

Dr Williams: That will be managed at the time we agree the pathway. When the initial work is agreed with a government department, within CSIRO overall we will agree the rules for how things will be exploited at that time. It wouldn't be a retrospective agreement. We'd set that agreement out in the first instance. We do follow competitive neutrality rules in general, as well, which are established and which we as a government agency follow.

Senator KETTER: I think Senator Hume was asking questions about this earlier, but what work has been completed on blockchain to date?

Dr Williams: We have done a number of things on blockchain. We could organise a presentation on the whole thing for you, if you wish, because we have the experts in Data61. We have looked at using it for a range of opportunities. We talked earlier about smart money, but it's also been talked about for contract management, there's potential for IP management and there's potential for provenance of food chain. So there's a whole suite of areas where the concept of blockchain is potentially of use and of value.

Senator KETTER: Is this information published somewhere?

Dr Williams: Most of it will be on the Data61 website if it's published. On the Data61 website within CSIRO there will be an explanation of that or we'll be able to organise you a special presentation.

Senator KETTER: Okay.

CHAIR: Dr Williams, I'll take you up on that offer. I am a co-convenor of the Parliamentary Friends of Blockchain group, so I'll definitely take you up on that.

Dr Williams: That can be done quite easily.

Senator KETTER: I think Senator Hume has asked what you are currently doing with blockchain. Can you tell me what work is planned for the future with core blockchain?

Dr Williams: At the moment in time, no, I could not tell you.

Senator KETTER: Do you want to take that on notice, or is there nothing planned?

Dr Williams: There may be things planned. While we are in the planning phase, we could take that on notice and tell you what we have in the stream. I think the better way would be for you to take up the offer of a presentation. Then you will see the full suite of things we do in this area.

Senator KETTER: Is there some confidentiality around these—

Dr Williams: Not particularly. It's just that, at any moment in time, Data61 has 120 or 130 projects underway. I have not got detailed knowledge of all of them.

Dr Marshall: We are excited about the true provenance opportunity because, as you may know, Australian products command a premium because of the quality and purity of them. That means that, in other parts of the world, people try to copy them or replicate them. So figuring out a way to guarantee point of origin and authenticity could be very high-value for the Australian economy.

CHAIR: As there are no further questions for you, thank you very much for appearing before the committee this evening for the CSIRO. We'll see you at the next estimates, if not before. The Office of Innovation and Science Australia have been let go. We put questions on notice for them. So we will kick on to the resources component of the evening.

Northern Australia Infrastructure Facility

[20:22]

CHAIR: Good evening, and thank you for coming in a little early. Ms Walker, I see you've got an opening statement, which you've tabled. We can have that incorporated into *Hansard*. If you'd like to read it though, please feel free.

Ms Walker: No, I don't need to read it, but I suppose the headline number would be worth just commenting on.

CHAIR: Yes, perhaps speak to that.

Ms Walker: As of yesterday, the total NAIF loan value of projects, either with investment decisions or conditionally approved, is \$1.035 billion, the total project value is \$2.333 billion and the public benefit for those projects, which doesn't include all the conditional approvals, is \$1.9 billion. I think they're significant numbers and show the progress that we've been making.

CHAIR: Thank you. I might kick off questions, if you don't mind then and then I'll hand over to Senator Ketter. Can you tell the committee just how many projects there are currently in the due diligence phase?

Ms Walker: We have 23 projects in the due diligence phase. I'm not able to give you the names of all of those. We've made some of those public—we've actually had quite a number of announcements—but not all 23 are able to be announced publicly. Again, in the opening statement, we comment on how that 23 are split up. As usual, it's a good spread across the jurisdictions and a good spread across sectors.

CHAIR: How many of those investment decisions have been made as a direct result of the investment mandate changes?

Ms Walker: This is a question that I think was asked at the last Senate estimates. We know that, I think, three of the four that were made in the last financial year, I would say, were a direct result of the mandate changes, in that they either allowed us to do more of the debts—in the JCU project, for example, we did 100 per cent of the debt for that, and that was a direct result of the change. Humpty Doo, again, were able to do different asset classes and that was a direct result of the change. At least two of the four from last year and the Sheffield project, which has been announced, I would say, were also a direct result of the changes. The Northern Territory airports, some aspects of that, were probably a result of the changes.

Ms Bellettini: Yes. The Pilbara Minerals road upgrade project was also as a result of those changes. The investment mandate changes, really, supported us in being able to accelerate a number of the projects that were able to move through and increase the likelihood of projects moving towards the investment decision.

CHAIR: I remember the last time you were before us, I think, there was one project that was cross-jurisdictional. How many of the new ones or the ones in the pipeline are cross-jurisdictional?

Ms Walker: Two per cent of the active inquirers. We've got 123 of those in the pipeline.

CHAIR: So two per cent. A small number. I think you've given me the answer to that question.

Senator KETTER: I'm interested in the amount of money that NAIF has released into the successful projects. I'm going to ask four questions for each of the projects: What was the date the investment decision was made? What was the date NAIF made the drawdown facility available to the proponent? What was the date the proponent first accessed that facility? How much of the funding have available proponents drawn down through the facility?

Ms Walker: I'll have to take on notice some of that detail. I can take the Onslow project, which was the first project approved, and I think it's a good case study to take you through those time lines. I think we made the initial conditional approval on that project in August 2017. The final investment decision was made in September 2017. It was conditional upon a number of things, but one of them was the environmental approvals. From memory, those environmental approvals, which are outside the proponent's control and outside NAIF's control, are with the WA regulator and were issued in April 2018.

Ms Bellettini: Correct.

Ms Walker: Then the loan documents could not—they were signed after the approvals came through. I think the private sector lender signed those early in May. Then the state, as the lender of records, signed those documents at the end of May. Financial close was in June 2018. Drawdown, then, is a matter for the proponent. All of our construction deals, the actual drawdown, will be completely dependent on the program for the construction and for the proponent. The first drawdown, on that one, was 22nd June 2018. And it's drawing down—I think the final drawdown is forecast to be June this year on that project.

Senator Canavan: This financial year, obviously.

Ms Walker: Yes; 2019, sorry. All projects will have a lengthy gestation period, in terms of the regulatory approvals. That was regarded as reasonably quick, I understand. The drawdown will usually be between six and 12 months. Some projects can be 24 months, depending on the size of the project, the complexity and when the money is actually needed.

Senator KETTER: I accept all of those complications and different aspects that might arise, but I'm just interested in the actual information. So the date of the investment decision, which you tell me for Onslow was September 2017—and, yes, there were other things that happened subsequently, but let's just go with the investment decision. What was the date that the drawdown facility was first made available—was established?

Ms Walker: That would be financial close, which was 7 June. That's actually when they first drew down the funds. Financial close is when all of the conditions precedent to lending have been satisfied, and there can be many. So that was the first drawdown, June 2018.

Senator KETTER: So the first drawdown by the proponent was 22 June?

Ms Bellettini: Yes, that's correct.

Senator KETTER: My question is when—

Ms Walker: Sorry. That's the first NAB drawdown on 7 June. My apologies.

Senator KETTER: the facility was made available—

Ms Walker: From financial close?

Senator KETTER: And that was what date?

Ms Walker: That was 7 June 2018.

Senator KETTER: And how much of the funding available has the proponent drawn down?

Ms Walker: I think it is about \$5 million of the funds. Again, I would have to take it on notice, but they would be drawing money from NAB, as the other lender, and us. So you sort of tend to draw down—

Senator KETTER: I'm just interested in the NAIF drawdown facility.

Ms Walker: No, but it's relevant the date of our drawdowns, because you don't put the NAIF—it depends on what their financing structure is and what makes sense optimally, in terms of structuring it, as to when the NAIF money is actually drawn down.

Senator KETTER: Okay.

Ms Walker: And that will vary on every project.

Senator KETTER: I will go through the other projects, but before I go to the other individual projects, can you tell me: the figure of \$1.035 billion that you've given, is that the total value of the NAIF's investment decisions so far?

Ms Walker: No. That's total value of the investment decisions and conditional approvals.

Senator KETTER: Okay. Yes. So six, and four conditional approvals. What's the value of the six investment decisions?

Ms Walker: I do have that: \$264 million.

Senator KETTER: Of that value, how much funding have the proponents accessed so far?

Ms Walker: Those projects are still to reach financial close, other than Onslow. I think the second one is close. I expect within the next week it will be signed and I would expect financial close to be very shortly after that.

Senator KETTER: So it is only Onslow that has accessed any of the drawdown facilities?

Mr Thatcher: Onslow is the only project that has reached financial close. The others haven't yet.

Senator KETTER: Okay. Let's go to Humpty Doo. What was the date of the investment decision there?

Ms Bellettini: The date of that investment decision was 3 May 2018.

Senator KETTER: Thank you very much. There is no financial close on that one, so there's—

Ms Walker: That's the one that is expected to sign and close within the week. I think the documents were due to be signed by the private sector today and then would go to the Northern Territory government for signing. If not today, it would be tomorrow. It's imminent.

Senator KETTER: Okay. The JCU engineering school. Is that in the conditional?

Ms Walker: No. That's an investment decision.

Ms Bellettini: The date of that investment decision was 15 June 2018.

Senator KETTER: Thank you. And financial close, do we know?

Ms Walker: No, that's still in documentation. It is progressing very well. So we would expect it to be this quarter, but I can only report that the negotiations are going well.

Senator KETTER: Thank you. And the Pilbara minerals project?

Ms Bellettini: That investment decision was made on 2 August 2018.

Senator KETTER: Thank you. How's financial close going? That's some time off?

Ms Walker: No. But again I would expect it to be this quarter or early in the next quarter.

Senator KETTER: Okay. The Northern Territory airport extension?

Ms Walker: So that's conditional approval. There are still some conditions that need to be satisfied before we can make an investment decision—which are with the proponent to satisfy—and we're working through those conditions at the moment.

Senator KETTER: Thank you. And the Sheffield Thunderbird project?

Ms Bellettini: The date of that investment decision was 28 August 2018.

Senator KETTER: Thank you. So we're missing an investment decision somewhere?

Ms Walker: Conditional approvals. I think the Genex decision that was announced—have you got the date?

Ms Bellettini: June.

Ms Walker: June this year. So that is with the proponent and other stakeholders, working through issues.

Senator KETTER: That is one of the four conditional approvals?

Ms Walker: Yes, one of the four conditional approvals.

Senator KETTER: I think I've got five investment decisions which I've identified. Is there one I haven't asked about where we have got an investment decision?

Ms Walker: Yes, there is another one: Voyagers; it's an airport upgrade—contractor accommodation, runway lighting. It's still in the early phase of negotiations. It's probably only about to start on that.

Senator KETTER: But there is an investment decision on that?

Ms Walker: There is an investment decision.

Senator KETTER: Can you tell me the date?

Ms Bellettini: The date of that investment decision was 14 May 2018.

Senator KETTER: Where was that for?

Ms Bellettini: For the Voyages Indigenous Tourism Australia. It is an upgrade of the airport in Yulara, Northern Territory.

Senator KETTER: Thank you.

Ms Walker: Was that the six investment decisions?

Ms Bellettini: That's correct.

Senator KETTER: Just moving to another issue, there was an AusTender contract notice that was issued to Korn Ferry for appointing a new NAIF chair. On notice, you've provided me the list of all the contract IDs for the NAIF. The latest one was the Korn Ferry one, of \$71,500. Can you update me on any additional notices issued for the NAIF?

Senator Canavan: That would be more for the department, I think, at least in regards to work with Korn Ferry or other related organisations. Ms Reinhardt, did you want to start that off?

Ms Reinhardt: Yes. So there was the Korn Ferry contract previously this year. There have been no additional contracts for similar services.

Senator KETTER: What about any other AusTender notices that have gone out since then?

Senator Canavan: You mean specifically for the Northern Australia Infrastructure Facility?

Senator KETTER: For the NAIF.

Ms Reinhardt: No further tenders for the NAIF.

Senator KETTER: I understand that that contract was for a new NAIF chairperson. I understand the appointment was made internally, ultimately. Mr McCormick was appointed to the position of chair.

Senator Canavan: Yes, that's correct.

Senator KETTER: So that's \$71,000 that we saved, I take it?

Senator Canavan: Sorry? What's the question exactly?

Senator KETTER: The \$71,500 was to be spent to find a new chair for the NAIF, as I understand it.

Senator Canavan: My understanding—I'm happy to be corrected—was the work of Korn Ferry did look at options for chair as well as for a director vacancy as well. Obviously we went through a proper process to establish who should replace Ms Warburton when she voluntarily stepped down earlier this year. It was proper to go through that process, but ultimately the government decided to appoint an internal candidate to chair, an existing director. We're still considering options for the remaining vacancies on the NAIF board.

Senator KETTER: Has that \$70,000 figure actually been spent or are there some savings?

Senator Canavan: Yes.

Senator KETTER: Has it all been spent?

Senator Canavan: The work that Korn Ferry conducted for the government has been completed. It has been received by me so I presume the invoice has been paid.

Ms Reinhardt: Yes, that's right. The money has been spent, the work has been done and that contributes to the minister's consideration around the chairperson and the other board members, and there remains a vacancy on the board.

Senator KETTER: I congratulate Mr McCormick on his appointment as chair. Let me just understand this. So there was \$70,000 for what ended up being an internal appointment and then there was some advice provided about the other vacancy. Is that right?

Senator Canavan: The work that Korn Ferry did is, in my understanding, fairly typical in the circumstance. They provided a range of options for me and the government to consider in terms of people with the required expertise that met the criteria under the Northern Australia Infrastructure Facility Act. We considered those suggestions alongside the potential of an appointment from within the board of the NAIF. I spoke to all the directors of the NAIF before making any decision and ultimately we decided that Mr McCormick was the best person for the role.

Senator KETTER: That sounds like a lot of money for what ultimately was an internal appointment. I understand you got advice about it. Did Korn Ferry do some work to shortlist a potential?

Senator Canavan: There was a list of potential people that could be appointed. I might ask the department to outline in more detail what work was conducted by Korn Ferry. It was remiss of me. Mr Lawson just reminded me that during this period we also appointed Mr Rolfe to the board to fill another vacancy. I just need to check if that was done on the back of the Korn Ferry work or separately.

Mr Purtrell: It was just after the Korn Ferry work, so we have actually filled two roles while we have been considering this potential list of applicants. Ms Reinhardt, is there anything you wanted to add?

Ms Reinhardt: No, just it was an extensive executive search. It provides not only a list of names for the minister to consider but also a benchmark against which the minister can consider what appropriate candidates might look like. Even if there is a candidate who is already on the board, it provides the minister with an opportunity to understand the calibre of alternate candidates and to understand what the decision around this internal appointment means relative to other opportunities.

Senator KETTER: Will there be a new contract or new tender for the remaining non-chair position that needs to be filled?

Senator Canavan: There is no current plan to conduct a further executive search.

Senator KETTER: Given that Mr McCormick ultimately was chosen to fit the role, I take it that there were concerns that Mr McCormick was not qualified. Did you have some concerns?

Senator Canavan: Not at all. When Ms Warburton unexpectedly had to leave, I expressed to the board my intention to conduct a proper search for the appropriate replacement. I indicated that I would consider the existing directors as potential applicants, but we wanted to make a thorough search, which we did. I did speak to all the directors on their views in regards to this matter as well as consult with Korn Ferry on this report before making an informed decision. I will take this opportunity to add that I think Mr McCormick has done great work since his appointment. This period has coincided with the updated mandate and a change of focus of the NAIF as a result of that mandate. As Ms Walker outlined, the results speak for themselves in terms of the increased pace of activity, and I've complimented Mr McCormick and Ms Walker for driving that change in the last six months or so.

Senator KETTER: As I understand it, there has been \$2 million spent on contractual services for the NAIF over its period of operation. We've got \$5 million out the door in terms of drawdowns for projects.

Senator Canavan: I'll have to check those figures, and I'm happy to take them on notice. Obviously, over that period we've had to staff an organisation from scratch—not just the directors of the board but the CEO as well as other staff. As Ms Walker outlined, all of the projects that are being funded will take years to come to culmination, so the actual spending and drawdowns of funds will coincide with those construction time lines.

Senator KETTER: When do you think we'll get a project up for Central Queensland?

Senator Canavan: That will obviously depend not just on the NAIF but also on the progression of projects by proponents in Central Queensland. I would have loved to have been able to get the jobs cracking from the Adani Carmichael coal mine, which was a project being considered by the NAIF, but the Queensland Labor government decided to say no to a \$2 billion investment in their state. I still struggle to fathom why a Queensland government would say no to a \$2 billion investment in their state when they weren't being asked to put a penny towards it and it was going to create thousands of jobs. Be that as it may, that decision has been made. I'm aware that in the public domain there's a consideration for a proposed meatworks near Clermont. I think Clermont is the closet town, or Moranbah—

Ms Walker: Clermont.

Senator Canavan: But I'll let Ms Walker answer if there are any further projects you would like an outline of in Central Queensland, keeping in mind that we can't release the details of some for commercial-in-confidence reasons.

Ms Walker: That's exactly right. The Clermont one is public. We're working with Signature Beef, but at this stage that's the only one that's been made public in Central Queensland. What I can say, and I did put this in the opening statement, is that there has been—and this is commenting on Queensland, not just Central Queensland—a significant increase in active inquiries. I think there's been a 192 per cent increase in active inquiries in Queensland in the last financial year. So it is a very important state to us. It's a state that we give an incredible focus to. Out of that degree of inquiry, you would expect that there will be projects flowing in Queensland. We already have JCU, which is a very significant investment in Townsville. I know that Professor Harding said that's probably the most significant investment in Townsville since the university was put there in the first place. So we're working hard for all our jurisdictions, and the results are that there is a really good spread across all the jurisdictions.

Senator KETTER: I hope that comes off, but at the moment, looking at that AusTender contract and the figure of \$2 million of contractual services for the NAIF, it seems more like it's the consultants of Sydney and Melbourne who are doing pretty well out of the NAIF so far.

Ms Walker: We've hired a full team and have not really had to pay very many consultant fees for the size of the team that we've recruited and the skill of the team. I'd be happy to share that information with you, and I think you would be very pleased with the cost on that, but these are expenses where, to get certain roles, you do need to go and do a search at the appropriate level and with the appropriate expertise supporting you.

Senator Canavan: I think it's a false comparison, for what it's worth, because the up-front costs of getting an organisation set up do require significant investments, but they are still very small in comparison to the over \$200 million of projects that have reached that investment-decision phase and the over \$1 billion when you add conditional approvals as well. I'm confident now that, with the pace that the NAIF is setting, we will be able to find projects to deliver on the \$5 billion worth of funding the government has committed to northern Australian development. The up-front costs of making sure we have the right staff with the right expertise are the right, appropriate costs to make when you're considering a fund of this size.

Senator KETTER: Thank you for that. Moving on, I'm interested in whether or not NAIF can play an important role in economic empowerment of a number of important groups. Can you tell me what strategies the NAIF has in place to empower women in Northern Australia?

Ms Walker: We have within our own organisation a significant number of females. Obviously, I'm a female CEO. We have a female chief of staff. I don't think we've got those numbers with us here, but I'm happy to share those with you. All of our projects are focused on economic development and population growth in the north, and women are a significant portion of the population in the north and will benefit from all of the projects that we deliver. Obviously there's economic focus in our projects, but we also are very, very focused on social impacts and public benefit. I would say that females—as well as males, but probably females—will particularly benefit from that social amenity objective that we will seek to achieve.

Senator KETTER: What about on the board of NAIF itself? When the board was first established, more than 40 per cent of the board was made up of women. Now there's only one woman left on the NAIF board.

Ms Walker: It's really a matter for the minister.

Senator Canavan: It's a matter for the government. Yes, you're correct. We also, of course, appointed, as the inaugural chair, Ms Sharon Warburton as a female chairwoman for the board. As I outlined earlier, Ms Warburton resigned unexpectedly and voluntarily. I was very keen to make sure we had the right person, the best person, for the job to be chair, and I think the proof is in the pudding. As I said, I have spoken to all the directors about the right person to appoint as chair. While I would have loved to have had the opportunity to replace Ms Sharon Warburton with a female chairwoman, in the end Mr McCormick has proven himself to be a very effective chair, and that's incredibly important. I'm happy to put on record that the government is doing all it can to make sure the remaining vacancy on that board is filled by a female so that we can seek to meet the government's objectives to boost female participation on boards.

Senator KETTER: Minister, did you consider any women for the role that Mr Rolfe has filled?

Senator Canavan: Yes, of course, there were women that were put forward. Again, Mr Rolfe has remarkable experience in infrastructure finance. He's worked for state governments; from memory, he was a coordinator-general for the former Queensland Labor government. The overriding consideration for me there was to have

someone who could boost the relationship we have with some of the jurisdictions, particularly Queensland, so that's what put Mr Rolfe ahead of other potential candidates.

Senator KETTER: I mean no disrespect to Mr Rolfe, but did you seek advice and get a short list for that position?

Senator Canavan: Absolutely, yes.

Senator KETTER: How many women were on that short list?

Senator Canavan: I will have to take that on notice.

Senator KETTER: If you could take on notice how many women and how many men were on that short list.

Senator Canavan: Absolutely.

Senator KETTER: Have you discussed this issue with the Minister for Women? She has issued a press release saying that there are a record number of women on government boards. In fact, 45.8 per cent of positions are now filled by women.

Senator Canavan: No, I haven't explicitly spoken to the Minister for Women about this matter, but when these board appointments were going through I did speak about this issue with the Prime Minister. We are very focused on making sure that, with this additional vacancy we have, we will seek to place a woman into that role. We're very proud of the increase in board representations we've made with females across government. I think in these circumstances what is important is what we are achieving across-the-board. Of course, any particular vacancy has to take into account the particular requirements, including statutory requirements, of that role. While we will not, of course, be able to fill every role with a female overall the government has made enormous progress in increasing the representation of females on boards.

Senator KETTER: Do you have a strategy in place to ensure women are better represented?

Senator Canavan: Yes. My strategy is to appoint a woman next to the role, that's the strategy. I have one vacancy on the NAIF board and, as I said in the outline, very strongly and publicly we searching to put a female into that role.

Dr H Smith: If I could add, the department and the portfolio tracks very closely the overall gender representation on boards across the portfolio. We have been tracking in an upward momentum and are getting close to 50 per cent.

Senator KETTER: The NAIF board is dragging you down a bit—

Dr H Smith: It's right across the portfolio—

Senator Canavan: As I said Senator Ketter, I think it's very important here that we don't try and take every particular vacancy or board itself, because every vacancy and every particular requirement will be different, but what is important is that across-the-board we're reaching those targets. We're clearly doing that. We're making great progress in this area.

Senator KETTER: Let's move on to the issue of First Nations people who are one of northern Australia's greatest assets. I think I saw in the department of industry's annual report that you have had some engagement with Indigenous Australians in northern Australia. Your annual report says:

Engagement with Indigenous Australians in northern development took a big step forward, with a group of Indigenous experts providing practical advice on their aspirations around northern development. Those ongoing discussions will support a better future and opportunities for Indigenous people in the north.

Senator Canavan: Are you quoting from the department of industry's annual report or NAIF's annual report?

Senator KETTER: That's the department of industry but there is a dot point there that covers the NAIF.

Senator Canavan: I might quickly start and other officials might want to add. I agree with your sentiment, Senator Ketter. Indigenous Australians make up 15 per cent of the population in northern Australia. I say regularly that if we cannot help and achieve economic advancement for Indigenous Australians, we will not properly meet our objectives to develop northern Australia, given the significant proportion of the population.

Just over a year ago, I think, the government established an Indigenous reference group, which is tasked to bring forward policy suggestions to help the goal of Indigenous advancement in northern Australia. The Indigenous reference group have become a permanent, ongoing feature of the northern Australia ministerial forum, which brings myself and state and territory jurisdictions together roughly twice a year. I think the Indigenous reference group has reported to at least two of those fora and are due to provide a further report in a couple of weeks' time in Mount Isa at the next forum, where they are bringing specific policy suggestions forward for all jurisdictions to help advance Indigenous economic issues.

The other thing that I'm very proud of is the work that the Northern Australian Infrastructure Facility are doing to ensure that projects have robust Indigenous economic participation plans. That is a specific requirement of the mandate the government has given to the NAIF. I think the results that are being achieved are not just a box ticking exercise, we are seeing real and tangible deliverables from projects. The Sheffield Resources project that was mentioned earlier is targeting 40 per cent employment of Indigenous Australians. Currently I think about 60 per cent of its employees are Indigenous, but it is being realistic about what it will achieve once it ramps up. It is in a very disadvantaged part of our country in the East Kimberley and that project will be a significant boost to Indigenous employment. I'm not sure if the department want to add anything to that?

Ms Reinhardt: I'm not sure there is a lot to add.

Senator Canavan: Ms Walker might add from the NAIF's perspective—

Ms Walker: I will add some comments. Yes, the Sheffield, that's right, 40 per cent within the first eight years. We have another project, JCU, which is targeting three full-time equivalent Indigenous employees during the design phase and three per cent minimum Indigenous employment during both the construction and the operations phase. We have another project where there's a target of three to five per cent goods and materials from companies that are 50 per cent or more Indigenous owned for the construction and more than 10 per cent of the workforce during the operations; I think that's right.

So, we are absolutely focused on this as a deliverable such that we really want to make a difference in this space. It is a mandatory criterion, as the minister said. But we are focused on it and we are doing everything we can to achieve it. The Indigenous Reference Group actually met with the board in Canberra last week, and I have met with the Indigenous Reference Group a number of times. I've also met with a number of other really key Indigenous stakeholders, including all the mayors of the Torres Strait councils. So, this is an area that we are putting tremendous effort into.

Senator KETTER: What I read out from the department of industry's annual report—was that a reference to the Indigenous Reference Group, or something else? It was on page 28.

Mr Coffey: You might also remember that under the \$700 million roads package in northern Australia there are specific Indigenous employment and business targets negotiated with each of those individual packages. Under the white paper there was a specific measure that would ensure that Indigenous business and individuals have the opportunity for jobs and some of the works under these roads packages, and they are negotiated as these packages come to fruition.

Senator Canavan: Unless the officials want to disagree with me, I've just read the section and I think it would have to be a reference to the Indigenous Reference Group.

Mr Coffey: Yes, that's correct.

Ms Walker: We also have proponents that are Indigenous. One of the investment decisions was an Indigenous proponent. We have others in the pipeline that we're working with and, as I think I mentioned last time, we have an Indigenous manager in our Cairns office.

Senator KETTER: Can you tell me when the Indigenous Reference Group started?

Senator Canavan: I believe it first convened at the ministerial forum in Darwin last year, which would have been July or August. I was not the minister at the time.

Mr Coffey: The first ministerial forum was on 1 September, and the Indigenous Reference Group was formed just prior to that—probably a month before. There were eight members of the Indigenous Reference Group. They comprised Indigenous experts from across northern Australia, with representatives from the three jurisdictions.

Senator KETTER: Did they provide a report of any sort?

Senator Canavan: They've already provided an interim report to the ministerial forum in Kununurra—in April, I think that was. And, as I said, they're due to provide an additional report to the next ministerial forum in two weeks time.

Senator KETTER: Are those reports public?

Mr Coffey: No, they are not. But they are really policy advice to the minister on Indigenous business development and enterprises across northern Australia to consider during the forum.

Senator KETTER: So, there is this Indigenous Reference Group of eight Indigenous people who are experts in their fields, and you meet twice a year.

Senator Canavan: The ministerial forum aims to meet twice a year. The Indigenous Reference Group meets more regularly than that. Mr Coffey might have information on how regularly. And I meet with the Indigenous Reference Group from time to time outside of the ministerial forum meetings.

Senator KETTER: And are there plans—

Senator Canavan: And the NAIF has also expressed that they—

Ms Walker: Yes, I've had at least three meetings with them, and some of those were also with significant stakeholder groups that they were canvassing to help put together their recommendations for the ministerial forum—so, right across a number of stakeholders.

Senator KETTER: Are any recommendations for improving NAIF's engagement with First Nations Australians coming out of this process?

Senator Canavan: I know that they're certainly discussing those elements. Because the next report's coming from the ministerial forum, I might just take that on notice the details in regard to that.

Senator KETTER: Okay. I would be interested in the recommendations, and perhaps, Ms Walker, if you are able to tell us what recommendations NAIF would be planning to adopt.

Ms Walker: Given that at the moment it's not my report or my recommendations, I think I should leave it until it's public.

Senator Canavan: I'll take it on notice and we'll come back to the committee with any response from ourselves or relevant comments from NAIF.

Senator KETTER: Then, Minister, if the government's planning to adopt any of the recommendations from the Indigenous Reference Group.

Senator Canavan: Yes.

Senator KETTER: Thank you. I now move on to project finance.

Senator Canavan: I should say for clarity I'm almost certain—I'm happy to put this on the record—that in the communique that was the ministerial forum released after the Kununurra meeting in April, we indicated we agreed in principle with all the recommendations of the Indigenous Reference Group. That was great to have buy-in from Queensland, Northern Territory and Western Australia there.

Senator KETTER: I'll come back to an earlier comment and observation I made that, after 3½ years, there are no investment decisions of the NAIF for Central Queensland as yet. Minister, you live in Central Queensland. Do you consider it a personal—

Senator Canavan: I'm the only senator in Central Queensland. I don't think there's a Labor senator in North Queensland—in any part of northern Australia, apart from Broome, with Senator Dodson. Sorry, there is McCarthy as well. The NAIF has actually been up and running now for nearly 2½ years, not 3½ years; I think you were dating that from the government's announcement. It was only constituted in mid-2016. And I put on record many times that the government was disappointed in the original pace of activity. I'm not attributing any fault to the feet of the NAIF in saying that. It was a combination of the fact that, over that period, Northern Australia and particularly North Queensland, as you'd know, Senator Ketter, had some challenging economic times, following a deterioration, particularly in commodity prices and, in some areas, drought, as well as the fact that we were setting up a relatively innovative way of financing infrastructure in Australia. It's taken just a little bit of tweaking to get the formula right. That's why I commissioned the Shepherd review late last year and have made subsequent changes to the mandate following that that's helped pick up the pace. I think things are moving and progressing very well now. I'd love to see more projects in Central Queensland, as I said, Senator Ketter.

Senator KETTER: We all would like to see that.

Senator Canavan: We would have had the largest project by far in the NAIF if the Adani Carmichael mine project had been allowed to proceed, but, as you would be well aware, the Queensland Labor government, for political purposes, knocked that on the head.

Senator KETTER: There was a fair amount of publicity in May this year around Beef Week—

Senator Canavan: Yes.

Senator KETTER: about the potential cattle project—the NAIF project for Central Queensland. That doesn't seem to have eventuated.

Senator Canavan: That's the project we were speaking about earlier, but Ms Walker might want to add some more. That's the Signature Beef.

Ms Walker: That is still in due diligence, so we are still actively engaged with the proponent. These things have a gestation period and we are working through that. I was actually going to comment that we are ready, willing and able to assess any project at any time that's ready to be assessed. I think sometimes people do lose sight of the fact that this is not a model that we are the proponent for. We are a lender, a financier, and we assess projects, but we must have a proponent that comes forward. We are able to look at projects right across the spectrum of infrastructure and now, with a very broad mandate, really anything that can contribute to economic development in an area. The issue is that we need proponents to come forward—so equity to come forward and sponsors to come forward.

I think we've demonstrated with projects like Genex and the Northern Territory airport that we will be very much on the front foot and we will approve projects as soon as possible to the most advanced stage that we can do. I actually think that we've made tremendous progress in the two years and four months since establishment—in fact, it was my second anniversary in the role yesterday—to have 10 projects.

CHAIR: How many projects have the Queensland government actually submitted to the NAIF?

Ms Walker: The Queensland government?

CHAIR: Yes.

Ms Walker: We don't have any GOCs, if that is the question that you are asking. We have a number of government and corporations that we would love to be working with and we've identified as projects that we feel would fit our mandate. We are progressing those discussions with the Queensland government. We will be on a case-by-case basis and we are encouraging them at every step of the way to come forward and to engage with us.

CHAIR: What do you think their reluctance is?

Ms Walker: I am not sure whether they thought that NAIF was meant to be dealing purely with the private sector. Obviously, we have done JCU—that's a statutory authority—and we have demonstrated that we can work with the public sector. Our mandate is very flexible. I think they now have that message very clearly and they are starting to engage on that front. But it will still take them some time to get through to a point where we can get a project up which is a GOC project. They are also probably complex projects. But, yes, there is very fertile ground with the GOCs if they bring those projects forward.

Senator KETTER: There was an announcement made in Beef Week. As the minister has said, this is a drought-stricken areas and farmers struggling. It sound almost like it was a media stunt to announce a project and then we are still a fair way off.

Ms Walker: No. I think we had this discussion last time. There was an announcement. The proponent was obviously at Beef Week, and we had our chair presenting at Beef Week. It was just after the investment mandate changes were made. It was positive from the proponent's point of view to publicise that they were looking to develop that project because it will be a multi-user project, so they have a real interest in attracting people other than just themselves to use that facility. We, obviously, were keen to let people know about the new mandate, the expanded breadth of the mandate. That project is progressing. We've had many conversations about commercial-in-confidence, and it is not appropriate that I give you an exact pinpoint of where the discussions are at. But I think it has been progressing very positively, as I said before. From an announcement in May, which was an early engagement on the project, to where that project is at, I think that's progressed very quickly in the scheme of things.

Senator KETTER: Minister, on 4 May 2016, you said:

The Northern Australia Infrastructure Facility continues the legacy of other great nation building initiatives that Australian governments had taken in the past, like the Snowy Mountains scheme and interstate railways.

Do you still stand by this comment, or were you swept away by the moment at the time?

Senator Canavan: Absolutely. It is helping to build our country. The latest investments from the Northern Australia Infrastructure Facility have proven that, particularly the ones that are opening up mining opportunities in the Kimberley and Pilbara regions. It is an innovative way for infrastructure to be built in Western Australia. The airport investments in the Northern Territory are incredibly important, particularly to a Northern Territory economy that will probably struggle a little in the next few days as the large INPEX project winds down.

As has been expressed, I would love to do more business in Queensland. What marks North Queensland out from the other areas of northern Australia from an infrastructure perspective is that a lot of the infrastructure is owned by the state government, by government-owned corporations. There hasn't been the level of private investment you have seen in the Western Australia mining industry in the past or the privatisation that you have seen in Northern Territory over time. So a challenge for us is to fund upgrades to ports, to railway lines, to energy

infrastructure when it is owned by the Queensland government. As Ms Walker said, we are making progress in engaging with the Queensland government. We have had a few hiccups in the past, but I think that the value of the Commonwealth government's finance here, particularly the patient capital that the NAIF can provide, is starting to resonate with some of the government-owned corporations. I'm hopeful we'll see tangible results soon.

Senator KETTER: My final line of questioning is in relation to the CHINA MINING 2018 congress and expo that ran from 18 to 20 October. Minister, were you registered to attend that event?

Senator Canavan: I did plan to attend that event. I'm not sure if I was formally registered or not.

Senator KETTER: You don't know whether you paid—

Senator Canavan: I would have to take that on notice.

Senator KETTER: My information is that registration fee was about \$1,053 Australian.

Senator Canavan: I would have to take it on notice.

Senator KETTER: Did the department pay for the minister to speak at the event?

Senator Canavan: I think we might take that on notice. I'm not sure.

Senator KETTER: Were any of your staff registered, and if so how many?

Senator Canavan: Again, I'll have to take that on notice.

Senator KETTER: It's sound like we are going to take these all on notice. What was the cost of it? Were you meant to be part of an Australian delegation, Minister?

Senator Canavan: I was planning to attend that particular conference, but it was only going to be myself, staff and departmental officials.

Mr Lawson: We'll check it further, but we have no sense that the department paid for any registration fees for that.

Senator KETTER: Were airfares paid?

Senator Canavan: We'll take that on notice.

Senator KETTER: Did the department purchase sponsorship or exhibitors fees for the conference?

Mr Lawson: We understand that Geoscience Australia were at that conference, so we'll follow up on that.

Senator KETTER: Minister, can you tell us when you cancelled?

Senator Canavan: I might take that on notice.

Senator KETTER: Are you concerned that Australia wasn't represented at this, apart from Geoscience Australia?

Senator Canavan: Obviously I was planning to attend, but that did not eventuate.

Senator KETTER: Can you tell me why you cancelled?

Senator Canavan: I'll take that on notice.

Senator KETTER: You can't tell me why?

Senator Canavan: I'll take that on notice.

CHAIR: We will let NAIF go and resume at 9.30 with radioactive waste and NOPSEMA.

Proceedings suspended from 21:19 to 21:30

CHAIR: Senator Patrick has some questions.

Senator PATRICK: I'll just start with the National Radioactive Waste Management Facility. Mr Wilson, I'm just wondering if you could give me an update of where things are at? I know there's a court case on foot. Perhaps, without going into the details of the court case, you could tell us about the sequence of what's happened over the last couple of months, where we're at and where you think it's going to go?

Mr B Wilson: I'll ask my colleagues on the other side of the table to also add in on elements that they're working on. You're obviously aware of the court case. A hearing date of 30 January 2019 has now been set by the Federal Court. The case was discontinued in the South Australian Supreme Court at the agreement of both parties and reinstated in the Federal Court. You're absolutely right; we're not going to comment on anything on the matters before the court, obviously, so I'm not going to speculate on anything to do with the court case. That case has been brought against the District Council of Kimba by the Barnjarla Determination Aboriginal Corporation—a claim of racial discrimination. That's obviously being defended by the District Council of Kimba.

Senator PATRICK: Can you just tell me why it got transferred to the Federal Court from the Supreme Court?

Mr B Wilson: I can allude to it. I'm certainly no lawyer, so I'll—

Senator PATRICK: Sure—with that caveat.

Mr B Wilson: There are questions of jurisdiction about whether the South Australian court was the right court to hear the case. To make a claim on racial discrimination, it technically had to go through the—Robert's here. Robert can actually answer this. He's from our internal legal area.

Senator PATRICK: Sure—thank you.

Mr MacLean: Mr Wilson is correct: the South Australian Supreme Court did not have jurisdiction to hear a claim under the Racial Discrimination Act. The matter first had to proceed through the Australian Human Rights Commission, and when it was dismissed by the Human Rights Commission the appropriate court was the Federal Court of Australia.

Senator PATRICK: I thought there was like cross-vestiture between the federal and state courts?

Mr B Wilson: I think all parties agreed to not take time in pursuing that particular jurisdiction—

Senator PATRICK: So there wasn't an interlocutory—

Mr B Wilson: So they both agreed to discontinue. I have just one observation. The District Council of Kimba has provided an undertaking not to proceed with the proposed ballot until that's been resolved. The Federal government has talked to the Flinders Ranges Council and the Outback Communities Authority, who were going to run a ballot on the other community at Wallerberdina Station. We've collectively agreed that we'd also not run that ballot until the current matter's resolved.

Senator PATRICK: I think that's probably sensible. Are the ATLA people in a similar boat? Do they have rise for some sort of application that might then disrupt the process again?

Mr B Wilson: That would be a question, obviously, for ATLA. Their CEO did write to—

Unidentified speaker: To me, I think.

Mr B Wilson: I think it was you, but it could've been the Flinders Ranges Council. We'd have to check. Their CEO wrote, indicating that, in his view, we should withhold the process around Wallerberdina Station, and, if we didn't, he would consider engaging in a similar legal question. We withheld the ballot, and so—

Senator PATRICK: It makes sense to do that on the basis that we'll wait for the benefit of the decision, and no doubt ATLA will wait for the benefit of the decision.

Senator Canavan: In good faith, I thought it was absolutely appropriate to treat both communities the same, so to speak, given that the legal questions that are being tested in the case of Kimba would, of course, similarly apply, given the ballot to Hawker is also being conducted under the South Australian Local Government Act or the relevant act.

Senator PATRICK: All right, so the court will hear the matter on 30 January. That's a substantive hearing—it's not an interlocutory hearing?

Mr B Wilson: No, they've had an issue case management or directions hearing already—last Friday—and I think they're going to have another one on 5 December to tidy up some administrative questions. The Barnjarla people have indicated that they may bring a second claim for damages against the council, and the court will consider that if it comes forward in that time.

Senator PATRICK: A claim for damages wouldn't prohibit the ballot, whereas clearly the first issue before the court needs to be resolved.

Mr B Wilson: I'm not going to speculate on how the court will handle it, but the question it will consider on 5 December if this second claim is filed is whether it will hear the two matters together. The presiding judge I think indicated that the substantive matter is the discrimination matter, and that would obviously come first.

Senator PATRICK: I come back to you, Minister. I am reading an article written by Michael Owen on 18 June about the race to lock in a nuclear dump before the federal election. I want to read this to you because I don't want to verbal you. It says:

The decision will be made in the second half of this year ... one way or another we need to make a decision," he said—referring to you. It continues:

"We do not want this overlapping with a federal election. We have to find a solution."

I want to make sure that that's an accurate statement.

Senator Canavan: Yes, that's accurate.

Senator PATRICK: What's going to happen I guess is that the matter gets heard on 30 January and a ruling made sometime in February. We are almost overlapping a federal election.

Senator Canavan: Senator, obviously this was not the government's desired time line.

Senator PATRICK: Sure, I appreciate that. That was on 18 June. I'm not suggesting you should have predicted that there would be pending litigation, but what does that mean? I presume that means you do not want to, for political reasons, do this whilst there is an election running.

Senator Canavan: I think when speaking to the community on the ground there there was a preference not just in regards to the federal election but also, as I'm sure you're aware, the local government elections in South Australia, which will be held soon. There was a preference to not have this question interfere with a separate question at a ballot box, given that they're very separate issues obviously at either a local level or a federal level. So that was the ideal circumstance. We have not been able to achieve the ideal circumstance that we would've liked to have been able to. We will now work through the court process. I can't predict now when that will conclude, so I'm not going to go into hypotheticals about what might or might not happen beyond that. We're concentrating on working through that at the moment.

Senator PATRICK: I'm working off the statement you have made. It appears to me that we won't have this decided before the next federal election.

Senator Canavan: Senator, I can't answer a hypothetical question, because it depends on outcomes of a court that I can't and won't prejudge.

Senator PATRICK: When you said that you don't want this overlapping with a federal election I presumed you meant that.

Senator Canavan: As I've already outlined, this ideally was not our intention.

Senator PATRICK: So when you said 'we do not want this' you didn't mean that you wouldn't do it?

Senator Canavan: Senator, I can't be more clear than we thought the government's time line was the most appropriate one. Due to circumstances outside of our control we have not been able to meet that time line.

Senator PATRICK: I guess we'll watch this space then, won't we?

Senator Canavan: Yes, there are events afoot.

Senator PATRICK: Mr Wilson, I want to go to an answer you provided to the references committee. A FOI request had been made and the department responded saying that documents exist that fall within the scope of the FOI request. There were lots of section 22 exemptions—'the information is not relevant to the request'—but there were three documents where portions did fall within the request. Maybe it was just a misunderstanding, but I asked for you to table those three documents and what I got back was something different. The FOI applicant has subsequently received at least one of the other documents, and it wasn't common with what you had tabled. I'm just getting to the point: there are two documents that exist that have not been released under FOI that I think fell within the request that I made in the references committee.

Ms Chard: Since your question in the committee, there were documents that were released under FOI in relation to the FOI request. There was some information in that FOI request that was redacted. The grounds are the deliberative processes of the department, and I appreciate you've made the comment previously in the inquiry that those grounds don't apply to your question on notice in the Senate inquiry. When we answered your question originally, we sought to summarise the information that was in those documents. On your second question—your supplementary question—following our summary of that, you've asked if we fully disclosed all of the information that relates to assessing community sentiment, and we're currently reviewing those documents to determine if there is anything in those documents that falls outside of what has already been released in the FOI request.

Senator PATRICK: But to be really clear, the question I'm asking from a Senate perspective is simply that you table the two documents that remain in that FOI request. I don't want a summary; I simply want you to table the two documents. They are documents which, in the FOI world, have a section 47 deliberative claim over them. Those claims do not apply to the Senate—those particular exemptions. What's the issue with simply tabling or providing those documents to the committee?

Ms Chard: Senator, we can take that on notice. It is actually a different question to the supplementary question that you asked following the Senate inquiry. Your question was: was there any additional information pertaining to assessing community sentiment? I appreciate I'm getting into semantics, but we can take that on notice.

Senator PATRICK: Just to be clear, I'm not asking you to disclose what would normally be exempt under the section 22 claim under FOI; I'm just trying to be very narrow in what I'm requesting that you table, and that is

simply the information that falls within the scope that is within those two documents—that scope of what 'broad community support' is. Mr Wilson, I was a bit curious, because I note you made that decision. I know there's a matter afoot, but it's not before a chapter III court, so there are no sub judice issues. And, indeed, nothing said here can be produced in the tribunal, so we're safe in terms of anything we say here. But perhaps a general, broad principle where you suggest that advice given to a minister deserves some form of protection—that was the general principle, you said, in your FOI response. Now I put it to you that public servants are obliged by their position to provide robust and frank advice to a minister, but, in doing so, that obligation is not diminished by a requirement for transparency. And, indeed, if you say advice is fearless, it is hardly fearless if the only person you want to give it to is the minister.

Senator Canavan: I think that's a fairly broad question, Senator Patrick, on a broad range of issues. My understanding of the general practice, particularly at these committees, is that advice to government through its deliberative process is normally not disclosed.

Senator PATRICK: No, actually, that's not correct. I've studied *Odgers* in great detail. It is the first under the list of claimed exemptions in *Odgers* not accepted by the Senate. Often, claims are made about advice, about legal professional privilege, about confidentiality in legislation, and none of those are accepted by the Senate. But I'm actually referring strictly to the FOI domain, and it's a question that goes to culture. It's actually pretty much settled in the FOI world that advice is not exempt under FOI. I'm not trying to litigate the decision that is still pending, but I'm going to the culture of officials who are obliged to give frank and fearless advice and are, at the same time, obliged to be transparent in what they do.

Mr B Wilson: I can certainly, speaking on my behalf, say that, yes, I provide advice to the minister. Whether it's frank or fearless is, I guess, an objective judgement.

Senator PATRICK: But you get the point—

Mr B Wilson: I certainly do.

Senator PATRICK: 'fearless' means that, actually, you don't mind if anyone sees it because you're so confident in that advice.

Mr B Wilson: And I certainly act with great integrity and transparency around what I do and say. I certainly don't have a cultural issue against transparency. My comments were related to: the decision I made was in relation to deliberative policy advice and that that aspect of it was not going to be released under this FOI request. We released most of the rest of the brief that we provided to the minister. That's the approach we took. It certainly wasn't trying to hide anything.

Senator PATRICK: So you were just relying on the deliberative aspect. I seem to recall—I did read the decision—I thought that was part of your claim. 'Deliberative' I accept. You're entitled to make that claim. I'll walk away from that topic; thank you. Thank you, Chair, for your indulgence. I'd now like to go to NOPSEMA.

Senator Canavan: Just to be clear, all departmental officials now—we're finished with the department. Just NOPSEMA to go.

National Offshore Petroleum Safety and Environmental Management Authority

[21:47]

CHAIR: Good evening to officials from NOPSEMA and thank you for joining the committee. Is there an opening statement from NOPSEMA?

Mr Smith: No, not this time round. We thought we'd jump straight into it.

CHAIR: Terrific.

Senator KETTER: Welcome back, gentlemen. My questions relate to the recent Senate inquiry into the work health and safety of workers in the off-shore petroleum industry, which made 13 recommendations, six of which went to NOPSEMA specifically. I'm just going to ask generally: what are you doing in response to those recommendations and, if you're accepting them, how are you progressing with their implementation?

Mr Smith: At this point the government hasn't responded to the report. I understand they're still working through that process, so there isn't a position as such to advice estimates. Having said that, I can say from NOPSEMA's perspective that there are at least some things in the report that we think have merit, and we've already proceeded to implement some.

Senator KETTER: Can you tell us—

Mr Smith: I can give you some examples, if you'd like.

Senator KETTER: Of the six recommendations, are any of those recommendations some of the things that you're already working on?

Mr Smith: Yes, they are. For example, there's a recommendation in there—I don't have the recommendations in front of me, but I think one of them relates to an HSR forum, a health and safety representative forum. We've already started organising that forum. It's a tripartite organising committee that I chair along with representatives from the ACTU, from one of the unions, from industry and from the department as well.

Senator KETTER: I might just step through some of the individual recommendations—firstly, the recommendation that:

... NOPSEMA and facility operators ensure that HSRs—
health and safety reps—

are present and fully engaged when NOPSEMA carries out its inspections by:

- requiring HSRs to accompany NOPSEMA inspectors on their inspections; and
- requiring NOPSEMA inspectors to meet separately and privately with HSRs during inspections.

What are you doing in response to that recommendation?

Mr Smith: We already meet privately and separately with HSRs. At the start of an inspection, we do that, and we also do so at the conclusion of an inspection. So that component of the recommendation is already in place and has been for quite some time. The legislation already provides for HSRs to accompany our inspectors during an inspection. They do on occasions, and we welcome that. There's no restriction on them actually joining us.

Senator KETTER: But you would stop short of actually requiring the HSRs to accompany you on inspections?

Mr Smith: The legislation doesn't give us the power to require them to do so.

Senator KETTER: It also recommended:

... that NOPSEMA carry out regular, unannounced—
or short-notice—

inspections as part of its standard inspection regime.

What are you doing about that one?

Mr Smith: Yes, we already undertake unannounced inspections. We have done some this year, in addition to past years. We expect to continue doing that. The unannounced inspections are typically onshore. You effectively can't turn up unannounced at an offshore facility, but we still do some offshore inspections that we would say are very short notice, as in a matter of days. After an incident, we'll get out there and inspect. So, effectively, we're doing unannounced inspections both onshore and offshore.

Senator KETTER: What's the average notice time that you would provide the employer when you carry out an inspection?

Mr Smith: It depends on the background to the inspection. If it's a planned inspection, we will typically give notice weeks in advance to the companies. If it's in response to an incident, it will depend on the nature of the incident. If we think it's one that's particularly serious, we will do an inspection often within a matter of days.

Senator KETTER: The inquiry recommended:

... that NOPSEMA and Australian Maritime Safety Authority update their Memorandum of Understanding ...

Are you doing anything about that one?

Mr Smith: Yes, I've already spoken to the CEO of AMSA. We have discussed the merits of that recommendation. We've agreed that we will refresh the MOU before the end of this year.

Senator KETTER: Was the MOU last updated in 2009 or 2013? I've seen differing reports about that.

Mr Smith: I can't confirm that. It was before my time with NOPSEMA.

Senator KETTER: The Senate inquiry was provided with information which referred to a 2009 MOU, but then there was an ATSB investigation into the death of Mr Kelly, I think it was, and that referred to an AMSA-NOPSEMA MOU updated at 2013. Perhaps you could take that one on notice.

Mr Smith: Yes. I can tell you that we're working off the 2009 version. I'm not aware of the 2013 version, but I have heard reference to it along the lines you've mentioned.

Senator KETTER: Is that something you can check out for us?

Mr Smith: Yes.

Senator KETTER: Thank you. The 2009 MOU provided for several important joint NOPSEMA-AMSA initiatives and protocols, including jointly conducted audits and inspections, protocols for WHS investigations where jurisdiction is not clear, and the development of complementary WHS promotion and education material, codes, guidelines and programs. Can you tell me which of these joint initiatives are actually occurring?

Mr Smith: Yes, we do quite a range of activities jointly with AMSA. We have regular meetings with them, strategic meetings with them, to discuss activities in relevant jurisdictions. In terms of the interface between our jurisdiction and theirs, neither organisation believes there is an issue, so it hasn't been progressed any further, because neither agency thinks there's an issue that needs to be progressed further. Does that cover each of the issues you mentioned?

Senator KETTER: Jointly conducted audits and inspections—you're doing those?

Mr Smith: No, we haven't for quite some time. We haven't felt the need, because that recommendation, if I recall correctly, is underpinned by the idea that there's some lack of clarity about the jurisdictional boundary. Neither agency believes that's the case, so we don't feel the need for the joint inspections where that situation arises.

Senator KETTER: Okay.

Mr Grebe: Senator, I might also refer back to question on notice BI-108 at last estimates. We provided an expanded list of ways in which we work cooperatively on joint initiatives with AMSA.

Senator KETTER: Okay. Does that include things like educational material, codes—

Mr Grebe: Guidance, yes, newsletters, working on the national plan, associated documents and governance arrangements under the national plan—and there are a range of examples there.

Senator KETTER: Okay, thank you for that.

Mr Smith: We have also relied on AMSA for input into our enforcement strategy, for example.

Senator KETTER: Have you taken any steps towards maintaining a register of HSRs? That was one of the recommendations.

Mr Smith: Nothing since the inquiry. We haven't progressed that issue at this point, Senator.

Senator KETTER: Is there a reason for that? Do you not agree with that recommendation?

Mr Smith: We haven't considered that recommendation further since the inquiry. We've been—

Senator Canavan: Obviously, the government will formally respond to the report, as is the practice, but we're still considering those recommendations. I'd like to compliment Stuart for his proactive approach in acting on some of those recommendations before that formal response is finalised, but we'll make sure we consider all the recommendations in detail.

Senator KETTER: The inquiry recommended:

... that NOPSEMA's Enforcement Policy be amended so that its response escalates for each instance of non-compliance by the same organisation or in respect of the same facility.

Have you acted on that recommendation?

Mr Smith: We believe our enforcement strategy already sees us escalate penalties where we think there's been a repeat, so there hasn't been any change yet. We haven't done a formal review of our strategy against that recommendation yet, but I can tell you that's our starting point.

Senator KETTER: So it currently escalates for each instance of noncompliance—is that what you're saying?

Mr Smith: Yes. If we think that a company is engaging in a continuing practice which we find unsatisfactory, we will escalate.

Senator KETTER: And what are you doing to ensure that prosecution action is taken where there's been repeated noncompliance with the legislation?

Mr Smith: We consider each matter on its merits. If we think a prosecution is warranted then we take action. We're pursuing one prosecution at the moment. So yes.

Senator KETTER: Is that in relation to repeated noncompliance?

Mr Smith: No, we thought it was a matter that warranted prosecution in its own right.

Senator KETTER: Just on HSRs, can you tell me how many interviews with HSRs in the offshore industry you've conducted in 2018?

Mr Smith: I don't have that number in front of me.

Mr O'Keeffe: May I come in here, please. We don't interview HSRs as such. What we do is that, as part of our inspection program, for each offshore inspection, when we hold an entry meeting, we will meet with the HSRs—if you call that an interview; that's actually a meeting with them—and again on exit as well. That happens on every single offshore inspection that we do.

Senator KETTER: Do you keep any stats on that?

Mr Smith: Yes. In 2017-18, we undertook 155 inspections, so it would be reasonable to assume we would have conducted around 300 meetings with HSRs at least.

Senator KETTER: And what training and engagement with HSRs on the off-shore industry have occurred in 2018?

Mr Smith: Do you mean training and engagement that we've undertaken? In terms of engagement, we've had the meetings, we've had the engagement when we're on inspections and we've had some other engagement. We don't conduct training for HSRs, in terms of the other part of your question. We do accredit registered training organisations, who then provide the training for HSRs.

Senator KETTER: Can you tell me how many participants have attended those courses? Do they report that to you?

Mr Smith: No, they don't report that to us.

Mr O'Keeffe: What I can say is that we attend the training courses. We go in and make an appearance and introduce ourselves as NOPSEMA and explain what we do. I personally have attended a training course. At that course, there were only two participants, so one of the problems is that there's a lumpy nature in terms of the numbers attending these courses, but we try to cover all of the courses.

Senator KETTER: Do you ensure that HSRs have access to an electronic copy of the safety case for their site?

Mr Smith: We ensure that HSRs have access to a safety case. It doesn't necessarily have to be electronic.

Senator KETTER: So, there's a paper—

Mr Smith: In some cases, there are copies of the safety case available in hard copy on the facilities.

Mr Grebe: It's probably also worth pointing out that many staff on a facility may not have access to IT facilities, so a hard copy is usually the best way for—

Senator KETTER: Whose responsibility is it to provide the HSRs with the safety case for their site?

Mr Smith: The operator.

Senator KETTER: And is it part of your role to ensure that the operator does that?

Mr Smith: Yes. We expect every staff member to have access to the safety case, and we check that on inspections.

Senator KETTER: In relation to enforcement activities, how many WHS investigations has NOPSEMA conducted in each year since it replaced NOPSA? At the last estimates, I understand you gave us a five-year average. I'm interested in the number of investigations in each year.

Mr Grebe: I think we did answer that on notice as well—BI-109. As part of that question, we provided answers to the number of OHS investigations between 2012 and 2017 by year. So, for example, 2017 shows 301 investigations, which reflect an investigation conducted into each OHS reportable incident.

Senator KETTER: So you provided that for each year?

Mr Grebe: Yes, from 2012 to 2017. Similarly, you had a follow-up question about the enforcement actions across each of those years and the answers are provided against each of those years as well.

Senator KETTER: How many of those investigations identified noncompliance?

Mr Smith: All of those investigations resulted from concerns that there may be noncompliance—so, in that sense, all of them.

Senator KETTER: We're talking about an average of 300 or so investigations per year?

Mr Smith: Yes.

Mr Grebe: Yes. The lowest is 301; the highest is 403 in 2012.

Mr Smith: Perhaps, just to be clear, the outcome of some of those investigations would be that they might have been minor issues or they may have even been false alarms. Nonetheless, they were notified to us as incidents, so they were investigated.

Senator KETTER: Can you tell me about the nature of the instances of noncompliance—and I'm more interested in serious noncompliance—and what enforcement actions were taken in each case?

CHAIR: Not all 300!

Mr Smith: Perhaps if we just run through the nature of the enforcement actions that we've taken during 2017. I might get Mr Grebe to run through the categories, and we can elaborate on some of them, if you'd like, but perhaps not all.

Senator KETTER: Is there a document you can perhaps provide us with?

Mr Grebe: Yes. It's actually part of the answers to questions on notice from last estimates, BI-109. But I was going to explain that, in 2007, for example, with 301 notifications, there were a total of 37 enforcements, ranging from the lower order such as written warnings relating to breaches which may be administrative in nature, for example, through to a notice of intent to withdraw the safety case, which essentially would shut down the operation. There was one such instance. In between those more extreme ends, I'd say there were a range of different notices, including 27 OHS improvements, which relate to addressing significant threats to health and safety to staff at facilities and people at facilities, and two prohibition notices where there's a significant and immediate threat. So these aren't where there are actual hazards exposed; there has not been an escape of hydrocarbon gas and a fire and explosion. It's that there are failures of controls which could lead to those, for example.

Senator KETTER: You say you've already provided those figures to us.

Mr Grebe: Yes.

Senator KETTER: That was some months ago. Are you able to provide an update on those figures?

Mr Grebe: Certainly.

Mr Smith: Yes. The figures we've provided are per calendar year from 2012 to 2017. I can give you the last financial year, so that'll take you through to 1 July of this year. In terms of OHS only for 2017-18, there were five requests for revision of a permissioning document, such as a safety case. There was one general direction and one well integrity general direction and there has been one prohibition notice and eight improvement notices.

Senator KETTER: I have a question you could take on notice for me, if you haven't already done so. How many enforcement actions has NOPSEMA taken in each category of enforcement action? Is that something you can look into?

Mr Smith: That's included in the figures from the last hearing.

Mr Grebe: And we've just added this financial year.

Senator KETTER: If you could add the last financial year.

Mr Smith: Those are the figures that I just read out.

Senator KETTER: How many prosecutions have you undertaken in the last 12 months?

Mr Smith: None.

Senator KETTER: Your submission to the Senate inquiry discussed a range of enforcement options other than prosecution. Does NOPSEMA have a policy—written or unwritten, official or unofficial—that NOPSEMA will only prosecute in circumstances of noncompliance resulting in fatality or serious injury?

Mr Smith: No, it does not. We have one prosecution we're pursuing at the moment, so, no, we don't have any rules along the lines that you've just outlined. I can tell you, in the event of a fatality, we would take a prosecution as a matter of course, but, for other offences, we consider them on their merits. In our view, in many instances, some of the other tools that we have are actually more effective than prosecution. If I can give an example, if there's an incident on board an offshore facility, a prohibition notice may well be a more effective tool from a range of perspectives. A prohibition notice will stop the conduct immediately, so it removes the risk immediately. That prohibition notice will be published, giving the opportunity for the lesson to be shared across the whole industry within a matter of days, whereas a prosecution can take several years and may not deliver the outcome. Sometimes, people are interested in the scale of a prosecution for a financial penalty. If we are successful, the financial penalties associated with the prosecution usually end up being in the tens or maybe hundreds of thousands of dollars at best. But a prohibition notice, if it stops production at the facility, can cost in the order of a million dollars a day for a company, so the financial impost is actually far more significant and far more direct. So, we will choose whatever tool we think is going to be most effective in delivering compliance, not only by that company but by the industry more broadly.

Senator KETTER: Finally, going back to the information you said you have already provided on notice, does that break down enforcement actions, or the number, into things like the power to take possession of plant and samples, do not disturb notices, prohibition notices—is that the categorisation?

Mr Grebe: It covers the enforcement tool itself—the thing that gives effect to enforcement—exercising powers to not disturb a site, or to collect plant or equipment enforcements and such. It is like exercising powers to take documents or to require people to ask questions. We don't separately catalogue the instances where we have used powers. They are not enforcements themselves, they are—

Senator KETTER: There are things like infringement notices, injunctions—

Mr Grebe: It covers not a formal enforcement but a recognition that there was a breach, which is a written advice or a warning; an OHS improvement notice, which is a formal enforcement under the act; an OHS prohibition notice, which is another formal enforcement under the act; requests for revised safety case, which is a formal enforcement under the regulations; OHS direction, which is use of general direction powers under the act; intent to withdraw safety case, which is an enforcement under the regulations; and our preparation of a prosecution brief. We don't carry out our own prosecutions; it's a referral to CDPP. They're the ones we cover in the questions on notice.

Mr Smith: There are other things—things like when we do an inspection we will make recommendations to the companies for changes and we will follow up those recommendations with the companies over subsequent periods to ensure that they're compliant with, are completed and closed out. We don't record those as enforcement actions. If we did, there'd be several thousand enforcement actions per year, and those numbers would swamp the information that I suspect the community is most interested in, which is these more-substantial enforcement actions.

Senator PATRICK: I have an article here entitled 'Victorian trawl fishers cheer as massive seismic survey rejected.' Are you familiar with that?

Mr Smith: I've seen some media reports. I may not have seen that specific article.

Senator PATRICK: I'm relying on that as a lead in to the discussion. Just to get us into context: so, fundamentally, NOPSEMA reject a proposal to conduct some seismic surveying? Is that right?

Mr Smith: Yes. If I can provide context, I've seen the media reports suggesting we rejected the seismic survey, but that is not actually correct.

Senator PATRICK: That is what interested me. Let's find out the truth.

Mr Smith: It may seem like semantics but we haven't accepted their request, their proposal, which means they have an opportunity to modify the proposal and resubmit it. If the article is the one I'm thinking of, it was suggesting that, because of our decision, there would now be cheaper seafood than would have otherwise been available at Christmas. In that sense, there is an element of truth, perhaps. If the company doesn't get approval before the end of the year, then any seismic impacts that may have impacted on the fish stocks and that may have increased fish prices at Christmas—there's an element of truth in that then and I'm prepared to concede that. But it would be wrong to assume that we have said this seismic survey is not acceptable in any circumstances and nor is it necessarily the case that the company can't come up with some sort of proposal that might be acceptable in future.

Senator PATRICK: I'm interested in the reason as to why it wasn't accepted?

Mr Smith: Okay. I'll get Mr Grebe to elaborate on that one.

Mr Grebe: Thanks. Currently, the environmental approval process for exploration activities is an environment plan. It doesn't have any public disclosure elements to it, so the environment plan is a confidential document currently. The decision, obviously, is based on information largely obtained from the document and from other sources of information we use to assess environment plans. The assessment is still in progress in the sense that it's been provided back to the proponent to modify and resubmit, as Mr Smith outlined. There are time frames we suggest for completing that process and returning it to us to continue assessment. But, in essence, they can take as long as they need to amend their proposal and resubmit it.

The only information we're authorised to publish is anything we create ourselves, so we don't publish a decision notice for this particular assessment. The criteria that hasn't yet been met is demonstrating the impacts to the environment, and that includes the commercial aspects of the environment—the economic features. For example: fish, and therefore fisheries. They haven't been demonstrated to be of acceptable levels. Also, the proponent hasn't demonstrated consultation with relevant persons. In this particular instance, those are organisations or people who may be affected by the activity. They haven't demonstrated that consultation has

been carried out in a way that the regulations describe—that is, by providing sufficient information and time to enable them to make them an informed assessment of whether they're affected and to raise any objections or claims.

Senator PATRICK: In terms of the consultation: the act has a requirement in respect of a minimum level of consultation?

Mr Grebe: Yes, it's regulations, but the law sets out the requirements for consultations that a titleholder must complete before submitting an environment plan. That has quality elements to it, in the sense that it requires a titleholder, firstly, to identify relevant persons—and the relevant persons are defined in the regulations. There are a range of different categories, including government and state and Commonwealth government organisations. And there are also, as I said, persons or organisations whose functions, activities and interests may be affected.

Senator PATRICK: So the fishing industry, for example, may be one?

Mr Grebe: Definitely, yes.

Senator PATRICK: Actually, aren't the oil and gas industry meeting with the fisheries industry to come up with a plan about how to deal with this more generically?

Mr Grebe: Certainly. There are a range of initiatives that are being pursued to try to improve consultation. But I think that's more about the information needed to consider what kinds of impacts may occur as a result of things like seismic and then to develop plans to avoid or mitigate those, as well as improving the consultation between proponents from the petroleum industry and the fishing and seafood sector.

One of the initiatives that the industry established several years ago was a memorandum of understanding between the two industry groups, to agree to cooperate and improve on the way that the activities of both of them could be conducted in the ocean without affecting each other unduly. As part of that, they've recently sent invitations to a range of fishing and petroleum stakeholders, as well as to government agencies, to spend more time together. This is essentially in a forum in regional locations, exploring how they can identify exactly what problems are being experienced by both sides and how they can identify solutions to implement to fix those.

Senator PATRICK: Is government supporting that in any way, or just through attendance or participation?

Mr Grebe: It's attendance. I think that everyone's got a bit of a role to play in fixing any problems or issues that come up through consultation. Sometimes that's on the government's side, be it with the regulators, often it's with proponents and sometimes it's within industries that may be affected in terms of access to information, timeliness and responding to requests for consultation et cetera. We've always advocated that all the people need to have a role to play in the system, let's say, and therefore take part of the responsibility in implementing solutions.

Senator PATRICK: Okay. You said consultation, and then you said 'acceptable levels'. I didn't quite understand the first criteria that they didn't meet?

Mr Grebe: The regulations set out a range of criteria that have to be met before we are able to accept an environment plan, or ultimately, after reasonable opportunity, if the titleholder can't show that they comply, we have to refuse the environment plan. Those criteria cover a range of things. I picked out two of them. One was a demonstration that impacts will be reduced to acceptable levels.

Senator PATRICK: Impact of what?

Mr Grebe: The impact of the petroleum activity of the seismic.

Senator PATRICK: And the impact there being impact on?

Mr Grebe: Seismic surveys emit sound, through a series of air guns, to direct—

Senator PATRICK: Just to help you out: I used to design seismics.

Mr Grebe: Sorry!

Senator PATRICK: And train them. I was trying to get to whether it was a particular fish stock or something.

Mr Grebe: That article is referring to a survey that's proposed by a company called CGG, and they're calling it the Gippsland 3D Marine Seismic Survey. It's over an area of existing exploration permits and acreage which isn't open. They're looking to conduct new seismic using new technology. It covers quite a large area in the current proposal, and therefore it takes a long period of time to conduct. There are a range of impacts that can typically arise from something like that—displacing fishing activity, causing fish to change behaviour and move away, making them less amenable to catching. In this particular instance, from my understanding—I wasn't the decision maker, but from the brief—a large portion of the Danish seine trawl fishery operates there in that period of time, but there are a range of trawl and other fisheries that operate in that area also.

Senator PATRICK: It's a re-survey, so I presume they're going to try to get better resolution data or something like that.

Mr Grebe: Yes. I understand that.

Senator PATRICK: And then they go and reprocess or something.

Mr Grebe: Part of the environment plan process doesn't specifically identify the technical geological purpose, but generally, when an area is being surveyed and it's been surveyed before, it is to provide a greater resolution, particularly at greater depths.

Senator PATRICK: Greater depths normally means lower frequency—

Mr Grebe: Below the sea—

Senator PATRICK: which tends to indicate less resolution, but unless you—

Mr Grebe: It's not necessarily the frequency. You probably know more about this than me now, but it's listening longer, harder, so the technology in the hydrophones is generally the thing that changes.

Senator PATRICK: You can use pulse compression techniques at low frequency, but generally you need low frequency to penetrate the sea floor.

Mr Grebe: Yes.

Senator PATRICK: So that explains that. So this is not some blanket thing you've discovered; it simply hasn't met the criteria. They will get an opportunity to revisit that.

Mr Grebe: Yes, and, as part of that, they'll be needing to continue consulting with relevant persons and ensuring they've given them a proper opportunity to raise objections or claims and adjust their plans to address them.

Senator PATRICK: I'd like to now move to the Great Australian Bight. Can you give me an update of where things are at, particularly in relation to Equinor?

Senator Canavan: I might just quickly say that my understanding is that there are no environmental plans before NOPSEMA at this stage. As you've outlined, Equinor remain involved. Under the commitments Equinor have made to NOPTA and to the government to acquire the acreage, they have plans to drill wells in their period of ownership, which would of course require approved environmental plans before they could occur. But my understanding is that none has been submitted yet to NOPSEMA. With that introduction, though, I'm happy to pass to the NOPSEMA officials if there is anything they can disclose at the moment about Equinor's plans.

Mr Smith: The minister is correct: Equinor have not yet submitted an environment plan to us. So we are not conducting an assessment in that sense. We have had discussions with Equinor about where they're at. We understand their intention is to release an environment plan for public comment before they submit it to us for assessment. That hasn't yet happened.

Senator PATRICK: In terms of drilling, an environmental plan is not the only plan that is carried out.

Mr Smith: Correct.

Senator PATRICK: So we're not talking exclusively about just an environmental plan; we're talking about the initiation of the process.

Mr Smith: Before any drilling takes place, they're going to require an environment plan from us. There will also need to be a safety case and a well operations management plan. We haven't received those documents either. Bear in mind that the operator for the drilling facility won't necessarily be Equinor.

Senator PATRICK: You might have to help me out here. I can't remember whether it was the Great Australian Bight inquiry or whether there was an inquiry before that that looked at NOPSEMA, its efficacy, processes and so forth.

Mr Smith: There seem to be lots of inquiries into NOPSEMA, our performance, how we operate and whether we're doing a good job. I'm pleased to say those reports invariably find we are a good, robust, effective regulator.

Senator PATRICK: I'm now recalling that it was in the Great Australian Bight one. There was a chapter put together by the secretariat, no doubt based on submissions from you, that went through the process. I recall it was quite a lengthy process. What's the typical time frame from front to back?

Mr Smith: For the environment plan?

Senator PATRICK: No, for approval, because you need all of the things to be approved.

Mr Grebe: The environment plan is usually the longest and the one started first, so it's probably the most relevant to your question. Obviously, it depend in large part on how many iterations the proponent needs to

modify and resubmit. In its shortest, the decision time frame can be 30 days. That's the statutory time frame for us to make a decision after a plan has been submitted for assessment. It's very rare. Out of last 15 or so environment plan decisions, for example, all of them required at least one modification, resubmission or additional information, so they are all longer than 30 days. The median environment plan time frame from submission to a final decision, which we publish and make public on our website, for drilling environment plans—I would have to take on notice the exact number—is in excess of 100 days.

Senator PATRICK: I was going to come to that. You talk about secrecy or confidentiality. I will point out that the Senate's inquiry powers come from section 49 of the Constitution and they actually override those powers. I'm just highlighting that for you to ponder on.

Mr Grebe: That's okay. We know you can compel documents.

Senator PATRICK: Even confidential ones, unless there's some other public interest harm. There was a criticism in respect of BP, I remember, because they refused to disclose their oil spill model. Where are we at in terms of when we get through this process there's transparency so that all and sundry can examine the safety plan, the environmental plan and any other such plans that you rely on to make your decision?

Mr Smith: I presume you don't mean for the BP one.

Senator PATRICK: No, it's a general question.

Mr Smith: The BP one is now available publicly; it's up on our website. The arrangements currently provide for a summary of the environment plan to be published within 10 days of approval being granted. However, there are changes coming which Equinor has already indicated it intends complying with for this process, which will include them releasing their environment plan before they submit it to us. They'll release it in full and go through a public comment period before they submit it to us. The document will be out in full in the public domain.

Senator PATRICK: So that's environmental?

Mr Smith: Yes.

Senator PATRICK: Safety?

Mr Smith: No, it doesn't get published during the approvals process. If it's approved, then the safety case must be available to the workforce. In fact, anyone that's on board the facility must be able to have access to the safety case.

Senator PATRICK: What about the public in this instance? Or do you say the safety cases are not related to oil spills; it's a work environment?

Mr Grebe: It's occupational health and safety.

Senator PATRICK: Perfect. There was another article. I just want to get on the record what the position of NOPSEMA is. It was on 6 April, 2018. It said a BP document says an oil spill 'will be a welcome boost to local communities'. I've got the Mayor of Ceduna saying that the company's claim was silly and unnecessary, and I'm inclined to go with that. I just want to get on the record: do you, in any assessments, look positively towards a spill?

Mr Smith: No. I'm pleased you've asked us that question. It is good to get it on the record. We don't condone that approach, and that's reflected in the fact that we didn't accept the environment plan, and that was one of the things we pointed to as being outside the realms of what we would consider acceptable. They did not end up getting approval before they decided to withdraw.

Mr Grebe: I think the point is that it became public in the media because our decision letter was released where we identified that as something that was clearly incorrect. In relation to the more important point—is a spill is acceptable?—no, no spill is acceptable. The act has clear duties to prevent the escape of petroleum, and it's an offence and one of the more significant offences under the act. In no way does any of our authorisation process permit spills to occur simply because a response plan has been prepared to deal with one. Points like that aren't accurate and are worse than not helpful; they're quite silly.

Senator PATRICK: Okay, that's good. There is one area of concern I have, just to put it on the record and maybe to get some feedback or even just plant it as a thought. When I used to work up in Malaysia, I had a colleague who took me to a room in the middle of KL which he and/or his team were never allowed to be more than 15 minutes away from in order to be able to respond to an emergency. One of the interesting things was that this person had set up a business. It was like an ops room of a warship or joint ops out at Bungendore or something, but it was paid for by a whole range of people drilling in the South China Sea. It was amortised. It was quite an impressive facility. This person had all the resources available to be able to respond to a spill. I imagine

something like that is not likely to turn up in relation to this particular activity in the Great Australian Bight—or is it? Are you familiar with what I'm talking about?

Mr Grebe: Yes. It might not look exactly like one in Malaysia. I'm trying to think of the one it might be, but titleholders will generally have cooperative arrangements for oil spill response and other emergency response arrangements. It makes sense economically.

Senator PATRICK: Where I was coming from was that, in the South China Sea, clearly there were lots and lots of operators, whereas in the Great Australian Bight there would be one, at least at the start.

Mr Grebe: Certainly. The company will have its own emergency response and crisis management infrastructure, but there would be somewhere—and it might not be on location in the Great Australian Bight—where there are resources held for deploying to respond to spills, whether it be in the North West Shelf or in the Great Australian Bight. For example, OSRL is one of the main response service providers for oil spill, and their facility in Singapore has similar kinds of features, by the sound of it, to the one you're describing. Their Australian based marine oil spill centre maintains 24-hour round-the-clock response support service provision for oil and gas and also the downstream industry in Australia. So we have similar kinds of infrastructure. It's probably just carved up potentially differently.

Senator PATRICK: I presume that in dealing with a spill you have a pool of resources available to you. Once again, in the South China Sea the distances travelled are relatively small. I myself in the Navy travelled from Singapore down to HMAS *Stirling*. It's quite a long journey. Do your plans require assets of a particular nature and quantity to be within a particular sailing distance of a rig?

Mr Smith: Yes. It's up to the company to propose in their environment plan how they intend to respond in the event of a spill, and we'll consider whether it's acceptable or not. The companies can take different approaches but, typically, they will adopt and use the services of the sorts of operations that Mr Grebe talked about, which will include a whole range of infrastructure and assets that can be deployed in the event of a spill.

We have also undertaken inspections of those facilities to make sure that what they say is available is actually available. Amongst those things, they'll have a range of different devices and approaches, including provisions for capping stacks. There is a capping stack in Singapore, and there are also some new approaches which are coming onto the market.

Senator PATRICK: An issue for most people in Port Lincoln is the fact that there is a capping stack only in Singapore.

Mr Smith: Yes, but there are also new approaches coming onto the market where certain types of capping stacks can be loaded onto aircraft and deployed in pretty short time, in which case it is no longer going to be a case of where the capping stack happens to be located is the delay. To deploy a capping stack actually takes some time in terms of clearing the site and clearing debris and making sure the capping stacks can be deployed. Once you get below a certain threshold, whether the capping stack is deployed in Port Lincoln or Singapore is largely immaterial if it can be deployed on a plane and brought to the location.

Senator Canavan: Can I just add that it is an issue the government takes very seriously. These are matters for NOPSEMA to decide upon as the independent regulator, but I have had numerous discussions with Mr Smith and his team about these technological developments. While it's principally a requirement of the proponents to put forward the proposals, obviously the NOPSEMA team assess those for whether they are best practice or not and have the powers to reject plans that do not adopt best practice and ensure that we can respond as timely as possible to any events.

Senator PATRICK: But you have no powers in this instance, do you, Minister?

Senator Canavan: As I said at the outset of my comments, it is a matter for NOPSEMA to ultimately decide upon. Obviously, I keep abreast regularly of what NOPSEMA are up to and make sure that they are on track to meet their obligations under the act.

Senator PATRICK: But, as a minister, there is nothing you can do—

Senator Canavan: It is obviously an independent decision-making process.

Senator PATRICK: As a final question, because I know it's late: you receive a whole bunch of information and you analyse it against criteria for either environmental compliance or safety compliance. Is your analysis process and criteria publicly available?

Mr Grebe: Yes is the simple answer to that. For environment plans, for example, we publish a range of guidance to assist titleholders' understanding of the requirements. Also, in relation to decision making, we

specifically have decision-making guidelines which set out how we consider each of those criterion for acceptance which I was talking about earlier—for example, the relevant person consultations.

Senator PATRICK: And they are available online?

Mr Grebe: Yes, definitely. They guide our assessments against the law. It's still a case-by-case assessment, so you don't apply them inflexibly.

Senator PATRICK: Clearly, you have experts, as opposed to someone like me who might look and try and do their own assessment.

Mr Grebe: Many people try, Senator.

Senator PATRICK: I'm just wondering what the difference is between you doing it and someone else doing it. Is it the fact that you have got all the information, you've got the expertise and you've got some other documents that help you along the way, a library of information?

Mr Grebe: It is probably yes to all of those things. The expertise base is a large part, but that can sound like you're making it up. It's what you know, and the relevant standards and the other material that's relevant to decision making that all form part of the assessment. We have technical assessments with teams of specialists across a large range of fields with experience in the industry—20-plus years in engineering and the safety team or in drilling, the environment side, and PhD scientists who understand—

Senator PATRICK: Do you look at the economic cost of a spill? Or is it just a technical examination of the spill area?

Mr Grebe: I would call it a technical examination, in terms of the decision about whether the risks are reduced to ALARP in the case of a spill. That is about whether there are controls to further mitigate impacts should a spill occur that can be introduced without grossly disproportionate cost. If they are available, they will be included. It is important to understand how much oil is being removed through the various response strategies.

Senator PATRICK: One of the big concerns in Port Lincoln is that we have a significant fishing industry and so just having the model and ignoring that factor would be a distortion in terms of applying a weighting to that. Clearly, that is important. Whereas if you are well, well away from an industry, at least that economic factor—I'm not suggesting the environment is not important—

Mr Grebe: The consequences of the spill are driven by volume, but obviously that needs to be read in context. If your impact—

Senator PATRICK: And you do that?

Mr Grebe: Yes, absolutely. The environmental setting is large part of environment planning, because spill risks can go quite some distance. The area that may be affected, which gets defined through the environment access process that a titleholder carries out, picks up far and wide places. There is a large range of information needed to be able to make judgements about whether risk reductions are appropriate.

Senator PATRICK: I'm sure as we get closer I'll end up pulling out the Great Australian Bight references in the committee report as a good starting point. Thank you very much, Chair.

CHAIR: I think Senator Stoker and I only have another three-quarters of an hour to go! Don't worry, I'm only joking!

Mr Smith: We were just warming up!

CHAIR: Thank you very much to the officers of NOPSEMA. There being no further questions at this time, the committee's consideration of the Economics Legislation Committee's supplementary budget estimates will conclude. I thank Minister Canavan, officers of the Department of Industry, Innovation and Science and all witnesses who have given evidence before the committee today. Thank you very much to the secretariat. Thank you very much to Hansard for your patience. I declare the meeting adjourned.

Committee adjourned at 22:41