- There will be specific focus areas that may need to be prioritised but a mix of different types of focus areas is important so we are not putting all of our eggs in one basket
- I'm not convinced that national research priorities are required and I certainly don't think they need to form a coherent whole. Some argue that the National Science Challenges haven't been very successful (struggle to engage with industry, are overly bureaucratic, don't listen to Industry Advisory Groups...)
- Why is it necessary to have all research priorities co-developed with Maori? It may force the research down an avenue that may be costly in terms of opportunity lost and may turn off innovation instead of encourage it. Incorporating the Treaty of Waitangi and matauranga Maori into *everything* is such an overkill and a distraction for New Zealand when we have bigger challenges we face
- 1.3.1:
  - What does it mean when it says that 'users have confidence in how decisions are made and decision-makers can be held to account'? How does this look in practice?
  - I am supportive of flexibility but don't we need to be careful we don't end up with what you are trying to get rid of currently? (insecure jobs based on funding for certain time-frames). There could be the tendency to change tack on a whim if something new looks exciting when it may not be worthwhile chasing for NZ (e.g., space research, or hemp/medicinal cannabis that everyone is jumping at when it is hard to compete with others internationally with deeper pockets doing similar work)
- What is wrong with letting individual research organisations choose their own research priorities? I would argue this has been reasonably successful for some time
- Again, I don't understand why Maori co-development is given such a high priority – indeed, it is being prioritised over others who have arguably more valuable expertise, with relevance and validity. It doesn't need to be forced across *everything* in the process as it will stifle development and progress
- Could priority-setting (if it is in fact needed) be done in overlapping cycles so as to not cause massive disruption in periodic timeframes? This could allow for flexibility if the system needs to incorporate new areas of research that were previously unforeseen (such as virus research). An example could be a large piece of research funded for say, seven years and every two years, new research priorities and funding are considered that could further enhance the large research focus areas and/or deviate into new, related areas
- You must involve people with relevant expertise and those who know how to execute in the most efficient and effective manner. Government priorities are sometimes not representative of what is realistically achievable, so it will be important to get advice on execution by people who know the reality of what can be done
- I don't think the system is broken currently in terms of governance across organisations and research programmes. You will find that the pool of people is small enough and connected enough that there are connections across both organisations and programmes and there is also room for a variety of talent, roles and professional development
- Maori authors will always claim that not enough money, resource, emphasis, appreciation, etc is given to Maori interests, but this is not the case these days
- 3.1: 'The system has regularly shown the value of increased investment in R&D' – has it really shown it? I'd be keen to hear how
- Competition between the organisations is largely productive and creates better value for industry who engage with them

- Setting specific Priorities doesn't leave much room for flexibility so it is good that you are leaving room for not solely priority driven research opportunities
- I absolutely agree that researchers need to be able to investigate future opportunities as well
- MBIE has pressured the science community to engage with Maori over the last five years or so in particular and it is no wonder that Maori are fatigued. I believe that it is better to let it happen where appropriate and where everything is aligned so it can work genuinely. Now it appears that this engagement is going to be forced which will cause dissention and will ultimately slow down innovation in the sector for everyone and ultimately for New Zealand. This over-focus of everything Maori at the expense of others will make new immigrants in the science system and non-Maori feel they are not valued. Which may well backfire
- Surely, having ESR funded via a contract with the NZ Police means it is effectively undertaking work on behalf of the Police, when is should be on behalf of New Zealanders (in other words, ESR could be criticised for being beholden to Crown prosecutions rather than scientific evidence related to crimes)?
- Fully costed contracts are very expensive for industry, so they are often put off by working with CRIs. I support reducing costs for industry to engage with CRIs which will encourage them to come back, spend more on R&D than they normally would do and this fosters more of an ongoing relationship between industry and the science sector
- Providing base grant funding for research organisations will help keep them focused on their work, rather than worrying about sourcing funding to help keep staff on, etc (it's a distraction for them). Base grants should therefore include salaries
- A negotiated system for baseline funding seems the least disruptive as a performance-based system might just encourage perverse behaviour where organisations reporting on their performance will be skewed to demonstrate high performance in order to retain funding. An activity-based system will potentially mean that 'flavour of the month' research areas will be turned on one year, off other years in favour of more popular or needy activities and will be hard for organisations to predict what will be needed activity from one period to the next
- Why would any organisation want base grant funding to be optional? Everyone, given the opportunity would want base funding to allow them to plan for the future and to provide stability
- Why does everything need to be centralised? This will simply create a massive bureaucracy and a bloated super-organisation. Keeping individual CRIs and research organisations allows them each to drive their own interests as they see fit (within reason) and be sharp by comparing themselves to other CRIs, which is a good thing
- I'd argue that we are now getting to a good place in which the research organisations are collaborating more and making them all under one umbrella will lose some of the dynamism they each have (albeit some more than others)
- I agree that Companies Act commitments can at times be complicated when the CRIs are undertaking research for national benefit. Sometimes, it can be challenging with CRIs wanting to own Intellectual Property (IP) which can at times hamper discussions with companies wanting to access that IP. I certainly appreciate the national interest of not tying up IP with only one company but there needs to be more work done on this. Having CRIs focus on their own commercial gains can put them at odds with many of the client companies and as a result, puts companies off and means they shop around to other

research organisations. This can then cause frustration on the part of the research organisations

- I do like the fact that the CRIs are companies, as it ensures they are kept on the ball and close to market but if there was a way that they could be kept on the ball but not <u>competing</u> with companies, that would be ideal. Insist on the CRIs being fiscally responsible, efficient and providing good value for the taxpayer
- Some CRIs (say ones that are paid to do ongoing monitoring) are criticised as being complacent and out of touch with their stakeholders which can cause dissention
- Companies struggle to engage with universities for a number of reasons:
  o Massive overheads
  o The inability for some researchers working on applied projects to understand company drivers/deadlines, etc and that it is not a bottomless pool of money to keep trialling things until they work. If something isn't economic, a company will cut funding and some academics struggle with this
  o Some academics have no appreciation of industry needs and are instead happy to hang out in their offices. There will always be ones like this but university researchers need to be incentivised more to engage with industry. CRIs are generally much better at engaging with industry than universities
  o Some university commercialisation offices can have an arrogant reputation with industry, especially around IP
  o I disagree that universities are more flexible than CRIs – in fact, I think they are some of the slowest to adapt (compared with some of the newer universities or other research organisations)
- I disagree that 'Larger and more financially resilient institutions may also have greater agility in responding to government priorities, industry demands and emerging opportunities.' I think the exact opposite will happen if an institution gets larger. In fact, at 4.4.1.2 it states just that!
- Incubators run by Government are sometimes run using a model that creates perverse behaviour (bums on seats versus outcomes-based models). Certainly some companies will benefit from these incubators but many do not and would be aided in other ways that have more impact (such as simple grant funding)
- Callaghan should return to simply doing grant funding. It is what companies need and want most of all, rather than courses, events, etc. Get back to basics
- It is a shame that it is beyond scope given Future Pathways is about improving the science system but for what it's worth, the R&D tax incentive is really a waste of time and once companies have jumped through the hoops, it's just not worth it for many. Especially given things like software development and out of scope and that only income generating companies are eligible for funding when many pre-income companies really need the funding
- Anything that could be done to get regulatory bodies to support innovation would be good, as this can be frustrating in terms of R&D progress for both companies and researchers
- I have been a member of MBIE's College of Assessors for a number of years and I refuse to do it after last year's debacle in terms of absolutely mad invoicing requirements. I am one of many in the same boat which is an absolute shame for New Zealand's science system