

Annex 1: Stakeholder engagement

Process

- 1 The Ministry of Education has led broad stakeholder engagement through the two Education Summits and New Zealanders are still providing input through the post-Summit engagement programme. We continue to draw lessons from this for the vocational education and training (VET) system review.
- 2 As part of the VET review itself, we engaged with the following stakeholders:
 - a. workplace learners and enrolled students
 - b. employers, industry representatives, including Industry Training Organisations (ITOs)
 - c. regional employers' associations, regional economic development agencies, local bodies and Business New Zealand
 - d. staff employed in education providers and staff and student union representatives
 - e. education providers (including institutes of technology and polytechnics (ITPs), wānanga and private training establishments (PTEs))
 - f. sector peak bodies (including industry and provider peak bodies)
 - g. research bodies (including Ako Aotearoa, New Zealand Council for Educational Research (NZCER) and the NZ Initiative)
 - h. Secondary Principals' Association of New Zealand (SPANZ).
- 3 The stakeholder engagement involved calls on stakeholders in the following regions:
 - a. Auckland
 - b. Hawkes Bay (including Napier, Hastings and Wairoa)
 - c. Taranaki (including New Plymouth, Stratford and Hawera)
 - d. South Canterbury and Otago (including Timaru and Dunedin)
 - e. Wellington.
- 4 We have compiled the information we gathered from stakeholders into A3s that align with the four themes for our review. We would like to release this publicly, with your agreement. We will provide your office with this material for review prior to releasing it.

Feedback

- 5 Stakeholder feedback is discussed throughout this briefing, including in annexes 3 to 6. Our findings shed light on the three issues we identified as follows:

Issue 1: Poor skills matching – We saw a mix of practice, with some great examples of TEO-industry collaboration, but also some frustrated employers.

Issue 2: Inequitable outcomes for some groups of people – We saw fewer examples of tailored approaches to learning and/or recruitment, with the result that many groups are not well supported to participate and achieve, and some industries are not accessing all their potential workers.

Issue 3: Counter-productive, system-driven competition – TEOs and employers noted that the system (especially the funding system) does not encourage collaboration between ITOs and providers. Despite this, we saw many collaborative arrangements.

Survey of employers

- 6 In May and June 2018, officials surveyed 30 medium-large employers in New Zealand on their views on the current and desired state of New Zealand's skill system.
- 7 When asked what a skills system should provide and who it should focus on, respondents told us:
 - a. The primary focus of a skills system should be on a learner's current and future needs. A substantial minority also told us that a skills system should benefit all New Zealanders.
 - b. Equipping young people with work-ready skills (for example, positive attitude, and enthusiasm) was important for them. Ensuring learners had digital literacy skills was also seen as important.
- 8 On the whole, most respondents appeared to be satisfied with the state of New Zealand's training system, but noted a few areas for improvement. These focused on:
 - a. Improving the careers advice system. All but one respondent noted this as an issue of the current system.
 - b. Improving support for Māori and Pacific learners. Most employers acknowledged that the system, including employers, could do more. Many employers also noted that better support could also be provided to women or those with additional learning needs.
 - c. Enabling and supporting employers to provide more work-based learning opportunities for young people. Some employers noted that health and safety requirements, or a lack of knowledge and time in who to contact, prevented them from providing young people with work experience opportunities.

Annex 2: Research, data and international perspectives

- 1 We have undertaken preliminary research and analysis, drawing on:
 - a. recent OECD reports and other reports about vocational education and training (VET) and the changing world of work;
 - b. a purpose-built dataset for VET; and
 - c. initiatives and policy development drawn from a small number of jurisdictions.

What we have learnt from recent reports

- 2 OECD data suggest that we need to be less concerned about volume and more concerned about the relevance of training. The OECD Survey of Adult Skills 2016 (PIACC) tells us that New Zealand is an outlier country, with self-reporting suggesting a relatively over-skilled and over-qualified working age population, fewer under-skilled workers than most countries, and poor alignment between field of study and field of employment. Other OECD data suggests that our workers are less productive than in many other OECD countries.
- 3 This analysis needs to be handled with care given the self-reported nature of some of these comparisons in PIACC. However, there is other evidence to support the conclusions. For example, we heard from employers that there was a poor match between the skills of people they employ and the skills required in the positions they appoint them to. We also know from the initial data analysis we have undertaken that there are increasing flows of learners with degrees undertaking vocational qualifications.
- 4 We also know that different learners do not experience equitable outcomes from the education system and labour market. For example, Māori and Pacific Peoples are overrepresented in lower-skilled, lower-paying jobs. Similar inequities may exist for other groups of people. We know that people in low-skilled occupations spend fewer hours in training and are more likely to have no training activity.
- 5 Equity issues also arise from the changing world of work. Technological change results in more lower-skilled, lower-paying jobs changing or being eliminated, compared to higher-skilled, higher-paying jobs. That means that Māori and Pacific Peoples are more likely to need to retrain in order to stay in the labour market. But if Māori and Pacific Peoples continue to be overrepresented in lower-level study (see next section), then retraining risks entrenching this issue.

What we have learnt from our initial analysis of VET system data

- 6 As part of this review, we are linking datasets to allow us to analyse VET as a system for the first time. Currently, we have participation data, and further work is underway to compile completions and outcomes datasets. Preliminary data shows that the VET system has become more efficient over the last 10 years, and we are getting better value for money. The number of learners completing qualifications has fluctuated around 100,000 for the last eight years. This is despite falling numbers of learners over the same period, from 312,000 learners enrolled in VET in 2010 to 241,000 in 2017.
- 7 But we are not always getting better value for money for all learners. For example, Māori and Pacific Peoples participate in VET at lower qualification levels than Europeans. Also, in 2017 there were significantly more learners enrolling in VET who already had a qualification (compared to 2008), and there has been a shift downward in the levels in which learners who already have a qualification are enrolling. These

two examples show that outcomes by ethnicity are not always equitable, and that there are some learners for whom VET may not increase their outcomes.

- 8 Initial analysis of cohort data for 2009 school leavers, derived from the Integrated Data Infrastructure, suggests that there is an earnings advantage associated with graduates with L3-4 certificates from work-based programmes compared to graduates with L3-4 certificates from provider-based programmes. This data reflects *all* provision at L3-4, not just VET as we have defined it for the purposes of this review. This seems to suggest that blended learning with significant workplace components may result in better outcomes. However, we need to interrogate this data further, as this data reflects the outcomes of only a single cohort of school leavers. Results may differ for other cohorts of school leavers or for adult learners or over longer periods of time. There may also be inherent ability differences between leavers choosing workplace-training and provider-based level 3-4 study. We also need to explore the extent to which these differences reflect differences in fields studied between workplace-based and provider-based L3-4 certificates, given the large impact that field of study has on earnings. It is hoped that any further findings from interrogating the data can feed into recommendations to Cabinet on the VET system review.
- 9 Firms and industry are operating in a tight labour market and continue to report difficulty finding people with the right skills.
- 10 Our data also shows that enrolments vary across subsectors according to changes in the business cycle. At the bottom of the business cycle (in the years following the Global Financial Crisis) we see the numbers of learners at providers remain steady and grow, while they fall in industry training. The reverse has happened in the last few years with a stronger economy: the numbers of learners in industry training has increased, while they fall at providers. This creates challenges for providers to manage their costs while revenues fluctuate due to changes in demand across business cycles.
- 11 ITOs are also affected by the business cycle, with employers taking on more trainees as the business cycle improves and then taking on fewer as the business cycle approaches the bottom of the cycle. However, they are less seriously impacted by the rate of change in the number of trainees, because they do not have dedicated facilities and equipment, and generally lease property rather than owning it.

What we have learnt from other VET systems

- 12 It is difficult to “lift and shift” solutions from other jurisdictions. In examining systems that are more similar to our own (in particular Australia and Scotland) or that we might aspire to (e.g. Switzerland and Singapore) we have identified initiatives of interest. The annexes to this paper provide some sense of how overseas initiatives could be adapted for use in New Zealand to solve issues specific to each theme.

Annex 3: A system that is effective for all learners

Description

- 1 Overall, the performance of the vocational education and training (VET) system for learners has improved in the past 10 years. Our preliminary data analysis shows that the number of learners completing qualifications increased from 2008 to 2017. This is despite falling numbers of learners over time. In other words, the system has become more efficient.
- 2 But we are not getting better value for money for all learners. For example, Māori and Pacific Peoples participate in VET at lower qualification levels than NZ Europeans. Also, in 2017 there were significantly more learners enrolling in VET qualifications who already had a qualification (compared to 2008), and there has been a shift downward in the levels at which learners who already have a qualification are enrolling. These two examples show that outcomes by ethnicity are not always equitable, and that there are some learners for whom VET may not increase their outcomes. (There are more preliminary findings from our data analysis below.)
- 3 The VET system will increasingly need to respond to demand from workers needing to transition to a new skill or industry due to technological disruption. We can expect a large number of mid- and late-career learners to be using the VET system and the system needs to prepare for this focus on 'learning for life' as disruptions become more commonplace.
- 4 Our ambition is that *all* learners can progress along *enriching, individualised, seamless, deliberate* career pathways from VET to meaningful and sustainable employment. Currently, some learners face low-value, homogenous, complex and/or unintentional pathways from VET to employment. To achieve our ambition, the VET system needs to prioritise learner outcomes, equity, aspirations, and pathways, and to strengthen system alignment, as the following table shows.

	The current VET system...	The VET system can be improved by...
Outcomes	prioritises enrolments rather than outcomes	recalibrating the funding system towards outcomes and away from enrolments
Equity	provides limited incentives to TEOs to embrace equity by funding at the same rate regardless of individual learners' needs only provides some learners with the financial, learning and pastoral support they need	embracing equity by funding TEOs based on individual learners' needs providing all learners with the financial, learning and pastoral support they need
Aspirations	incentivises TEOs and employers to put their own short-term needs ahead of learners' and employees' long-term career success perpetuates negative perceptions about VET	recalibrating incentives towards learners' and employees' long-term career success lifting the esteem of VET in all aspects of education and employment
Pathways	sets some learners on complex or circular pathways that do not always improve their outcomes	simplifying pathways into and through VET and from VET to employment, and ensuring that pathways always improve learners' outcomes
System alignment	may not always be aligned across national, regional and local organisations	streamlining all services and information about VET to make it easier for learners, potential learners, and employers to access it

- 5 Achieving our ambition for all learners requires shifts across the education and employment systems, not just in VET. For example, schools need to strengthen the esteem of VET by improving the quality of careers advice to students, by strengthening Vocational Pathways, and by embedding workplace learning in all of their curriculum. In addition, 16- to 18-year-olds need strong secondary-tertiary programmes to help them transition from schools to VET. The Tertiary Education Commission's (TEC) careers system strategy work, the Ministry of Education's (MoE) Careers Action Plan for schools, and MoE's reviews of NCEA and Vocational Pathways are examining these issues. The New Zealand Qualifications Authority's (NZQA) review of the New Zealand Qualifications Framework (NZQF) will help clarify the purposes of qualifications at lower levels on the framework. We are connected with these other pieces of work, and will continue to ensure that our work is aligned.

Summary of Stakeholder views

- 6 We engaged with learners at seven ITPs and PTEs, and with trainees in two workplaces. We also met with NZUSA. Our meetings with staff of tertiary education organisations (TEOs), employers, and other organisations also addressed how the system works for learners.
- 7 Learners told us about some things that are essential to their success. These include: supportive tutors, proximity to campus, small hands-on classes, blended learning (classroom and workplace, online and in-person), and support from providers to find work experience. Learners also told us that understanding the outcomes of their study and their pathways forward improves their engagement in study. Some learners told us that the Fees Free policy has encouraged them to study. Learners said they were motivated by their academic success.
- 8 Learners also told us about some barriers to their success. These include: distance learning, workplaces that are not supportive of studying while working, limited local offerings at higher levels of study, assessment practices that focus on compliance rather than excellence, and challenges to finding individualised assistance. Most of the learners we met with were focused on work, but clusters of students at particular providers had no clear plan.
- 9 From our engagement with employers and employees, we found that most employers (with notable exceptions) are not focused on diversity or equity within their workforces. We heard that strategic partnerships between regional economic development agencies, providers, schools and learners are growing, with the aim of supporting school-leavers' transitions into employment and early study. Some employers told us that attracting young learners into VET can be difficult and that schools and the National Certificate of Educational Achievement (NCEA) appear to privilege pathways to university over VET.
- 10 TEOs also told us that careers advice markets VET as less prestigious than university study. We also heard from TEOs about learners with significant need for support to improve their literacy and numeracy skills, a lack of access to reliable information about learners' individual needs, employers that face financial barriers in releasing staff for training, and a need to increase the numbers of women in traditional trades.
- 11 We also drew on the feedback from the Education Conversation survey. Respondents talked about the importance of a system that values diversity, including diverse ages, cultures, ethnicities and disabilities. In particular, we explored the feedback about education and disability, to complement what we heard from our stakeholder meetings. They talked about the need to provide more skills support for students with disabilities,

and to provide skilled teachers with the resources they need to support those students. Earlier engagement (a 2015 process focussed on special education) identified pathways from schooling into tertiary education and work (and independence) as a particular challenge for people with disabilities.

- 12 Our engagement to date has resulted in only limited connections with Māori and Pacific learners, learners with disabilities and special learning needs, and women in traditional trades. This is a significant gap in our information gathering and we are in the process of setting up targeted engagement to address this.

Current profile and trends

- 13 As noted above, the number of learners completing qualifications in the past 10 years has fluctuated from year to year, but has increased from 2008 to 2017. This is true across all ethnicities, ages (except under 18-year-olds), and subsectors (except private training establishments (PTEs), where the number of learners achieving qualifications in 2017 was slightly lower than in 2008, but still a much greater proportion of total learners).
- 14 Participation has decreased across all ethnicities, except Asians. This is likely due to increased Asian migration. NZ Europeans are underrepresented in VET compared to the general population, and Māori and Pacific Peoples are overrepresented in VET compared to the general population (but Māori and Pacific Peoples are underrepresented in tertiary education at degree-level and above). Within VET, Māori, Pacific Peoples and Asians are overrepresented in lower levels (L1-3) compared to NZ Europeans, and underrepresented at higher levels (L4-7). Over time, NZ Europeans, Māori and Pacific Peoples have all participated at increasingly higher levels of VET, but Asians have participated at increasingly lower levels.
- 15 Across almost all age groups, a greater proportion of learners are enrolled in VET at industry training organisations (ITOs) and wānanga in 2017 than in 2008 (except 18- to 19-year-olds at ITOs), and a lower proportion in institutes of technology and polytechnics (ITPs) and PTEs (except under 18-year-olds). A greater proportion of NZ Europeans and Pacific Peoples in VET participated in industry training in 2017 than in 2008. The opposite is true of Māori: Māori over 18 increasingly participated at ITPs.
- 16 People are more qualified upon enrolling in VET. Around two-thirds of people enrolled in VET had no prior qualification in 2011, whereas half of VET learners in 2017 had no prior qualification. This pattern holds true across all ethnicities except Asians, who have been more likely to have a prior qualification than people of other ethnicities (53% in 2011 compared to 35% in 2017).
- 17 There has been a slight shift in enrolment levels towards L3-4. In part, this is a result of the Targeted Review of Qualifications (TRoQ) and a gradual conversion of higher-level programmes to New Zealand Apprenticeships at L4.
- 18 Women are underrepresented in VET, particularly in traditional trades, and are overrepresented in industries like personal services and human welfare that have lower outcomes (women are overrepresented in university study). In 2017, they accounted for 45% of VET learners. Over time, a greater proportion of both women and men are achieving qualifications. But even though there are fewer women than men in VET, more women earn qualifications than men. In 2017, 46% of women achieved qualifications, compared to 36% of men.
- 19 Pulling together our data into a “VET view” is a new task for the review. The information above is based on data that is currently available. More work is underway to analyse

existing data and to bring together information about qualification completion rates, outcomes, and other measures of achievement across the system. The analysis will be ready later this year.

- 20 Tertiary education data does not contain information about learners with disabilities or special learning needs.

Approaches in other countries

- 21 Even though VET and tertiary education systems in other countries are often quite different, we can learn from how other systems prioritise learner outcomes, equity, aspirations, pathways, and system alignment. (Other annexes also provide useful information about other countries' systems, including the discussion of Switzerland in Annex 6).
- 22 In the USA, **Tennessee** is at the forefront of supporting people to achieve tertiary education qualifications via free tuition, the use of data, and individualised mentoring. From 2017, the state government has provided free college education to most adults without an associate or bachelor's degree, regardless of whether they have undertaken previous study. Adults who apply for the programme are required to provide information to help the state figure out what they need to be successful. Applicants are asked about their highest level of education, time elapsed since they last studied, what times they are available to attend classes, whether they will be working while studying, what challenges they expect to have while studying, etc.
- 23 This information helps match applicants with suitable colleges and with pastoral support. Colleges are responding to the programme by offering "boot camps" in writing and maths, by adding more classes during non-traditional hours, or by training staff in teaching adult learners. All applicants must also participate in an advising programme funded as part of Tennessee Reconnect. Community Navigators are "institution neutral", local advisors who support adults from the moment they think about college until they graduate.
- 24 In **Australia**, the state government of Victoria has set subsidy and fees-free policies to support priority learners. From 2019, Free TAFE Priority Courses pays tuition fees for priority courses for students who are eligible for government-subsidised training. Priority courses are 38 non-apprenticeship courses and pre-apprenticeship courses leading to jobs in high-growth industries and important areas for the state (like family violence, rolling out the National Disability Insurance Scheme, and delivering major infrastructure projects). The Skills First Youth Access Initiative pays tuition fees for particularly high-risk youth (under 22).
- 25 The Australian government offers financial support to apprentices as a way to help eliminate financial barriers. The VET Student Loan programme offers income-contingent, capped loans to eligible students studying certain VET qualifications at diploma-level and above. Capped Trade Support Loans are available to Australian Apprentices undertaking L3 or 4 qualifications leading to a priority trade occupation that appears on the National Skills Needs List, L2-4 agriculture qualifications, and L2-4 horticulture qualifications in rural, regional, and remote Australia. The Living Away from Home Allowances support eligible Australian Apprentices who have to move away from home to undertake an apprenticeship.
- 26 Several jurisdictions (including Victoria, Tennessee and Scotland) use government-supported, institution-neutral careers advice to help anyone interested in VET understand and pursue the options that are available to them across the entire VET system. In **Scotland**, Skills Development Scotland links the VET system with the

labour market via skills plans, careers advice, employability training, and advice to employers.

Potential directions of travel

- 27 Achieving our ambition for all learners requires significant shifts within the VET system. We feel the most significant improvements will come from changes to funding and financial incentives, as these are the strongest levers. We propose options for change across three dimensions: funding for TEOs, financial support for learners, and financial incentives for employers. We also propose other areas to consider change.
- 28 The next sections explain why changes are needed, and what the changes could be.

Funding for TEOs

- 29 We want an outcomes-focused system that embraces equity and provides tailored support to learners based on their individual needs. But we currently have a funding system that is enrolments-focused and one-size-fits-all. Redesigning the funding system could involve significant changes that would be challenging to implement, but could result in significant improvements for learners. There are a number of different ways to refocus the funding system on outcomes, and they would require different levels of redesign and change.
- 30 As with the current enrolment-focused funding, outcomes-focused funding carries a risk of incentivising TEOs to support students who are “easier” to help over those who require tailored learning and pastoral support. Any changes that incentivise outcomes would need to evaluate and fund according to individual learners’ starting points to avoid unintended negative consequences.

31 s 9(2)(f)(iv)

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Financial support for learners

- 34 Direct financial support for learners in tertiary education comes from student loans and allowances, and from the Fees Free policy. But the settings for both policies mean that

many students in VET cannot benefit from *either* policy. Trainees and apprentices are only eligible for student support in certain circumstances, and only a small portion of apprentices are eligible for Fees Free (we estimate approximately 6,000 of the industry training learners in 2018 (there were 146,000 learners in 2017) could be eligible for Fees Free).

Student support

- 35 Trainees and apprentices are only eligible for student support if they are enrolled in block courses directly with a provider and meet general eligibility criteria (including 0.25 equivalent full-time students (EFTS) for loans and full-time load for living costs and allowances). They are not eligible for student support for courses that are paid for by the ITO or employer, regardless of whether they are delivered at a provider. If they are also in employment, they are unlikely to be eligible for living cost loans or allowances because of the personal income test (i.e. they are not considered most in need). Unfortunately, we do not have data that shows how many student loans are taken up by trainees or apprentices while on block courses.
- 36 But trainees and apprentices may sometimes face one-off fees, other study-related costs or personal expenses that they might struggle to pay for without financial assistance. Data on ITO fees for 2018 shows that fees vary significantly by programme, from \$250 to well over \$10,000 over two years. Some of the fees charged by ITOs do not include fees for block courses, and some fees are only payable in annual lump sums.

37 s 9(2)(f)(iv)

Fees Free

- 38 Current Fees Free eligibility settings mean that many trainees use up their Fees Free eligibility without being able to benefit from the policy. Only industry training programmes that are above 120 credits are eligible for Fees Free, but trainees who study between 60 and 120 credits at L3+ lose their Fees Free eligibility. This includes most Māori and Pasifika Trades Training (MPTT) learners.
- 39 Very generally, we know that people whose highest tertiary education is between L1-3 do not have significantly improved earnings, though qualifications at these levels prepare them for further study and improve their likelihood of gaining employment. Outcomes for people with a qualification at levels 4 to 7 (non-degree) are improved, with greater improvements in earnings coming upon attaining a degree. Learners who complete qualifications tend to see greater improvements in outcomes than those who start, but do not complete, their qualifications. These are average outcomes, without accounting for variances due to prior qualification attainment and other learner characteristics – i.e. some learners will see a higher income premium from lower-level study than others.
- 40 All of this means that a substantial number of learners in industry training do not, and will not, benefit from Fees Free, but are likely to need higher-level study to increase their earning potential.
- 41 This is not just an issue with industry training. Other VET students in lower-level qualifications at providers similarly use up their Fees Free entitlement on comparatively

low-cost programmes, while others save significantly more in fees by direct entry to more expensive higher-level programmes. This is particularly true of bridging programmes that are intended to help prepare learners for higher-level study.

- 42 In addition, Fees Free may not be equitable for Māori and Pacific Peoples, and possibly for other groups of learners who might benefit from additional financial support. Māori and Pacific Peoples are overrepresented in lower-level study, and in jobs that are more likely to be lost in the future due to technological changes. Current Fees Free settings mean that many Māori and Pacific Peoples who would benefit from upskilling or retraining are ineligible for Fees Free, even if they have relatively low levels of tertiary education.
- 43 MPTT in particular is a programme intended to prepare Māori and Pacific Peoples to undertake pre-trades training that helps them progress to higher-level industry training programmes, providing them with financial assistance to do so. In part, this programme recognises that some Māori and Pacific Peoples may need additional support to prepare for apprenticeships. But current Fees Free settings mean that most MPTT learners lose their Fees Free eligibility by undertaking MPTT, and therefore may face more costs once they begin apprenticeships compared to other learners.
- 44 Additionally, some Māori in particular may use up their Fees Free eligibility for VET if they choose to take te reo or tikanga Māori courses prior to engaging in VET (or a bachelor's degree). Māori who choose to connect with their language and culture through study may therefore find themselves facing financial barriers to other tertiary education study. Māori still get Fees Free for te reo and tikanga Māori study, but these are generally lower-level, lower-cost qualifications, so this impacts their financial support if they choose to then progress to higher-level, higher-cost qualifications.

45 s 9(2)(f)(iv)

Other areas for change

- 46 The funding changes proposed above represent the biggest opportunities to improve in the VET system. But there are other opportunities that you may wish to pursue, driven by our goals of equity, aspirations, pathways, and system alignment. We have outlined some of these opportunities in the table on the following page.

There are significant gaps in our analysis to date

- 47 This theme is focused on strengthening the VET system for all learners, particularly Māori, Pacific Peoples, young learners, women in areas where they are underrepresented, and learners with disabilities and special learning needs. Reviewing the VET system for these groups requires substantial data analysis and engagement.
- 48 At the next stage of this review, it will be important to analyse data and undertake engagement that will give us a more nuanced understanding of how different groups of learners interact with the VET system and how it performs for them. This will help us develop the ideas in this annex further, but we will remain open to new proposals.

A system that is effective for all learners: Table of key options

Change to consider	Choices to be made (subject to further advice)	Dependencies/ links	Sequencing
s 9(2)(f)(iv)	s 9(2)(f)(iv) • Breadth of review (VET or wider system)	s 9(2)(f)(iv)	s 9(2)(f)(iv)
s 9(2)(f)(iv)			
Improve information collection Information about all fees free students prior to study with a view to tailored support Data about learners with disabilities and special learning needs	<ul style="list-style-type: none"> Scope definition for information and methods of information collection Compliance costs on providers 	<ul style="list-style-type: none"> Single Data Return definitions 	<ul style="list-style-type: none"> Likely to be medium- to long-term change
s 9(2)(f)(iv)	<ul style="list-style-type: none"> Method of addressing the issue (e.g. 	<ul style="list-style-type: none"> NCEA review Productivity Commission, which made a similar recommendation 	<ul style="list-style-type: none"> Consultation required first.
			<ul style="list-style-type: none"> Medium- to long-term for legislation change

Annex 4: A vocational education and training (VET) system that supports, and is supported by, industry

Description

- 1 We need a coordinated VET system where tertiary education organisations (TEOs) and industry work together to understand and respond to industry needs. While there are good examples of this happening, there is significant inconsistency across industries and within regions. Our ambition is to offer those industries that work collectively for their long-term benefit, and that exert influence over education provision, a more flexible system that meets their diverse needs.
- 2 The impacts of technological change and climate change are a key reason why we need a more efficient and effective VET system. As we are faced with the inevitability of large areas of work changing or being eliminated, a VET system that will enable those displaced by these changes to quickly transition to new equivalent employment is vital for ensuring a just transition.
- 3 There is no one-size-fits-all solution. Our response will need to be flexible enough to adapt to the different circumstances of each industry or region and to the changing nature of work. We propose to achieve this by focussing our efforts on the three areas in the following table.

	The current VET system...	The VET system can be improved by...
Engagement	may not be as responsive to industry skills needs as it could be	facilitating better coordination across industry and TEOs providing more options for firms and learners making it easier for firms to access and navigate the VET system
Collaboration	lacks a strong voice from firms reflects a limited understanding by industry of their own skills needs	facilitating better collective activity by firms to develop industry-level responses to skills needs supporting firms to understand and identify any skill changes needed
Skills leadership	has inconsistent provision across industries and regions	requiring industry-led leadership on skills needs including information and support for firms. providing clear guidance about what is expected

- 4 Success will require engagement with other parts of the education system. For example, industry would benefit from greater collaboration with secondary schools and influencing career pathways across the whole education system. It will also be important to consider and manage the impact of the Future of Work and how industry and TEOs can work together to plan for the effect that it will have on skills needs. Better information about skills needs at both regional and industry levels will be critical to support this.

Summary of stakeholder views

- 5 In gathering information from stakeholders, some good examples of collaboration were mentioned. For example, Aoraki Development, the economic development agency for Mid-Canterbury, is driving the 'Canterbury Youth Initiative' that works with employers and schools to improve connections between industry and youth. BEL group, along with Fonterra, Primary ITO, the Tertiary Education Commission (TEC) and other local farmers, hold an 'open day' each year for school-age children across the Hawke's Bay.

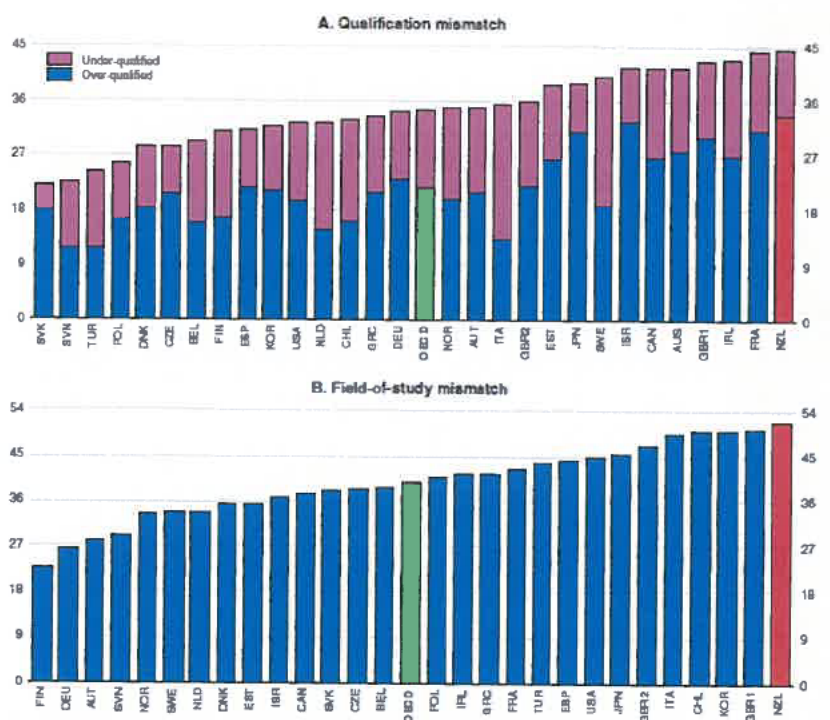
These initiatives focussed on expressing demand for skilled workers and collaborating with schools, tertiary providers and industry training organisations (ITOs) to address it. Unfortunately, it appears that examples like this are not widespread.

- 6 Some employers felt they were not being listened to by providers and ITOs and criticised the relevancy of some of the qualifications being offered. However ITOs and providers described extensive efforts to seek industry input when developing qualifications to ensure they were relevant. There appeared to be some degree of mismatch in messages between these groups in talking with ITO and provider representatives around the country, suggesting dialogue and collaboration could be improved.
- 7 Employers' experiences of VET varied significantly. Some were very happy with the service they received, but others felt frustrated by the lack of options for how training was delivered in their workplace, and in particular a lack of educational and assessment support. In most industries, employers also commented on the significant proportion of employers (especially small employers) who do not train or engage on skills issues.
- 8 ITOs commented that the engagement of employers with training is uneven. Many ITOs have training arrangements with less than 20% of the employers in an industry.

Current profile and trends

- 9 Firms and industry are operating in a tight labour market and continue to report difficulty finding people with the right skills. New Zealand's rates of participation and employment are among the highest in the OECD, and our unemployment rate is well below the OECD average (and expected to fall to 4% as employment growth exceeds labour supply growth).

- 10 New Zealand has high levels of mismatch of skills and particularly high over-qualification, as illustrated in the graph opposite. Our workforce is comparatively highly skilled, but we need to do more for those with lower skill levels. People with low-skilled occupations spend fewer hours in training and are more likely to have no training activity. Lower-skilled industries are more likely to be affected by the changing nature of work.



- 11 The type of training firms need is likely to be affected by the impact of global megatrends: technology, globalisation, demographics and climate change. The OECD estimates that around 35% of New Zealand jobs are

Source: OECD(2017), OECD Economic Surveys: New Zealand

at risk of automation over the next two decades (and 9% are at high risk) – a little above the OECD average¹.

- 12 New Zealand's high levels of over-qualification suggest we do not need more training, but better training that responds to firm and industry skill needs. Better training means more productivity gains as a result of more relevant and responsive VET provision. Stronger collective action is required by firms and industry to ensure their voice is heard and reflected in the VET system, especially in those industries that are not responding well to shortages in skills and training.

Approaches in other countries

- 13 Singapore and Scotland have skill system models that are centred on firms and industry (although Singapore's system is more strongly harmonised with industry investment planning). The systems aim to provide industry with a clear voice about skills needs and development.
- 14 The skills system in **Scotland** focusses on helping firms access the right skills at the right time. It is industry-led and based on government facilitated partnerships with the key players within the skills system. Skills Development Scotland works with employer and employer groups to help them recognise and articulate skills needs. The model succeeds because the investment in skills responds to these needs.
- 15 The system has a number of different coordinated elements across industry, firms and providers at a national, sectoral, regional, local and individual level, with government providing facilitation. In New Zealand, while the elements are the same, they lack the coordination for various reasons including funding incentives, variable capability across ITOs and poor engagement with industry.
- 16 The benefits New Zealand could gain from considering some of the aspects of this system warrant further investigation. For example, a system like this would help provide firms with a collective voice. ITOs could have a strong skills leadership role, including a Future of Work perspective where the ITO plays a key role in helping firms see the need for upskilling and retraining and in identifying how they can do that in work-based learning environments and bearing in mind the changing nature of work (for example, the impact of technology and automation on skills needs).
- 17 **Singapore** has developed a strong industry approach to skills development. It is developing Industry Transformation Maps to address issues within industries and deepen partnerships between government, firms, industries, trade associations and chambers. The maps are framed around four pillars:
 - Productivity
 - Jobs and skills
 - Innovation
 - Trade and internationalisation.
- 18 A key component of the Industry Transformation Maps is the Skills Framework. This is co-created by employers, industry associations, unions and government. It provides key information on sectors, employment, career pathways, occupations/jobs, and existing and emerging skills required for the occupations/jobs. Engaging employers at a national and regional level in New Zealand could drive greater dialogue between

¹ These estimates do not take account of the new jobs that may be created by advancing technology.

employers, industry representatives (including ITOs) and training providers. This collaborative approach to provision may help leverage broader economic goals.

- 19 This model may be a useful framework for thinking about: how we improve the consistency of ITOs' performance and use the skills leadership function within the VET system; or how government facilitation through SWEP is focussed. To reflect the New Zealand context, we would need to add a regional economic development element. The Singapore model is discussed in further detail in the Work-place learning annex.

Demand-side interventions

- 20 We also explored international examples of three demand-side interventions: Group Employment and Training Schemes (GETS), levies and procurement.
- 21 **GETS** refers to an arrangement where an intermediary organisation (a group training organisation) employs apprentices and trainees and places them with host employers. Evidence from Australia suggests that GETS are effective at helping firms navigate the VET system and complement investment in other forms of training (rather than acting as a substitute). The French have a model on a larger scale that is used to provide apprentices with experiences throughout the country. In New Zealand, GETS are being used to help minimise the risk for firms of committing to a full apprenticeship or training programme (for example, if they are a small business or in an industry with uncertain demand). Establishing GETS raises further issues, as there is significant infrastructure to develop (HR structures, admin, recruitment/liaison officers), as well as the issue of funding. In Australia, a large part of government funding comes from the actual job placement of the learners to employers. Based on available evidence, GETS is a useful mechanism for supporting New Zealand firms to work collectively in response to skills needs and development. Further work is needed to shed light on the specific barriers to establishing GETS, and therefore the role of government.
- 22 Government **procurement** can be used to incentivise firms to support a range of outcomes, including providing training and apprenticeships. Several states in Australia have procurement rules that support training and diversity of recruitment by construction tenderers. Examples of outcomes being sought through procurement include specific measures, such as ensuring a particular percentage of a firm's workforce is in training, or broader measures, such as reducing long-term and youth unemployment by delivering jobs and increasing apprenticeships. Initial reports suggest this is having a positive effect on employment outcomes. We see opportunities in New Zealand to use government procurement to signal the importance the government places on firms' involvement in training.
- 23 Compulsory **levies** paid by firms can provide an incentive for firms to upgrade the skills of their workforce. Singapore uses a levy to support workforce upgrading programmes and to provide training grants to employers. The UK introduced a levy in 2017 which is paid by larger firms and is intended to pay for training at smaller firms. France has statutory training levies and an apprenticeship tax from which employers are exempted when they train apprentices. We are not recommending introducing levies at this stage. The main outcome of levies is to help increase the quantity of training, which data suggests is not a significant problem in New Zealand. Instead, we need incentives that will help improve matching between skills and employers.

Potential directions of travel

- 24 The following sections explain why changes are needed, and what the changes could include. Many of the changes in this theme sit outside the Education portfolio. We have noted below where we recommend meeting with the appropriate Ministers to discuss

how these changes may be progressed. If you agree, we can provide further advice about these meetings.

- 25 Given the variation across industries, a one-size-fits-all approach will not work. Interventions need to be tailored to industry circumstances. We have suggested a number of initial proposals below to support better coordination between industry and tertiary providers.

Information

- 26 Industry and individual firms do not always have a clear understanding of their workforce skill needs. MBIE has a range of labour-market information, but it can be hard to access and understand. We recommend that further work be done to consider how information held by MBIE could be adapted and presented in a way that is accessible, useful and relevant to firms and industry. This builds on existing platforms, but will require additional resource to implement effectively. This work would be MBIE-led and falls within the employment portfolio. We recommend meeting with the Minister of Employment to discuss this further.

Facilitation and coordination

- 27 Coordination between firms, ITOs and tertiary education providers costs time and effort, and the pay-off can be uncertain. This can mean industries, especially those made up of mostly smaller firms, struggle to articulate their needs when it comes to navigating complex pathways within a region.
- 28 We recommend taking an active approach to help improve coordination with the VET system. Our recommendations include:
- a. industry-led facilitation and coordination through the ITOs' skills leadership function
 - b. firm-led coordination through Group Employment and Training Schemes (GETS)
 - c. government-driven facilitation and coordination through the Sector Workforce Engagement Programme (SWEP).

ITO skills leadership function

- 29 Current legislative change proposes to reinstate the skills leadership role for ITOs. This will be an important part of improved facilitation at an industry level. It will be important to be clear about the intent of this change. We will work with TEC and NZQA to deliver guidance, focussed on skills leadership as a means of supporting firms within an industry to act in their collective, long-term interests. s 9(2)(f)(iv)

s 9(2)(f)(iv)

Any wider change should be considered in light of options we propose in Annex 6 on the Work-based Learning.

Group Employment and Training Schemes (GETS)

- 30 GETS help firms work together to address their training needs by sharing the costs and providing a clearer pathway for young people. While we are aware of some successful GETS operating in New Zealand, we do not know the extent of their use. We recommend that you direct us to work with MBIE to review GETS. The review would build on work being done by the TEC about existing GETS. It would identify whether industries are using the opportunities GETS offer, if there are any gaps in provision, and what the cause of the gaps are. This would help us to identify whether

current policies are adequate to support this mechanism. We recommend you discuss this further with the Minister of Employment.

Sector Workforce Engagement Programme (SWEP)

- 31 SWEP is a joint agency programme to help industry understand their own skills needs and instigate plans that address these needs. The information and collaboration generated by SWEP also helps the VET sector be more responsive to industry needs. SWEP is the responsibility of the Minister of Employment.
- 32 SWEP can be useful where the workforce development issues faced by an industry are broader than supply from VET (e.g. Migration or Social Welfare). It also provides a platform for more active engagement from government to industry. It may be desirable to expand the capacity of the SWEP unit, for example, to support ITOs in re-establishing their skills leadership role, or in response to new workforce issues.
- 33 We recommend working with MBIE (including the Provincial Development Unit, SWEP and the Just Transition Unit) to determine the best approach for maximising outcomes. We recommend you discuss this further with the Minister of Employment, the Minister for Regional Economic Development, and the Minister responsible for Just Transitions.

Funding incentives

- 34 We recommend investigating the possibility of an Innovation Fund to incentivise a regional response to skills and training from firms. The fund would support innovative firm-led experimentation around different ways firms can collectively meet regional skills needs.
- 35 Through the consultation, we saw some successful community and regionally driven initiatives such as Aoraki Development's 'Canterbury Youth Initiative'. The Business Linked Internship Scheme is another example where internship programmes for young people are established with local firms. Incentivising innovative local approaches to labour and skills needs will encourage firms to take a more active role in ensuring the VET system is responsive to their skills needs.
- 36 We propose that the Innovation Fund be set up as part of the Provincial Growth Fund (PGF). The PGF aims to lift productivity potential in the provinces. Ensuring local firms have the skills they need to grow will be important part of achieving this. Any fund established will need to fit into the wider funding picture to avoid any overlaps or counterproductive outcomes. We will work closely with the relevant agencies to ensure investment is productive and produces sustainable results.
- 37 We recommend discussing this further with the Minister for Regional Economic Development, as the PGF falls within his portfolio responsibilities.

Government procurement

- 38 Government procurement is another lever to support firms to understand the benefits of investing in training. Internationally, it is increasingly being used to incentivise firms to provide employees with training and upskilling, and to take on apprentices. There are particular opportunities presented by large events such as the America's Cup or APEC 2021.
- 39 This option needs to be considered in the context of the broad range of wider benefits government can seek through procurement. Skills development is one of many wider benefits, including for example, social or environmental outcomes. MBIE is leading the

conversation about including wider benefits in contracts across government. Further work needs to be done to understand the areas where there might be potential to include requirements in a procurement for training or skills development (or, for example, where it might be appropriate to incorporate environmental outcomes such as reduced carbon emissions).

- 40 Seeking better skills development from firms through procurement would send a strong message about the importance government places on training. However, we need to weigh up the benefits gained against a number of risk factors:
- a. Given the high proportion of small firms in New Zealand, it will be important to ensure that additional requirements do not result in barriers to their participation in government contracting, including participation throughout the supply chain.
 - b. Aside from initiatives at the central government level (such as forestation and Kiwibuild initiatives), procurement may have a limited impact at a regional level where many government contracts are led by local authorities.
 - c. Seeking wider benefits is likely to increase the cost of procurement across government.
- 41 We recommend meeting to discuss this further with the Minister for Economic Development who has responsibility for government procurement.

A VET system that supports, and is supported by, industry: Table of key options

Change to consider	Choices to be made (subject to further advice)	Dependencies/ links	Sequencing
<p>Active coordination via:</p> <ul style="list-style-type: none"> Industry-led facilitation and coordination through the ITOs' skills leadership function Firm-led coordination through Group Employment and Training Schemes (GETS) Government-driven facilitation and coordination through the SWEP 	<ul style="list-style-type: none"> The degree to which government leads, or simply provides the right environment in which actors take leadership roles in ensuring coordination of skills development at a regional level. 	<ul style="list-style-type: none"> Links to proposals to expand blended learning and improve fairness Links to government's involvement in the labour market and to Fair Pay and Pay Equity initiatives Further work is needed on whether GETS require further support to expand their reach across industry 	<ul style="list-style-type: none"> Could begin with pilot programmes, if budgeted, in mid-2019
Innovation Fund to incentivise a regional response to skills and training from firms	<ul style="list-style-type: none"> Needs discussion with your colleagues 	<ul style="list-style-type: none"> Would require discussion and leadership from other Ministers and MBIE to lead implementation 	<ul style="list-style-type: none"> Requires budget appropriation, within the Minister for Regional Economic Development's portfolio
Government procurement to support firms to understand the benefits of investing in training	<ul style="list-style-type: none"> Needs discussion with your colleagues 	<ul style="list-style-type: none"> Would require discussion and leadership from other Ministers and MBIE to lead implementation 	<ul style="list-style-type: none"> Would require an assessment of cost and impact