What are the strategic people capability challenges facing Australia and New Zealand in implementing their 2016 Defence White Papers?

Bridget Musker

New Zealand Defence Force

Abstract

This paper examines the strategic people capability challenges facing Australia and New Zealand in implementing their 2016 Defence White Papers. It analyses the implications of changing demographics of each country between 2015 and 2025, as well as the key economic drivers, the unique characteristics of the future working population, and the demands for skills in future labour markets.

The paper contends that to maintain and grow their people capability, both Australia and New Zealand need access to a very limited supply of the top talent of the future generation. However, the biggest challenge is likely to be offering competitive remuneration to a section of the labour force that is in high demand, exacerbated by the sector's lack of appeal to women and security restrictions relating to skilled migrants, which may result in both countries needing to reassess the affordability of their White Papers.

Introduction

Australia and New Zealand's 2016 Defence White Papers strategically balance policy, capability and funding over the next 10 to 15 years. Australia's *2016 Defence White Paper* requires the growth of around 2500 permanent ADF members, to a total of 62,400. It also includes the reprioritisation of 2300 existing positions into higher priority activities by 2025-26, with further growth likely to be required into the 2030s.[1] In addition, it requires the growth in Defence of 800 Australian Public Service personnel.

The New Zealand Defence Force (NZDF) is currently undertaking further work to confirm the size of its work force.[2] However, New Zealand's *2016 Defence White Paper* indicates that the NZDF needs to continue to grow and modernise its workforce to support the future capabilities described in the White Paper.

The areas of growth and reprioritisation incorporated in both White Papers primarily relate to intelligence, space and cyber security. Positions are also required for the modernisation of maritime, air and land capabilities, alongside their supporting enabling functions. Across all areas, the skill sets required will have a strong science, technology, engineering and maths (STEM) focus. These skills will also be in high demand across the wider Australian, New Zealand and global labour markets.

The development of strategic workforce plans is a key next step for both Australia and New Zealand in implementing their White Papers. These plans will work through the demand requirements of a workforce, using current force-generation techniques. The numbers, composition and competencies required to support the capabilities of each of the White Papers will be articulated. But how are both nations placed from a supply side? Will the demand for similar skill sets in global labour markets impact on their ability to attract the experience required, while still addressing affordability? And how will the future demographic characteristics of both countries impact on their ability to attract, train and retain the next generation of professional military experts?

The purpose of this paper is to examine the strategic people capability challenges that are facing Australia and New Zealand in implementing their 2016 Defence White Papers. It will focus on the implications of changing demographics of each country between 2015 and 2025; key economic drivers; the unique characteristics of the future working population; and the demands for skills in future labour markets.

It will summarise the changing demographics of each country, review the drivers of economic growth, explore the challenges of targeting a changing working population, and address the impact of the demand for similar skill sets in the

future labour market. The paper will conclude that Australia and New Zealand could face significant people capability challenges in implementing their White Papers which may result in a need to reassess affordability in line with their strategic intentions for continued economic growth and prosperity.

Changing demographics – 2015 versus 2025

The next decade will be a crucial period for both Defence Forces to grow and align their workforces to the skill sets required to implement new capabilities. As illustrated in Table 1, the population of both countries is expected to grow in the period to 2025.

Table 1: Australian and New Zealand population estimates[3]

Australian Population Estimates (millions of persons at 30 June)			
Age Range	**2014–15**	**2024–25**	**Movement**
0–14	4.5	5.3	0.8
15–65	15.8	17.8	2
65+	3.6	4.9	1.3
Total	23.9	28.0	4.1
Percentage of total population			
0–14	18.8%	18.9%	0.1%
15–65	66.1%	63.6%	-2.5%
65+	15.1%	17.5%	2.4%

New Zealand Population Estimates (thousands of persons at 30 June)			
Age Range	**2014–15**	**2024–25***	**Movement**
0–14	914	978	64
15–65	3007	3331	324
65+	674	965	291
Total	4595	5274	679
Percentage of total population			
0–14	19.9%	18.5%	-1.3%
15–65	65.4%	63.2%	-2.3%
65+	14.7%	18.3%	3.6%

*A midpoint assuming steady annual growth between 2023 and 2028 has been used to enable a comparison at 2024–25.

Australia is projected to grow by approximately 4.1 million people and New Zealand by 679,000. By 2025, it is estimated that there will be 2 million more Australians aged 15-65, where participation in the workforce is at its highest, and 324,000 more New Zealanders. At the same time, both populations are also ageing. This demographic change means that the proportion of the predominantly dependent population (aged 65 and over) will grow by approximately 2.4 per cent in Australia and 3.6 per cent in New Zealand.

As there is steady growth in the working-age populations in both countries, the size of the workforce may not be an issue. The ADF is only looking to attract a total of 3300 more people (2500 ADF personnel and 800 Australian Public Service) from the expected working population growth over this period. The proportion of the total workforce in each country that either Defence Force employs is not projected to change significantly. However, as explored further in this paper, the gender, age, ethnicity and skill set match of this workforce may be a significant strategic people capability challenge in light of key drivers of economic growth.

Economic growth drivers – population, participation and productivity

Population structure, workforce participation and productivity are key drivers of long-term economic growth. The population structure of both countries is changing due to immigration and longer life expectancies. For at least the last 30 years, immigration has made the largest contribution to growth in the working-age population of both countries. As a result, both White Papers acknowledge that Australia and New Zealand will need to recruit from their respective ever-growing multicultural societies. The ageing population also has important implications for the tax base of each government, including their ability to provide the expected standard of services to their ageing population while funding future defence-related increases.

Participation in the workforce by all ages is expected to increase or stabilise. The most significant increase in workforce participation will be those aged 60-69.[4] Female participation rates are also expected to continue to grow following strong growth over the past 40 years. Global figures show that women now outnumber men in tertiary education by a ratio of 108 to 100.[5] Therefore, the female proportion of the workforce will also be more highly educated. As a result of these shifts in population and participation, both the ADF and NZDF will be targeting a workforce with a higher number of better-educated women, skilled migrants and those aged 60-69.

Productivity is the ability to innovate, create efficiencies and remain globally competitive.[6] Australia's National Innovation and Science Agenda states that innovation and science are critical in delivering new sources of growth, obtaining higher incomes and seizing the next wave of economic growth.[7] It also states that the talent and skills of Australians are the engine behind Australia's innovative capacity. Australia's Chief Scientist has stated that it is the knowledge and application of STEM skills that will build a stronger, more competitive economy.[8] Both countries will need STEM skills to grow their future military capabilities and their economies, which will place a high demand on STEM skills.

However, both Defence Forces will need to compete with the private sector for their STEM-skilled workforce. They will need to offer comparable remuneration and working environments, within their unique security and cultural environments. Given the reduced productivity of an ageing population (and its increased social security demands), it is highly unlikely that either government would be in a position to provide additional funding in order for their respective Defence Force to remain competitive with the private sector.

Australia's *2016 Defence White Paper* specifically states that the 10-year funding model will not be subject to any further adjustments as a result of changes in Australia's economic growth estimates.[9] So both Defence Forces will need to consider the challenges of targeting a working population that will comprise higher proportions of better-educated women, skilled migrants, and people aged 60-69, complementing the next generation of younger personnel.

Challenges of targeting a changing working population

Women, skilled migrants and those aged 60–69 are a growing part of the future working population in both countries. Yet women are currently under-represented in both Defence Forces, with 15 per cent in the ADF and 16 per cent in the NZDF.[10] Previous recruiting polices and initiatives have failed to increase this workforce percentage substantively, which suggests that employment and cultural aspects are preventing a change to this paradigm.

It may also be due to societal conditioning that women do not typically choose careers where they may be required to use power, influence or force. These elements may continue to deter women from joining the military over the next decade, which would result in a reduced number of potential recruits. Both Defence Forces should plan for this and set realistic goals for the number of women they will be able to attract and retain. At the same time, they will need to remain committed to removing any barriers that prevent women from joining the military, while maintaining their operational capability and war-fighting ethos.

The cultural composition of each of the populations is also changing to be more diverse as the intergenerational impact of migration filters through both countries. Skilled migrants, who will make up a greater proportion of the working populations, may not be eligible for employment due to current security vetting policies. This would also reduce the size of the pool from which both Defence Forces attract personnel.

The increased diversity from migrants is also changing the face of what a Defence Force member will look like over the next decade. It is moving even further away from the traditional, male-dominated ANZAC homogeneity into a culturally diverse workforce similar to the society it protects. A new Defence brand will be required to attract and retain personnel from this culturally diverse workforce. This brand will need to create a connection or reason for an individual to choose a Defence Force career, regardless of their cultural background, along with policies and procedures that ensure equality and inclusion for the growing number of ethnic groups and religions.

The most significant increase in participation rates in both workforces will be those aged 60-69. This is likely to result in both Defence Forces having an older workforce to ensure they can fill critical technical roles. New Zealand announced in March 2017 that it will follow Australia and a number of European governments which have responded to the economic challenge of an ageing population by raising the pension eligibility age from 65 to 67 in the anticipation that this will keep people in the workforce longer.[11]

Having a greater participation of older workers could have the benefit of cross-generational mentoring, with a greater mix of 'baby boomers' and generations X, Y and Z in the workforce at the same time. This will be particularly valuable as both Defence Forces manage the risks of phasing out old capabilities and bringing in modernised replacements.

It is also likely to present each Defence Force with a set of unique people capability challenges, including the ability to match the skills of the older generation to those needed; deployability; medical costs; occupational health and safety; the increased potential for intergenerational conflicts, particularly where older generations are perceived to be blocking the promotion of younger generations; and the need to manage the career requirements of four very different generations, at very different stages of their lives.

Tailoring the career management needs of individuals, while maximising the value of four generations participating in the workforce, needs to be addressed by new policies and force-generation techniques that recognise the unique situation of the individual and the critical skills required by the respective Defence Forces.

Although the proportion of the total workforce in each country targeted by either Defence Force is not projected to change significantly, both Australia and New Zealand's ability to grow the required people capability will be challenged by a working population containing more women, skilled migrants and older workers.

Demand for skills in the future labour market

The areas of workforce growth and reprioritization for both the ADF and NZDF have a strong STEM requirement which will be in high demand in the global labour market. New Zealand's *2016 Defence White Paper* explicitly points out that:

> One of the core challenges the Defence Force faces is balancing the modernisation of its workforce with the need to attract and retain the right people with diverse skills, many of which will be in high demand elsewhere. It must do this while remaining affordable in the long term.[12]

Australia's *2016 Defence White Paper* echoes these sentiments, stating that:

> All parts of the Defence workforce will need to upgrade their skills as part of being a more capable, agile and potent future force. To meet the demands of the higher-technology future force set out in this Defence White Paper, the Government will undertake the largest single rebalance of the Defence workforce in a generation.[13]

International research indicates that 75 per cent of the fastest growing occupations now require STEM skills and knowledge.[14] Globally, there is a disconnect between education standards and the skill demands of organisations. The STEM and soft skills that facilitate integration into the workforce are in short supply. Some major companies are now training their own personnel to bridge the gap between education and the skills required in the workforce.[15]

This global trend is reflected in Australia through too few children studying science, maths and technology in schools.[16] These subjects are critical in preparing for STEM jobs in the future. Both countries will have a short supply of the highly skilled workforce needed for their future military capabilities and to grow their economies.

Both Defence Forces will need to focus on hiring its next generation of younger personnel with these skill sets, because they will be unlikely to find them in older workers or even skilled migrants. To effectively compete with the private sector, each Defence Force will need to appeal to the motivation of future generations, as well as offering modern flexible working conditions and creating a varied and innovative environment that offers rapid career progression and a more liberal working regime.[17]

Even if these significant cultural and employment changes are made, the biggest challenge is likely to be offering competitive remuneration to a section of the labour force that is in high demand and made even smaller by the sector's lack of appeal to women, and security restrictions around the employment of skilled migrants.

Each Defence Force will need to balance its demand for future people capability with the economic reality of remaining within its indicative funding levels. The proportion of the Australian defence budget allocated to personnel will reduce from around 37 per cent to around 26 per cent in 2025–26, although this proportion is distorted by large capital investment in 2025-26.[18] However, the amount of investment in personnel is projected to grow from $12.0 billion to $15.3 billion in 2025-26.

This represents an average annual increase of 2.75 per cent to cover the additional personnel, personnel inflation and the price of a more highly skilled workforce. Although Australia's *2016 Defence White Paper* had around 80 per cent of the defence budget externally cost assured, the projected 2.75 per cent average annual increase may not be high enough to compete with the private sector. New Zealand is likely to face a similar challenge and will use its mid-point review between White Papers to assess the ongoing affordability of capability options.

Conclusion

Population structure, workforce participation and labour market demands in the next decade will create strategic people capability challenges for both the ADF and NZDF. Both countries are managing the implications that an ageing population has on their tax base, while striving for continued economic growth through innovation that requires the same STEM skills needed by their Defence Forces. Even though the proportion of the total workforce in each country that both Defence Forces employ is not projected to change significantly, both Australia and New Zealand's ability to grow the required people capability will be restricted due to the working population containing more woman, skilled migrants and older workers.

To enable both Australia and New Zealand to maintain and grow their people capability, they need access to a very limited supply of the top talent of the future generation, requiring them to compete more actively with the private sector. Offering modern flexible working conditions and creating a varied and innovative environment that offers rapid career progression and a more liberal working environment will be critical factors in attracting and retaining the future generation of personnel.

On their own, these are significant cultural and employment changes for each Defence Force. However, the biggest challenge is likely to be offering competitive remuneration to a section of the labour force that is in high demand and made even smaller by the sector's lack of appeal to women, and security restrictions around the employment of skilled migrants. This may result in New Zealand and Australia needing to reassess the affordability of their White Papers in line with their strategic intentions for continued economic growth and prosperity.

Notes

1 [Australian] Department of Defence, *2016 Defence White Paper*, Commonwealth of Australia: Canberra, 2016, pp. 146-50.

2 [New Zealand] Ministry of Defence, *2016 Defence White Paper*, New Zealand Government: Wellington, June 2016, pp. 55-9.

3 The Treasury [Australia], *2015 Intergenerational Report Australia in 2055*, Commonwealth of Australia: Canberra, March 2015, p. 12; also Statistics New Zealand, 'National population estimates as at 30 June 2016', *Statistics New Zealand* [website], 12 August 2016, available at <http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/NationalPopulationEstimates_HOTPAt30Jun16.aspx> accessed 9 February 2017, and Statistics New Zealand, 'National populations projections 2016 (base) – 2068', *Statistics New Zealand* [website], 19 October 2016, available at <http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/NationalPopulationProjections_MR2016.aspx> accessed 9 February 2017.

4 The Treasury [Australia], *2015 Intergenerational Report Australia in 2055*, pp. 16-21.

5 SHRM Foundation, 'What's next: future global trends affecting your organization. Evolution of work and the worker', *SHRM Foundation* [website], February 2014, p. 13, available at <https://www.shrm.org/foundation/ourwork/initiatives/preparing-for-future-hr-trends/PublishingImages/Pages/Evolution-of-Work/2-14%20Theme%201%20Paper-FINAL%20for%20Web.pdf> accessed 4 July 2017.

6 The Treasury [Australia], *2015 Intergenerational Report Australia in 2055*, p. 12.

7 Australian Government, 'Welcome to the ideas boom', *Science.gov.au* [website], 2015, p. 1, available at <http://www.science.gov.au/scienceGov/news/Pages/Welcome-to-the-Ideas-Boom-8-February-2016.aspx> accessed 4 July 2017.

8 [Australian] Chief Scientist, 'Science, technology, engineering and mathematics: Australia's future', *Chief Scientist* [website], September 2014, p. 5, available at <http://www.chiefscientist.gov.au/wp-content/uploads/STEM_AustraliasFuture_Sept2014_Web.pdf> accessed 4 July 2017.

9 [Australian] Department of Defence, *2016 Defence White Paper*, p. 179.

10 [Australian] Department of Defence, *2016 Defence White Paper*, p. 151; and [New Zealand] Ministry of Defence, 2016 Defence White Paper, p. 82.

11 Anna Loren and Vernon Small, 'NZ superannuation changes: what they mean for you', *Stuff* [website], 7 March 2017, available at <http://www.stuff.co.nz/national/politics/90120887/NZ-superannuation-changes-what-they-mean-for-you> accessed 4 July 2017.

12 [New Zealand] Ministry of Defence, *2016 Defence White Paper*, p. 12.

13 [Australian] Department of Defence, *2016 Defence White Paper*, p. 23.

14 [Australian] Chief Scientist, 'Science, technology, engineering and mathematics', p. 7.

15 SHRM Foundation, 'What's next', p. 6.

16 Australian Government, 'Welcome to the ideas boom', p. 4.

17 SHRM Foundation, 'What's next', p. 15.

18 [Australian] Department of Defence, *2016 Defence White Paper*, p. 181.