**Number of Speakers: Five**

**Interview Duration: 00:36:21**

**Ben: Participant**

**Sue: Participant**

**Jason: Participant**

**Steven: Participant**

**Ben: Participant**

**[Recording starts 00:00:00]**

Mod: Now, what we’re going to do; we’re going to kick off this session with some questions that I’ve got. And then we’re going to move into an open forum discussion. So a little bit of scene setting for those questions. Is the application of technology advances in conjunction with entrepreneurship, which together translate innovations into productive economic activity and growth? That’s a key sort of opening remark. However, this can only apply if market structures and the regulatory environment are conducive to expansion. It is important for government policies to support innovation by reforming and updating regulatory frameworks that effect innovation activity – a fundamental premise of our review.

So to Sue, question for you. Australia is transitioning from traditional industries, such as large-scale manufacturing to niche and innovative areas of activity. How is the government supporting innovation as we transition into an advanced economy that cultivates and commercializes innovative ideas?

Sue: I think we’ve heard from the minister chapter and verse about the National Innovation and Science Agenda, which is the government’s platform to say that it’s interested in trying to promote innovation and entrepreneurship. And the four pillars that make up that innovation and science agenda represent a path to a more innovative and entrepreneurial country. So within the framework, there is business and individual tax incentives, which I think will address some of the issues that were raised by our two commercial speakers today. Co-investment, capital funding to help good ideas get off the ground; sharpening incentives for industry and research collaboration, including international collaboration; and building Australia’s skills and talent with education initiatives right at the starting of the grassroots with some of the little kiddies and moving, particularly, women in Steam, and some of those other areas where we need to pay attention; and positioning the government as an exemplar, driving innovation in its procurement and service requirement.

So I’m not sure we need to launch a satellite yet in our department, but there’s an opportunity. I’m loophole to that. So, basically, the government has set a framework for innovation and entrepreneurship. It builds on some other things that it already has in place, like an advanced manufacturing growth centre, for instance; funding through the CRC, two CRC programs in the field. Other things such as the Entrepreneurs’ Program that allows people to commercialize ideas through Accelerating Commercialization, which is some funding for those startup opportunities.

Mod: Good. Thank you. Thanks for that answer. To Jason. You’ve touched on regulation already, and it needs to be appropriate to our circumstances. And there are some that feel that the current regulatory environment is too restrictive. And I think you’ve already started to make that point. You provided some examples of those restrictions. But can you provide some more examples of how existing regulation has impacted your specific commercial endeavors and those of your colleagues in the industry?

Jason: Okay. Saber’s business is mostly space operation software, so it doesn’t affect us so much as it affects the customers that we talk to. And, again, a lot of the complaints that I get are mostly because the businesses that I’m talking to in Australia are only about a year old. So the market growth that we’re seeing in CubeSat; it’s hitting Australia pretty nicely. And everybody is trying to figure out how to navigate through it. And the complaints that they’re giving to me are saying things like, we have to prove that this CubeSat is not going to burn up in the atmosphere and hit someone on the head, because we have to solve some sort of work.

And I think what has happened is the regulations out there have been matured over 40 years by countries other than us. And I think those regulations – without being a lawyer, I think those regulations are – they are probably reasonable. But what happens is the interpretation that we’re taking; it is very obtuse. That’s the impression I’m getting. It’s like, all right, you’re launching a CubeSat commercially, 90% of these launches are happening out of the International Space Station, which is low enough that it’s not going to impact a much larger commercial spacecraft, just from the altitude. So you can make certain judgment calls there.

The other one is on the insurance side, people are being forced to pay for much larger dollar figures than they should be. So if you got a $200,000 business – not just the CubeSat; your business is $200,000 at the sea level, all right – and you’re being told you got to set. I don’t know what the number is; I’m going to just pick 80 million out of the year, 80 million in insurance, a 100 million in insurance, something like that. That’s definitely something that the launch provider should be covering, and usually does. So people will sit in this audience we’re talking about, well, they should negotiate that with the launch provider. I’m not sure if they are or not, but that does make a lot of sense to me. That should be, not something part that the Australian government is saying you need this insurance. It should be saying, all right, let’s make sure that this is covered under the launch provider that’s giving you, either from NASA, from an ISS launch, or from SpaceX, or whatever the commercial provider is.

Mod: So you’re suggesting there are some insurance settings that should be reviewed in the Australian context.

Jason: I think so. I think what we need to realize is that the risk for us is much lower if we’re not doing the actual launch. And that’s something that I think is just training other people who are looking at it. Because I know they mean well, but they’re just trying to make sure that we don’t step on our own toes as we start to grow.

Mod: Yeah. Okay. Thank you for that. Steven. In your presentation, you spoke about the shift from binding international treaties and conventions to what can be described as soft international laws, that provide guidance about how nation sates access and utilize space. In this context, what are the emerging priorities identified by agencies, such as the UN, that Australia may need to consider in its domestic legislation?

Steven: Thanks. Well, in keeping with the theme of what’s going on here, we are looking at an era where technology is moving forward very rapidly, things are changing. What was initially perhaps a mere possibility is now a probability and a reality, perhaps, in some areas of space activity. And as I indicated in my opening remarks, the international framework hasn’t moved forward very quickly in reaction to that. Just by its very nature, it doesn’t move very quickly. And the UN process by which international guidelines and rules are established is a consensus process, and it’s still a highly sensitive and political area.

But that’s it. Everybody realizes that in some way, shape or form, if those states that are involved in space activities, as those under their jurisdiction, if they are to maintain the integrity of that, then they have to play the game to a certain degree. And so there actually is a lot of cooperation on important issues. And those issues relate to two areas. Firstly, more broadly, how do we react to technology and the things that are possible? And I’ll come back to that in a sec. and then secondly, how does that align with the future, if you like, sustainability of space activities? And by that, I mean the environmental sustainability in terms of problems with debris, and a whole range of other issues.

And so the international community has identified those two as the main priorities. We have guidelines as to sustainability in the form of debris mitigation guidelines. They’re generalized. They’re not particularly comprehensive, but they’re a starting point. And they’re a starting point that engage best practice. And I think by and large most states are actually following those to a certain degree.

In terms of the technology, how do we react to this? We now have things that really were not within contemplation of regulators, even 10 years ago. So we now have, as we’re hearing about small satellites, the distinct possibility of having large constellations of satellites, being initially now shot out on piggyback launches at high altitudes, causing all sorts of issues, and then, over time, with dedicated launch service providers. How do we deal with that from an environmental viewpoint, from a regulatory viewpoint in terms of frequency management, and from a registration viewpoint and information that, you know, these are difficult issues?

I was recently at a discussion that involved the UN-Space and UN ICAO, that is the International Civil Aviation Organization, wrestling with the whole idea of human spaceflight, commercial human spaceflight, and suborbital, and even orbital and point-to-point flights. And, really, this is a whole new paradigm. Nobody really knows yet how to deal with changes in that sort of technology, who’s to take responsibility. So they’ve identified that. They’ve identified issues of off-earth mining, which there’s lots and lots of excitement now about the possibility of off-earth mining. Frankly I still think there’s a long way to go in terms of the rate, but there’s a lot of money being invested in that.

So the international community is identifying technology as being the major challenge. Whether or not they can react as quickly or not, it remains to be seen. But then it becomes even more important for government to themselves be nimble, to recognize these possibilities and challenges but also opportunities, and deal with it that way. Thank you.

Mod: Thanks, Steven. So, Sue, just picking up on some of the points that Steven was making. Regulation has an important role to play; for example, insuring safety, maintaining their international obligations, and providing a defined and consistent operating environment for business. But the government also has a clear deregulation agenda to reduce red tape and make it easier for business to operate. How do you get the balance right?

Sue: Well, it’s true that the government is trying to remove inefficient regulation and duplication. But in this phase we need to manage a balance, and certainly the terms of reference of the review do cover both elements. One, that we have to meet some international obligations about making sure the activities we undertake meet with that. But also, two, as the minister said, we want to clearly encourage innovation and entrepreneurship. And there will be some risks and mistakes along the way with that, so it is about balancing. And so we’re pretty interested to hear what people have to say about how we might manage the risks and the opportunities.

Mod: So this forum is a critical input into getting that balance right.

Sue: Yeah.

Mod: Yeah. So let’s turn to emerging issues and opportunities. Experimental space technologies have clearly progressed to a point where significant commercial exploitation is increasingly viable. And the number of participants is expanding significantly. And a number of speakers have said that. This transition means a global space market is becoming progressively congested, and competition is intensifying. So we’ve heard the global bodies such as the UN, the United Nations Committee on the Peaceful Uses of Outer Space, are examining the changing operating environment with a view to formulating suitable international standards, which may have implications for Australia’s domestic regulation.

So, Steven, from small satellites, and development of technologies, and space tourism, and off-earth mining, the nature in which we access and utilize space is continuously evolving. What challenges does this now present to the regulation issue, specifically in Australia?

Steven: Oh, thank you. Well, hopefully through this process, the answer to that question, I suppose, will become more obvious as we look at exactly what it is that is the opportunities in Australia for space activities. But, clearly, most people agree. Everybody in this room will agree that as good as it is or as bad as it is, the current legislation is from a different era, and a different technological era and different circumstances for Australia. And because of all the things that Jason and Chris and others have said about how things have changed so rapidly.

In Australia now, with 12 new startups, you said, in the last few years.

Jason: Just from what I’ve seen.

Steven: It’s extraordinary. I mean, I had no idea about this. But, clearly, people are grasping the opportunities. And it’s incumbent on regulation. I mean, I’m not a regulator; I’m a lawyer, and law will always, to a certain degree, lag behind technological change, particularly where the technology moves so quickly. But it’s incumbent on countries like Australia if we want to remain competitive and we want to utilize our opportunities, to try to make sure that our regulatory framework, one obviously does what it has to do to protect government. That’s a given. But you don’t have to be overly onerous with that. And it needs to be timely in terms of responding. You can’t change the legislation every day. This review is not going to happen again for some period of time, I would imagine. So this is a real opportunity.

But the fact that it’s happening is important because it recognizes that legislation, regulation, particularly, where technology moves, particularly where opportunities in Australia have changed, needs to move forward so as to try to facilitate as best it can those opportunities. And that’s the challenge, because it’s always – there are always going to be people who say it’s all too hard, the government should do more. I’ve been one of those people in my academic writings. But I do recognize that it’s impossible to be perfect, but regulation needs to be forward-thinking to a certain degree.

Mod: Yeah. I mean, it’s almost axiomatic that regulation follows technology development as there’s always a lag.

Steven: Yes. I mean, it would be lovely to sit here and pass laws about what’s going to happen in the future and imagine it. But that’s not the way it works.

Mod: It’s not. Not really. Ben.

Ben: I was just going to comment. We’ve got a wonderful proceeding here, which is very recent and very fresh. And that’s the struggle the FAA has in US dealing with UAVs. It’s exactly the same situation; proliferation of flight from thousands to millions of flight vehicles. And if you look at exactly the regulatory environment the FAA has been trying to – with not much success – adapt itself to, it’s a fantastic case study to look at, because space is unfortunately lagging a few years behind that, and there a lot of lesson to learn there.

Mod: Yeah. Indeed, indeed. So let’s turn to commercializing research. Australia has got a well-developed capability in space research, and we’ve heard Jason and others talking about that. But our commercial sector is comparatively underdeveloped, hence our presence in this room today. A key question for the Australian sector is how to translate our research activities into viable commercial opportunities.

So, Ben, based on your experience, what are some of the challenges faced when translating outcomes of research into viable commercial products and services?

Ben: I think with the context of today’s discussion, I would turn that around and say how things are changing for the better. And I can think of some examples. In the older times, I’m sure about even two, three, four years ago, we had big space satellites cost $20 million, $30 million, $40 million for a minimum configuration. And so the industry was risk-averse, technology late times were many years. I worked on several flight missions, 10 years developing the technology before it flew, 10 years. And we envied those people who’d do it nine. Well, these days, it’s two years, sometimes a little less. As the cost has come down, so has the aversion of risk, and therefore the barrier to entry for new companies is dropping really fast. And so we’re finding a whole lot of new companies.

And this also applies particularly to Australia. I appreciate and I agree with what was said that we don’t have a particularly good brand name in space, but that’s becoming less and less important. And that’s a great thing for us. So in the area of just the credibility of the company that has to step forward to undertake the mission or to get on sail; that barrier to entry is dropping.

And the other example I can give is the tyranny of distance. I stopped counting my flights to US for space projects only at 300. So I’ve done – that was about five years ago I stopped counting – landings and, you know, IX. I think I’ve the personal record for flights into LA from Sydney. That’s no longer so important. Technology – convergence is really beating that word. But we’ve got – we have Skype. The communications technologies are coming to our head. And all those things come together. This is really a kind of convergence, because we’ve got the barrier to entry in terms of price dropping, we’ve got the credibility of companies dropping, we’ve got proliferation of technologies. And you can look up on the internet, how to build satellites now.

So the tyranny of distance is kind of dissolving. And not to mention that economy class today is a lot better than it used to be 10 years ago.

[Laughter]

Steven: Speak for yourself.

Ben: Thank God for competition. The third thing I obviously got is money. Capital used to be a really big problem, but, again, the convergence of the dropping value of the typical mission. Plus – and a lot of entrepreneurs here will wince when I say this – the private capital markets are flooded with capital. I’ve never in, frankly, decades of business experience, seen so much money flashing around in so many pockets. So I don’t see capital as a barrier to entry in this business anymore.

I think the fourth thing I’d mention – only because Chris Pyne was here and he was so forthcoming in laying forward innovation – government has changed dramatically. 18 years ago, my company designed, built and was in the process of launching the only satellite – I think to this day – that has been launched by an Australian company outside Optus. And we had a lot of resistance from government to try and stop us. And because there was no regulatory framework, no one in government had ever figured out that an Australian company would have wanted to launch a satellite. And so it was kind of the catchy way until we get some new laws enacted. And I said, well, no, we’re moving the satellite to launch pad in six months. And that’s what we had to do.

So, on so many levels – and I could go on and I won’t – I think the barriers to entry are dropping. And they transitioned from technology and great ideas to being able to fund them, get them into practice, get a credible – get FaceTime with the customer. All those barriers are dropping. So I think there’s a great opportunity. And one of the reasons I’m here today is because I think that there is an opportunity for government to play a role here in adapting that regulatory environment, to become part of that convergence.

Mod: Thank you. Jason, your company Saber Astronautics has a very innovative intern program. Tell us how your interns operate within your program, and what benefits they get from it.

Jason: Okay. So we get about 150 applicants a year for the internship program. And we get about three or four different cycles a year. And we just try and schedule it around their studies because, obviously, their studies are very important. And so we end up getting about 20 per year. It’s a very simple kind of relationship in the sense that, we get people who are motivated to work on projects, and they get direct training and experience under some really good IP. And they also get my contacts with other space companies out there, and they really get a foot in the door for the industry.

That’s really what they want to do. They want the resume, the CV bullet, and they want to get a chance to be part of the industry. So we’ve just been really lucky to get a lot of very talented people that we could put on the projects. So the key thing for us is we have a semi-formal training program, where we fill in some of the gaps they might not be getting in a particular university, depending on where they’re from. And that gap could be if they’re an Australian intern, it could be some deeper orbital mechanics that they might not be getting from an undergraduate program. Or if they’re an international, typically, it would be things like software, which is something that’s machine learning, which Australia is, like, really, really strong anyways, and Saber is just going through all. So it’s really give and take.

Mod: Thank you. Incidentally, how many have been through the program, all?

Jason: I guess about a hundred.

Mod: Wow. Over how many years?

Jason: Five years.

Mod: Five years. Well done.

Jason: Yeah.

Mod: Now, Sue, the Prime Minister and Minister Pyne launched the National Innovation and Science Agenda on the 7th of December last year. Can you give us an indication as to how that’s helping Australian companies commercialize their innovative ideas?

Sue: I think two of the pillars that form part of the National Innovation and Science Agenda, culture and collaboration, are really key here. The government is asking or encouraging people to take risks, and it’s okay to fail. And some of the initiatives they’ve put in place do directly address that. With collaboration, we mentioned the great research here in Australia. And we do have good firms too but we’re not great at collaborating. So one of the key things they’re trying to drive is collaboration between researchers and scientists, and the businesses themselves. So that’s really important.

And I’ll put a plug in there for the network we have of experienced commercialization advisers under the Accelerating Commercialization program. They are people with real industry experience, who can help people with good ideas to get their idea off the ground and help them to become or be ready to be a successful company.

Mod: Good. Thank you. So let’s now look at the supply chains in overseas markets. So the business of space is global and worldwide. There has been a shift from what the domain of government was to what is now predominantly a commercial activity. When Australia’s space activities legislation was drafted, it didn’t consider the innovation in commercial activities of the entities it regulated. If Australian firms are to be competitive, it’s important to understand some of the real challenges associated with international markets.

So, Jason, turning to you. What are some of the challenges Australian companies face when trying to participate in the global supply chains and international markets were to dispose? You might like to drill into some of the points that you gave us in your overview summary.

Jason: Yeah, yeah. You know, we ran into this road right away. Well, the first thing you’re going to run into is branding. It’s just; you walk up to a company. First of all, setting up the lab in the United States as opposed to setting up the lab we have in Sydney. Well, it had some similar conditions. Colorado does not have a lot of startups or space; most of those are actually in California. So when we landed on the ground and showing some good IP, before we could even show them, we said we’re Saber Astronautics. They said, aren’t you Australian? What are you doing here? Australia doesn’t do a lot of good IP. That’s the first thing you run into; it’s the perception of Australia as not being a space country.

The second thing was a lot of the businesses, when they realize you have very good IP, will turn around and try and acquire you. And some are very blunt about it. They’ll say, are you for sale? What a great product, are you for sale? Not is your product for sale, are you for sale? In which case, well, let’s date and then get married is kind of what I said. But this is, I think, normal to business. But, again, thinking in terms of the way the playing pieces are laid out, there’s a lot of incentive for the customers. If you go into the States, they would want you to bring that tech over to the United States. It’s going to be an acquisition play, I think, 90% of the time, especially if you’re going to the larger traditional brands. If you’re going to the startups, then they’re very insular. You got a better chance there, but they’re still very insular.

Here’s another pattern that I ran into, which I think has – it’s an overseas play which is going to affect us directly. It has already started. The way people sell and the way people buy is by bundling. So what a lot of CubeSat providers are doing right now is they’ve got experience making hardware and they’ve got flight heritage. They’ve got experience with software; the software might not be great, but it works and it’s easy to put together, and it’s also flown. So they’re saying, we’re going to bundle all that together along with the ground station network. So you the Australian University don’t have to do anything. You don’t have to innovate; you don’t have to do anything. Here you go, here’s a package, here’s a price. And you’ll have your payload up in space, and you’ll write a lot of papers, and it’s going to be great, right?

And it’s happening. And some of these companies are really good about it, very savvy. And one in particular managed to grab, I think, about 60% of the Australian CubeSat market within six months. I managed to beat some of that back, but it’s a fight. So it’s not at the Boeing, Lockheed, Northrop level; it’s down at more of my level. But as some of the startups in Australia grow, you get to see we really got to protect our shores a bit. And bundling is what they’re doing.

Mod: Thank you. Building on that, Ben, what are niche capabilities in Australia in which we excel, in your view?

Ben: Well, you would know. Clearly, we’re very, very good at the retailing of space data. And we have fantastic industries adding a lot of value, a lot of value and creating a lot of wealth for this community in how space data is used. And I think we all count that as part of the space industry. We’ve got some quite good companies, at the other extreme, in the flood area, although they’re in what I would call small space. And the big space these days, they’re still a few billion dollar missions. A GEO satellite will still cost pretty close to a billion dollars, and they don’t launch them. The ones I know are over a billion dollars, Roger.

[Laughter]

And there’s a really big space, which is mission to Mars, which is the $100 billion programs. And, believe it or not, there are missions in there for Australian companies. There are wide-open areas, and the Ios are out there for multiple space agencies to solve problems which require real innovation and new solutions. And small space can solve that problem. And communications problems, how do you solve the Mars coms problem? That’s a serious one. The one I like best – sorry, it’s an aside. The one I like best is how do you solve the time delay problem going to Mars and back? I think there’s a way to do that. And we’re going to have a lot of fun with it in the next 10 years.

Now, the, what are our strengths? I mean, obviously, from the point of view of both of my positions as chief executive in Space Environment Research Centre and EOS, we are, I think, the world leader in space drone management. There’s no question. I travel the world. I’m a consultant to NASA and to ESA. They really look up to how we address that problem here. But that wasn’t small space; I mean, we have spent well over a $100 million just in the research program, to become world leaders in that. So that’s one of those; it’s kind of middle space.

And that’s traditionally where we were just going to make a place for ourselves in the space market. And then a really good thing happened and the scale moved. The median of the scale curve moved one order of magnitude to the left, which is terrific for Australia because what that does is it’s disruptive in all the established players, and no offense. But there are wonderful companies that have been in space for decades, they have much less advantages than they used to have. And that disruption is very good for countries like us.

In fact, we’re probably the best placed country in the world, because of the education system. Yes, we have the same weaknesses but we’re still very strong. We’ve got a great capital market structure, much because of super innovation programs, I think, of the last 25 years. So we have capital. We have the right kind of – you know all those reasons. And I suspect that’s one of the reasons why you’re here. So we are strong in a number of things. But I guess my key response to your question is the way we’re strong is changing because this market space is changing so quickly. And the opportunities are erupting really quickly.

And one last thing; Australians are very, very good at responding quickly. I mean, you go around the world, our first responders respond faster than first responders in almost every country in the world. And it’s the same with business; we have very, very fast-moving small businesses.

Mod: Part of that pioneering spirit.

Jason: Yeah. It’s exactly right. And if you think in terms of investment as well, all is the same pattern. So the US investment for CubeSat is starting to peak. And there’s rumblings in California, like, oh, the money is just not there anymore. But meanwhile here in Australia it’s just like, oh, they did it in California, let’s throw some dollars on and build something. So it kind of works in our favor, I think.

Mod: Indeed. Now, the last question for me and I’m then going to throw it over to the audience. And I’ll revisit this question of risk versus opportunity that we asked Sue earlier, but I’m going to direct this one to Steven. Steven, as you’re going to be the lead writer of the review, how does this issue weigh on your mind and how are you going to resolve it?

Steven: Actually, I think it sounds a bit glib. I think the lead writers of this review really will come from the – it’ll be the submissions. And my task is to distill, and assimilate, and make, and analyze those submissions, so clearly I have the opportunity to look at that and maybe direct the submissions in particular ways that make sense to me. But this has been driven, I think, by all of the stakeholders. And I really mean it, otherwise I wouldn’t do this job. I mean, that really is an opportunity for people.

What we’ve heard is – I learn every day when I speak to people about Australia and space. What we’ve learnt is that there’s so much in terms of the spectrum of existing activity in space, as well as I’ve described that transformation from science and research into reality or probability and reality in the future. I should make the point, because a lot of this discussion has been based on that second part, that we’re already doing really amazing things commercially in sectors of the space sector, in the large satellite, you mentioned geostationary, and in other areas.

And clearly it would – it’s certainly not the viewpoint here to do anything to the extent there’ll be changes to in any way inhibit or change that. Of course, we’re good at what we do. The act as it is seems to work. You know, it can be improved. But certainly as we look at other things, we should – we’ll need to keep in mind we’re already doing well and not in any way jeopardize that. But, clearly, there are so many other things that can be done. And, clearly, they will – because space, as we heard from various people, still is an inherently risky thing, although the risks come down as the technology gets better.

But I was talking to somebody last week in another place who’s doing some proposed trial flights, trial launches, et cetera, and I was told that typically 90% of the first and second trial launches are launch failures. So, I mean, there’s risk associated with all of this. But I think the risk profile is changing for these relatively new actors. In the beginning of, let’s say, small satellite; there has been a lot of talk about that, there are other things. But in the beginning of small satellites, it was almost the journey that was important for the universities. Go, we got it up there, you know, that’s the journey. But now because we’ve got real capital, real money, real business opportunities, it’s not about the journey; it’s about the success. And so I think people – the risk profile of people has got – now do I say got higher or lower? I’m not exactly sure what I’m saying. But people are more conscious of risk now, and I think that’s important.

And whatever is done out of this review – and I’ve said this publicly a few times – irrespective of all of the opportunities that should be encouraged in the right way, I think it’s incumbent – certainly my own view – it’s incumbent to also encourage best practice. The idea of regulation to facilitate and promote is great, and that’s certainly what I think. But on the other hand, still, anyone who’s engaged in something that is an inherently risky activity should be encouraged to take every step that’s appropriate and practical to minimize those risks themselves. So it’s a two-way street. Government can help in terms of facilitating the environment, but in the end best practice has to emerge.

But I think the balance is changing. And that’s really – in the end, we’ll see. We’ll see how the stakeholders react. And, hopefully, we can put through this report to government, you know, a whole range of really important ways we can build on what we’re already good at. And, hopefully, government then will take that as it has been given.

Mod: Yeah, indeed. And the National Innovation and Science Agenda has shifted our risk appetite and made it a little easier to take those risks.

**[End of Audio 0:36:21]**