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Development of foreign language capability as a valued human resource asset within the military

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ABSTRACT

English has held the status as a global language for many years, and has been the language in which the corporate and military sectors conduct their international operations. However, due to globalisation, technological advances and challenging economic times, the environments in which businesses and defence forces operate have evolved considerably. Defence forces are increasingly involved in non-traditional operations, in non-traditional geographical locations, working alongside non-traditional international security partners. In light of the changing role and expectations of the military, Conway (2005) suggests that the military sector has been guilty for too long of assuming that English, the traditional language of international diplomacy, politics, economics and military operations, will remain the prevalent language. While the corporate sector has recognised foreign language capability as a human resource asset, its importance and operational relevance is largely unacknowledged within the military sector.

The aim of this study was to examine how modern English speaking defence forces, such as the New Zealand Defence Force (NZDF), are addressing the issue of 'linguistic complacency' (Crystal, 2003), and what plans are in place to develop human resources as foreign language capable assets. For the NZDF, the concept is new. Consequently, a preliminary investigation into one of the single Services, the Royal New Zealand Navy (RNZN), was undertaken. It identified Mandarin Chinese, French, Hindi and Japanese as the foreign languages of greatest applicability to the Service. Census survey results of RNZN uniformed personnel indicated that over half of respondents had some second-language ability (of varying proficiency level) across more than forty languages. Despite the reported foreign language capacity, the results, when compared with the Service's desired skills sets, suggested that there are a number of gaps between the ideal and current capability requirements. A United States Department of Defense model for developing foreign-language capability was discussed as a blueprint for how the RNZN and NZDF could look to bridge these gaps through the strengthening of educational ties with defence partners.

TABLE OF CONTENTS

Abstract	i
Table of Contents	ii
List of Figures	v
List of Tables	vi
List of Acronyms	viii
Chapter 1 - Introduction and Overview	
1.1: Introduction	1
1.2: The Research Objectives and Significance of the Study	4
1.3: State of the Field of Research	5
Chapter 2 – Literature Review	
2.1: Introduction	6
2.2: Why is Foreign Language Capability Becoming Recognised as an Increasingly Important Human Resource Asset?	7
2.2.1: <i>The New International Corporate Environment</i>	
2.2.2: <i>The Roles of the Military and the New Threats Challenging International Security and Stability in the 21st Century</i>	9
2.3: What are the Ideal Human Resource Foreign Language Requirements of the Modern World?	13
2.3.1: <i>Corporate Sector</i>	
2.3.2: <i>Military Sector</i>	15
2.4: What Foreign Language Capabilities do Defence Forces Currently Possess?	18
2.4.1: <i>Current Practice One Contracted Interpreters</i>	
2.4.2: <i>Current Practice Two Recruitment, Training and Development of Uniformed Linguists & Foreign Affairs Specialists</i>	21
2.4.3: <i>Current Practice Three Foreign Language Competency Assessments & Registration</i>	26
2.4.4: <i>Current Practice Four Simulation Training and Online Computer Learning</i>	29
2.5: Addressing the Gaps in Military Capability Requirements	31

2.5.1:	<i>Acknowledging the Slow Response in Addressing the Shortfalls</i>	
2.5.2:	<i>The Future</i>	32
2.6:	Opportunities for a Foreign Language Competent Workforce	37
2.6.1:	<i>Achieving Competitive Advantage</i>	
2.6.2:	<i>Improved Service Provision & Enhanced Reputation in the International Arena</i>	38
2.6.3:	<i>Better Utilisation and Allocation of Human Resources & Improved Job Satisfaction</i>	40
2.7:	Key Points of the Literature Review	42
Chapter 3 - Research Methodology		
3.1:	Introduction	44
3.2:	Conceptual Framework for Research	45
3.3:	Approval Procedures	
3.3.1	<i>NZDF and RNZN Approval</i>	47
3.3.2	<i>Research Ethics Approval</i>	48
3.4:	Study Design – Ideal Capabilities	50
3.5:	Study Design – Current Capabilities	
3.5.1	<i>Quantitative Approach</i>	51
3.5.2	<i>Pilot Trial</i>	52
3.5.3	<i>Sampling Procedure</i>	
3.5.4	<i>Sample</i>	53
3.5.5	<i>Measures</i>	55
3.6	Conclusion	58
Chapter 4 – Presentation of Results		
4.1:	Ideal Second-Language Capabilities as Determined by Frequency of RNZN Engagement with Foreign Navies	60
4.1.1	<i>Limitations</i>	
4.1.2	<i>Ten Years of RNZN Ship Visits to Foreign Ports 2000-2011</i>	61
4.1.3	<i>Foreign Naval Ship Visits to New Zealand Ports 2000-2011</i>	64
4.1.4	<i>RNZN Levels of Engagement with Foreign Navies</i>	66
4.2:	Geostrategic Importance of Identified Nations to New Zealand	69
4.3:	RNZN Second-Language Requirements as Determined by Naval Engagement Levels and Geostrategic Importance of Foreign Nations	71

4.4: Current Self-Reported Second-Language Capabilities of RNZN Regular Force Personnel	74
4.5: The RNZN's Current Second-Language Capabilities in the Identified Top-priority Languages	79
Chapter 5 – Discussion	82
5.1: Goal One	84
5.1.1 <i>Identify</i>	
5.1.2 <i>Validate</i>	87
5.1.3 <i>Prioritise and Demand Signals</i>	89
5.2: Goal Two	91
5.2.1 <i>Current Capabilities</i>	
5.2.2 <i>Personnel and Training & Education</i>	96
5.3: Goal Three	99
5.4: Limitations of Research	101
5.4.1 <i>Survey response rate</i>	
5.4.2 <i>Logistics of ship visits</i>	
5.4.3 <i>Self-assessment</i>	102
5.4.4 <i>Cultural proficiency</i>	
5.4.5 <i>Organisational application</i>	103
5.5: Future Research	104
Chapter 6 - Conclusion	105
Bibliography	108
Appendices	
Appendix A US Navy Strategic Language List 2011	115
Appendix B Research Questionnaire	122
Appendix C Covering Information Email	126
Appendix D Reminder Email	127
Appendix E Council of Europe's European Language Passport	128

LIST OF FIGURES

Figure 2.1	US Department of Defense Roadmap's Goals and Objectives	33
Figure 2.2	US Department of Defense Vision & Strategic Plan for Language Skills, Regional Expertise and Cultural Capabilities (LREC) 2011-2016	34/83
Figure 2.3	LREC Capabilities-Based Requirement Identification Process (CBRIP) Example	34/85
Figure 2.4	LREC Strategic Plan Implementation Timeline	35
Figure 3.1	Conceptual Framework for Research	45
Figure 3.2	Global Scale – Common European Reference Framework	57
Figure 5.1	Types of Assessment	89

LIST OF TABLES

Table 3.1	Descriptive Statistics: Age and Gender Breakdown of the RNZN and Sample Populations	54
Table 3.2	Descriptive Statistics: Length of Service Breakdown of the RNZN and Sample Populations	54
Table 4.1	RNZN Ship Visits to Foreign Ports 01 July 2000 – 30 June 2011	62
Table 4.2	Foreign Naval Ship Visits to New Zealand Ports 01 July 2000 – 30 June 2011	64
Table 4.3	RNZN Level of Bilateral Engagement with Foreign Nations	66
Table 4.4	Distribution of Countries According to Level of Engagement	67
Table 4.5	PI Values for Countries with which the RNZN has a Level of Engagement	69
Table 4.6	Distribution of Countries According to PI Values	70
Table 4.7	Top Priority Languages for RNZN Requirements	71
Table 4.8	Second Priority Languages for RNZN Requirements	72
Table 4.9	Additional Languages for Consideration by the RNZN	72
Table 4.10	Descriptive Statistics: Second-Language Ability within the RNZN Regular Force	74
Table 4.11	Foreign Languages in which RNZN Regular Force Personnel have Proficiency	75
Table 4.12	Number of RNZN Regular Force Personnel with Multiple Language Proficiency	75
Table 4.13	RNZN Second-Languages Categorised according to US Classifications	76
Table 4.14	Current RNZN Second-Language Capabilities as Self-Assessed by Regular Force Personnel 2011	77
Table 4.15	Descriptive Statistics: Proficiency Levels across Communication Competencies	78
Table 4.16	Detailed Proficiency Levels for RNZN Regular Force Personnel in the Top-Priority Languages	79

Table 4.17	Writing Proficiency Levels Crosstabulation and Chi-Square Tests	80
Table 5.1	RNZN Identified Second-Language Requirements and Current Capabilities	92
Table 5.2	Number of RNZN Personnel Wishing to Learn a Second-Language	93
Table 5.3	Second-Languages RNZN Personnel Wish to Learn	94
Table 5.4	Number of RNZN Personnel Wishing to Learn RNZN Required Second-Languages	94

LIST OF ACRONYMS

ADFA	Australian Defence Force Academy
ADFELPS	Australian Defence Force English Language Profiling System
ATLAS	RNZN Personnel Database
CBRIP	Capabilities-Based Requirements Identification Process
CEFR	Common European Framework Reference for Languages
DLILFC	Defense Language Institute Foreign Language Center
DLPT	Defense Language Proficiency Test
EEC	European Economic Community
ELP	Council of Europe's European Languages Portfolio
FAMT	RNZN Fleet Activity Management Tool
FAO	Foreign Area Officer
FPTO	Fleet Personnel and Training Organisation
GAO	US Government Accountability Office
IAS	International Affairs Specialist
ILR	International Language Roundtable
IRT	Rasch Scaling Item Response Theory
ISAF	International Security Assistance Force
LMS	Learning Management System
LREC	Language Skills, Regional Expertise and Cultural Capabilities
MLF	Multinational Land Force
NATO	North Atlantic Treaty Organisation

NCO	Non-Commissioned Officer
NZDF	New Zealand Defence Force
PAS	Politico-Military Affairs Strategist
PAT	Process Action Team
PI	Potential Indicator
RAS	Regional Affairs Strategist
RMCC	Royal Military College of Canada
RMN	Royal Malaysian Navy
RNZN	Royal New Zealand Navy
SAF	Slovenian Armed Forces
SAS	Special Air Service
UK	United Kingdom
UN	United Nations
UNIFIL II	United Nations Interim Force in Lebanon
USA / US	United States of America

CHAPTER ONE - INTRODUCTION AND OVERVIEW

It is all too easy to make your way in the world linguistically with English as your mother tongue... We become lazy about learning other languages... We all have to make a greater effort. English may be the world language; but it is not the world's only language and if we are to be good global neighbours we shall have to be less condescending to the languages of the world – more assiduous in cultivating acquaintance with them.

- Sir Sridath Ramphal, Former Secretary General of the Commonwealth
(as cited in Crystal 2003, p. 24)

1.1 Introduction

English continues to be considered as the global language of business and of the military (Crystal, 2003). Crystal (2003) suggests that globalisation, economic development and technological advances have all played a part in cementing English as the dominant international language. However, the unrelenting desire for economic success in times of economic hardship means that the traditional monolingual bias towards English is diminishing in favour of foreign language skill and competency (Crystal, 2003).

Historical military power, British imperialism, and the United Kingdom's status in the nineteenth century, as the then leading industrial and trading nation in the world, have ensured global dominance of the English language. By the twentieth century, the US boasted the largest population among English speaking countries, and was becoming an economic world superpower with an English language backed US dollar. Internationalisation of political and economic bodies such as the United Nations and the World Health Organisation has generated the requirement for a *lingua franca*, a common language on which to conduct and document formal business (Crystal, 2003). The progress and global accessibility of relatively new communication technologies such as email and the Internet, has also meant that a generically understood and common-language operating system was required.

These technological advances and the impact of globalisation in the post-Cold war era have dramatically changed the way the corporate world and the military sectors operate. Business-wise, they have enabled 24 hour world-wide operations to make viable commercial sense. Similarly, from a military perspective, they have allowed nations' defence forces to become more geographically displaced in new and far reaching areas of operations, and have fostered the development of multi-national taskforces.

The long-held status of English as a global language has led to what Crystal (2003) terms "linguistic complacency" (p. 22). This term describes the reluctance of English speakers to learn a second-language as they do not see any reason for doing so. The example used by Crystal (2003) is the stereotypical experience of an English speaking tourist in a non-English speaking destination, ignorantly expecting all local citizens to be able to speak English. Given the increase in global competitiveness, compounded with the fluctuating global economic climate, the English speaking corporate sector has woken up to its 'linguistic complacency' and the traditional supremacy of English in business is changing. The corporate sector is increasingly recognising the relevance and value of foreign language proficiency as a key operational and human resource asset capable of increasing market share.

Similarly, as the operational environments in which the world's defence forces evolve, interest in how best to combat 'linguistic complacency' within the military sector is also growing. As is true for both the corporate and military realms:

There has never been a time when so many nations needed to talk to each other so much. There has never been a time when so many people wished to travel to so many places. There has never been such a strain placed on the conventional resources of translating and interpreting. Never has the need for more widespread bilingualism been greater..." (Crystal 2003, p. 19).

However, unlike the corporate sector, the military sector has paid little attention to the development of its human resources in foreign languages. This study discusses the

reasons behind the recent emphasis on foreign language competency as a beneficial and arguably essential human resource capability for both corporate and military strategists. The field of research was reviewed in order to gain an understanding of what advances are being made by the world's defence forces in terms of developing foreign language capabilities.

The New Zealand Defence Force (NZDF) currently provides destination relevant language training to personnel as part of pre-deployment training courses. Beyond these typically short and 'just-in-time' survival language lessons, the NZDF also provides appointed Defence Attachés with in-depth and often in-country language training, depending on their respective overseas destinations. The NZDF single Services do not actively recruit personnel with second-language skills and there are no training policies established for the development of second-language proficiency. However, there are NZDF funded schemes available for Service personnel to apply for, should they wish to undertake a course of study in a second-language through an educational institution.

The NZDF has not conducted any research into its second-language requirements relating to its operational environment or strategic outlook. Consequently, this exploratory case study examines the ideal and current foreign language capabilities of one of the NZDF's three Services, the Royal New Zealand Navy (RNZN). Data relating to RNZN engagement with other nations' navies and calculated geostrategic importance levels of these nations was utilised to determine the operational regions and languages of greatest strategic benefit to the RNZN. A census of all RNZN uniformed employees and self-reported proficiency levels enabled a systematic quantitative analysis to be undertaken; depicting areas for potential human resource development and facilitating discussion on training and investment opportunities for the RNZN.

1.2 The research objectives and significance of the study

This study examines the current status of foreign language competency within the military sector and determines whether requirements are being met. It focuses on the RNZN as a preliminary investigation into the second-language capabilities of Regular Force uniformed personnel. This study's purpose is to identify what the ideal and realistic requirements of the RNZN are in terms of foreign linguistic skills, and to compare these to current human resource capabilities within the RNZN. The importance of the topic stems from its purpose and the fact that to-date, there has been no research conducted in this area within the RNZN or wider NZDF.

The research objectives for the study are:

1. To determine the foreign language requirements of the RNZN;
2. to identify what foreign language capabilities the RNZN already possesses within its Regular Force; and
3. to ascertain what gaps are evident between the RNZN's ideal and current human resource capabilities with respect to foreign languages.

This study will provide an insight into the current gaps and will facilitate discussion on potential solutions and strategies designed to bridge the identified shortfalls. However, arguably more importantly, it will raise awareness of foreign language competency, a previously unconsidered area of interest for human resource practitioners within the RNZN and NZDF.

1.3 State of the field of research

The majority of research studies on foreign language competency have focused on the corporate sector. While the majority of such studies have focussed on non-English employees requiring bilingualism in English, there are a handful of British and American studies that examine the foreign language requirements of United Kingdom and United States-based organisations, and one New Zealand study that provides an insight into the requirements of New Zealand's export markets during the mid-1990s.

There exists only a small body of academic literature that explores the military dynamic. Research discussing second-language use (any language other than English) in the military is heavily concentrated on the United States of America (USA), with only a minute number of studies focused on smaller nations' defence forces. It is suggested that this is due to the fact that the USA boasts the largest English speaking defence force with the greatest geographic dispersion of personnel world-wide. In the wake of the 9/11 terrorist attacks on New York, US foreign and security policies placed new emphasis on building a foreign language competent public sector and defence force, on which a great deal has been documented and published.

Inherent in the size of the US defence force is the investment capacity to instigate foreign language-driven human resource initiatives ahead of its smaller counterparts. This research aims to contribute to the aforementioned small body of literature by providing a study on the self-described "small nation Navy", the RNZN.

CHAPTER TWO - LITERATURE REVIEW

2.1 Introduction

Just as the corporate world has evolved with the introduction of new technologies and the impact of globalisation, the environment in which the world's defence forces operate has also changed. Research examining the relevance and importance of second-language proficiency as a key operational and human resource capability is increasing. There are significant parallels in the human resource management practices between the military and other types of business (Cycyota & Ferrante, 2004). As Cycyota & Ferrante (2004) suggest, defence forces are global in their reach. The dispersal of employees, the number of employees, as well as the variety of personnel and career fields, create considerable human resource management issues. Defence forces have unique yet robust recruitment, selection and leadership development processes. Similar to corporate employees, Service personnel are also committed to a higher organisational goal or mission (Cycyota & Ferrante, 2004). These parallels signify that the military is an appropriate platform to learn from and compare human resource related issues.

This literature review discusses the reasons behind the recent emphasis on foreign language competency from a wider business perspective, as well as through the eyes of the military. It will outline the benefits foreign language competency offers organisations and defence forces as interest grows in how best to combat the changes and challenges facing both operating environments. Lessons learnt by the Dutch, Belgian, Slovenian, and particularly the US defence forces, will be examined. A summary of linguistic and cultural training provided by the US, British, Canadian and Australian defence forces will be included. This review will also provide an insight into the future direction of defence force language training packages and what is needed if defence forces are to effectively adapt to the changing operational environment.

2.2 Why is foreign language capability becoming recognised as an increasingly important human resource asset?

Globalisation has impacted the way in which business is conducted and has introduced new opportunities for organisations to gain competitive advantage over global competitors. Just as it has impacted on the business world, technology has enabled defence forces to scatter their operations around the world, and has seriously altered the way in which conventional military operations are conducted (Bridges, 1994). The introduction of computer networks, organisational intranets and the world-wide internet phenomenon has changed the way businesses and defence forces communicate, and these have made it possible for all organisations to operate globally (Hamel & Prahalad, 1999). It has had a 'multiplier effect' in that it "... interlocks the whole world such that time and distance no longer buffer us against the effects of change" (Bridges, 1994, p. 17). Such diminished information boundaries shrink the world and accentuate regional, religious and ethnic differences (Daubach & Mueller, 1998).

2.2.1 The new international corporate environment

Specialisation and globalisation have forced the importance of fast and clear internal and external communication, and have also highlighted the importance of foreign language competency within the corporate setting (Bunchapattanasakda, Thitthongkam, & Walsh, 2011). For example, prior to the 1960s, the United Kingdom and the USA dominated the global trading market. All of the primary trading nations were English speaking and consequently, English was the language of trade. The establishment of the European Economic Community (EEC), and Great Britain's membership of it in 1973, transformed traditional trading patterns (Reeves, 1990). With new ease of access to the EEC market comprising 255 million people and one third of the world's trade, Great Britain had to adjust to a new trading situation. By 1978, only a quarter of its total exports were to English speaking markets. Great Britain's slow reaction to the new needs of its trading circumstances was evident in 1983 when the nation registered its first trading balance deficit in manufactured products since the 1950s (Reeves, 1990). British exporters had failed to recognise

the importance of formulating sales and marketing strategies targeting the new European markets, and specifically the need to present these strategies in a language their target market understood (Reeves, 1990).

Historical experience, such as that of Great Britain in the 1980s, shapes commercial perceptions and requirements, and these evolve over time. Results of a 1989 survey of 32 US multinational business executives (cited in Daubach & Mueller, 1998), indicated that the US corporate scene had begun to recognise that cross-cultural understanding was important. However, the study determined that the extent to which foreign language and culture are intertwined was negligible, given that language provision could be managed when, and as, required (Daubach & Mueller 1998). Since then, the need for foreign language skills and education within the global workforce has been well documented in business literature and professional journals. With the increasing prevalence of trans-national companies, employees can increasingly expect to work in international markets; work in the operating language of a multi-national company; take up overseas positions within a company; and travel internationally for business purposes (Council of Europe, 2001b). The Council of Europe (2001a) describes the new employment criterion as 'plurilingualism', as opposed to 'multilingualism', where multiple languages exist separately side-by-side in society. 'Plurilingualism' is defined as a person's ability to switch between languages in order to communicate (Council of Europe 2001a). In order to remain globally competitive, the new challenge facing organisations is the development of an organisational culture that fosters the opportunities and potential associated with foreign language competency (Ward, 2010). Ward (2010) believes that creating a workplace culture that promotes foreign language fluency is essential in today's multilinguistic/plurilinguistic markets, and particularly for organisations that are managed across, and transcend cultural and language divides.

2.2.2 The roles of the military and the new threats challenging international security and stability in the 21st century

The influence of globalisation and technology has also been felt within military organisations. Weapon system capabilities have improved dramatically; logistical processes and systems have been streamlined to ensure greater productivity and efficiency; and civilian skill and thinking have been introduced into military science and engineering (Lang, 1972; Lorenz, 2007). However, the greatest impact has been the structural and attitudinal shift away from combat and tactical operations inherent and central to the military of old (van Dijk & Soeters, 2008). As the world has become smaller through technology and globalisation, the public and political attitudes towards war and the deployment of Service personnel to war zones have changed, and there is a new emphasis on negotiation and maintaining peace.

Integral to the ethos of institutions such as the United Nations (UN), and inherent in military doctrine, like-minded nations pursue a rules-based international order promoting constructive conflict resolution and prevention (New Zealand Government, 2010). In order to maintain peace, and minimise the threat of terrorism and weapons proliferation, modern defence forces are now frequently called upon to undertake humanitarian and peace-keeping missions; disaster relief assistance; co-operative military training and education; joint taskforce maritime piracy and drug interdiction operations; and other unconventional deployments. The majority of these operations are joint international efforts undertaken in non-English speaking regions with non-English speaking military partners and civilian employees (Daubach & Mueller, 1998). For example, of the personnel involved in UN peacekeeping operations, approximately ten per cent are local civilians, and a further five per cent are international civilians employed by local and international government and non-governmental organisations (Ng et al. 2005).

The introductory chapter alluded to the fact that English speaking nations are frequently culprits of 'linguistic complacency'. Conway (2005) believes this to be particularly true of the US and its defence force, stating:

To assume that each coalition partner will defer to English as the lingua franca for war fighting is to doom an international partnership before it begins. To be effective in the international arena, we must employ our collective cultural heritage – as a nation of immigrants composed of native and multicultural speakers – and our brightest people to discourse, think, and act globally (Conway 2005, p. 60).

Despite the modest size of its Defence Force, New Zealand plays an integral part in the non-traditional multinational operations described above. New Zealand does not currently have a national security policy (New Zealand Government, 2010). However, in the New Zealand Defence White Paper published in November 2010, it was stated that “New Zealand recognises that distance is not insulation, especially given globalisation and technological reach (New Zealand Government 2010, p.17). It is therefore in New Zealand’s best security interest to work together with other nations, contributing defence efforts towards regional and international peace and security.

The Defence White Paper 2010 outlines the strategic outlook and ambition of the NZDF and highlights the planned direction of the Armed Forces for the next 25 years. Chapter Three of the Defence White Paper discusses the future strategic outlook of the international security environment and the threats posed to the rules-based international order. A number of these threats, such as cyber-attacks and nations’ increased access to weapons of mass destruction, can be directly attributed to advances in technology. Shifts in the distribution of global economic power, and growing resource pressures related to increased world population are also the indirect results of globalisation and technology. In a paper investigating future conflict scenarios confronting New Zealand’s closest economic and military partner, Australia, five Australian Army Majors cite terrorism and rice wars as the two predominant threats expected to challenge the nation’s defence prior to 2028 (Blain, Churchill, Hodson et. al, 2003).

The continued significant growth of the Chinese, Indian, Brazilian and Russian economies, and the comparably small growth of traditional power houses such as the US, Japanese and European economies, has resulted in a shift in economic power in the international scene. The Defence White Paper 2010 envisages that as the gap between rich and poor nations shrinks, the likelihood of these growing economies developing their military capabilities and expenditure increases. Consequently, the potential increase in the “proliferation of chemical, biological, radiological and nuclear technologies will narrow parts of the military advantage gap between major and aspiring nations” (New Zealand Government, 2010, p. 24), and could have implications on international stability and security.

Just as technological advances and economic growth enable defence forces to develop their defences, they also enable a smarter and increasingly innovative enemy (Lorenz, 2007). Defence forces need to adapt in order to deal with the relatively recent introduction of international terrorist groups, cyber terrorism and remote controlled improvised explosive devices, to name a few examples (Lorenz, 2007). Terrorist networks are often established in weaker nations as they are seen as safe sanctuaries by terrorists who can operate relatively uninterrupted by local agencies and enforcements (New Zealand Government, 2010). It is anticipated that this situation will continue. Therefore, defence forces and the international community need to remain vigilant regarding the risk of the failure of weak nations.

Pressures facing the rules-based international order will mean that defence forces continue to contribute to peace and security initiatives in order to respond to the challenges presented by new external threats. Warwick (2009) has declared that many of the world’s defence forces are currently ill-equipped to efficiently deal with the changing security threats and the new operational focuses of today. It is suggested that the significant lack of second-language linguistic and cultural skills within defence forces is, among others, a prominent reason for this (Daubach & Mueller, 1998; Ng, Ramaya, Teo & Wong, 2005; Lorenz, 2007; Meng, Ong, Tan & Tan, 2007; Warwick, 2009). Van Dijk & Soeters (2008, p. 321) believe that “a reconceptualization of the position and profession of the interpreter within

peacekeeping operations, in combination with language and cultural awareness training would benefit the military organisation as a whole". Defence forces need to adopt a new high-level appreciation for the role of the interpreter and develop foreign language skills in order to cooperate with non-traditional military partners and understand how today's enemies think and act in the new international operating environment.

2.3 What are the ideal human resource foreign language requirements in the modern world?

Upon recognising the potential opportunities associated with establishing a foreign language appreciative workplace, and investing in language training and development, there is an acute need for organisations and defence forces to ascertain where investment and human resources are best allocated. According to Reeve (1990), unlike foreign organisations who can safely focus on learning English, reluctance and opposition to foreign language learning within English speaking organisations tends to centre around the lack of knowledge and understanding as to what their respective key language requirements are. Managerial decisions regarding foreign language requirements, and the level of language proficiency required, are crucial in order to best utilise human resources (Bunchapattanasakda, Thitthongkam, & Walsh, 2011).

2.3.1 The corporate sector

Over the last fifty years, a substantial number of studies have been undertaken into the second-language skill requirements of the corporate world. Despite the range of years across which they were conducted, Reeve's (1990) survey of 23 British companies, Arn, Kordsmeier & Rogers' (2000) survey of 171 US businesses, and Soma & Waldman's (2006) survey of international organisations in Wisconsin, all depict similar organisational needs with respect to foreign language skills. These surveys concluded that organisations typically require foreign language fluency for the translation of internal company communication and correspondence; sales and marketing; acquisition arrangements and legal agreements; contract negotiations; communication with foreign suppliers and government officials; and improved customer service. A New Zealand study conducted by Enderwick & Akoorie (1994) into the requirements of 20 award winning and 18 non-award winning New Zealand export companies, found that employees with foreign language skills were employed predominantly in sales and marketing positions (70% within award winning companies; 49% within non-award winning companies). Others were employed in

technical/production fields and general management. The principle tasks of these employees were negotiation, liaison and product development.

Data obtained from the European Household Panel survey and the German Socio-Economic Panel survey denotes that across Europe, one in every five employees uses a second-language (other than the respective nation's official language) in the workplace (Tucci & Wagner, 2004). In 2000, statistics pertaining to 130,000 respondents across the European Union revealed that in order to conduct business, 20% of employees in Germany, 43% of employees in The Netherlands, 45% of employees in Denmark and 90% of Luxembourg's employees used a foreign language in their job. In contrast, only 6% and 8% of employees in Ireland and Great Britain respectively, needed to speak a language other than English. Of the non-English speaking respondents, 76% listed English as their first foreign language required for work purposes. Across all occupation categories surveyed, 50%-84% of respondents spoke English as their first foreign language, 8%-20% spoke French and 5%-14% spoke German (Tucci & Wagner, 2004).

From a US perspective, the language requirements of businesses during the 1990s and early 2000s appear not too dissimilar to the findings in Europe according to Cornick & Roberts-Gassler (1991) research. Their survey of 126 US-based organisations and 89 foreign-based organisations showed that both categories rated Spanish, French and German as their top language preferences, although they differed in the order of these top three. Asian languages such as Japanese and Chinese featured towards the bottom of the desired skills list in both categories. However, a survey conducted by Arn, Kordsmeier & Rogers (2000) and Soma & Waldman's (2006) survey of 49 Wisconsin international businesses paint a different picture. While they agree that Spanish, German and French remain among the most predominant language preferences, both studies suggest that there has in fact been a surge in demand for Asian languages to equivalent levels. Arn, Kordsmeier & Rogers' (2000) results showed that of the 171 US multi-national organisations surveyed, 78.9% reported to have foreign language requirements of which 36% desired Chinese language skills, and 40% needed Japanese proficiency. Soma &

Waldman's (2006) survey showed that Chinese and Japanese were ranked second and third in terms of importance and value to Wisconsin international businesses, with 44% of respondents actively recruiting Chinese speakers and 19% recruiting Japanese speakers. The research conducted into corporate language requirements denotes that while traditional European languages continue to be desired by employers, there is a definite shift and new importance being placed on Asian language skills by organisations conducting international business.

Arn, Kordsmeier & Rogers' (2000) survey also asked respondents about desired proficiency levels for foreign languages. The results indicate that just over half of the organisations surveyed do not formally assess their employees' foreign language proficiency levels, but put greater weight on their university level language training and qualifications. However, in terms of communication competencies desired by organisations, there is a significantly greater emphasis placed on oral translation skills than literary skills. 68% of organisations surveyed preferred employees to have fluent speaking ability rather than reading comprehension (39%) and writing ability (35%) (Arn, Kordsmeier & Rogers, 2000).

2.3.2 The military sector

A considerable amount of research has been undertaken into the requirements of the corporate sector, but the same cannot be said with respect to the military. As stipulated earlier, the small field of research available on second-language use in the military is dominated by examples and studies on the USA. However, despite being arguably the world's most deployed defence force, involved in international operations requiring contact with 140 languages (Conway, 2005), the research relating to its foreign language requirements is minimal. Publicly available and published information on other nations' defence forces is almost non-existent. Consequently, this section and the vast majority of this chapter reviews the US dominated literature and offers insights into other nations' experiences where previous studies allow.

The evolution of national security interests away from traditional threats, such as communism, has introduced a number of language challenges and focused the US government and defence decision-makers on the foreign language requirement issue. The traditional requirements of Russian, German and French languages have given way to newly prominent, low-context languages, such as Somali, Serbo-Croatian and Arabic, as the area of operations have dictated: Somalia, Bosnia, Iraq and Afghanistan (Conway, 2005). However, as Peters (2005, p.48) reinforces, “the military's needs are continually shifting and evolving. An urgent demand for Somali interpreters one year changes to a requirement for Serbo-Croatian speakers another”. Peters (2005) believes that the current priority foreign language requirements for the military sector are Arabic, Pashto, Urdu, Dari and other dialects of the Middle East, with future potential conflict possibly prompting Korean, Chinese and Persian Farsi to become priority languages. This is in keeping with the published expectations of the US Department of Defense.

In 1996, the US Department of Defense began publishing an annual Strategic Language List which distinguished what the US considered to be ‘Immediate Investment’, ‘Stronghold/Emerging’ and ‘Enduring’ Languages (Conway, 2005). ‘Immediate Investment’ and ‘Stronghold/Emerging’ languages are the US military’s priorities in terms of training and expenditure until 2015, and languages that the Department of Defense needs to develop in-house in order to build up a strong human resource capability. ‘Enduring’ languages are those for which civilian or reserve linguists and contracted interpreters can provide the skills as necessary. The annual publication of the Strategic Languages List is a classified document and therefore usually unobtainable. However, the US Navy’s input and Service-specific list for 2011 was released online and is included in Appendix A. It shows that the priority languages identified by Peters in 2005 continue to be of ‘Immediate’ importance for the Service in today’s (2011) security environment.

The New Zealand Defence White Paper 2010 does not stipulate what languages the NZDF considers to be of greatest interest, but it does allude to regions of interest from which beneficial languages can be identified. The primary security interests and

tasks driving the determination of New Zealand's military capability requirements until 2035 are reported in Chapter Four of the Defence White Paper. They include, contributing and leading peace and security operations in the South Pacific; maintaining defence relationships with Australia, the US, the UK and Canada; on-going contributions to UN-led peacekeeping initiatives; ensuring peace and security in East Asia; and national and international resource protection, disaster relief and humanitarian assistance (New Zealand Government, 2010). In light of these intentions for the future, this study will conduct a preliminary investigation on the RNZN as to where the opportunities lie for development of foreign-language capability. This in turn, will open up significant future research possibilities for the RNZN and wider NZDF.

2.4 What foreign language capabilities do defence forces currently possess?

Despite the acknowledgement of the importance of the foreign languages on the Strategic Language List, the US and most other sophisticated defence forces have had the same reactive rather than proactive response to developing their human resources' foreign language competencies in the identified languages. The US military's overarching approach to language is widely touted as "just-in-time" (Conway 2005; Daubach & Mueller, 1998) and it has treated most languages as 'Enduring'. For example, during the Gulf War, to counteract the shortfall of uniformed linguists competent in Arabic, the US military had little option but to use Kuwaiti exchange students and New York taxi drivers to provide interpretation services (Daubach & Mueller, 1998). Following the terrorist attacks of 9/11 – 11 September 2001, the US Defense Language Institute Foreign Language Center (DLIFLC) instigated crash courses in Arabic in order to retrain linguists of other Middle Eastern languages (Conway, 2005). Where able, the US military has combated post WWII language challenges by posting regular force members with proven proficiency in mission-specific languages and employed language proficient reservist members in order to meet active regular force shortfalls (Conway, 2005). However, achieving either of these outcomes is considered rare. The employment of contracted external linguists, interpreters and local native speakers is the norm, with Service personnel typically sent to last-minute language training and sent on assignment with the bare minimum skill set in terms of language and cultural awareness (Daubach & Mueller, 1998; Warwick, 2009).

2.4.1 *Current practice one - Contracted interpreters*

Contract agreements with external linguists come at a considerable cost. In the 2004 fiscal year, the US military paid out approximately US\$2 billion for linguists contracted during operations Iraqi Freedom¹ and Enduring Freedom² (Conway, 2005). In a

¹ Operation Iraqi Freedom (also known as the Iraq War, the War in Iraq) was a conflict led by the US military in Iraq from March 20, 2003 to December 15, 2011.

further example, linguistic contracts for operations in the Balkans in 2006 cost an estimated US\$97 million. Despite the enormity of this expense, in the 2004/2005 and 2005/2006 fiscal years, there was a shortfall of 2000 interpreters of the 6000 required in the same period (Conway, 2005). The need for defence forces to obtain, maintain and retain human resources with foreign language capability is critical, and the US example is reflective of other nations' experiences and requirements for foreign language skills.

Bos & Soeters (2006) visited the Dutch Stabilisation Force (SFOR) base in Bosnia and Herzegovina in 2003 and two ISAF³ bases in Kabul in 2005, in order to document the roles and responsibilities of interpreters in the Dutch and Belgian peacekeeping operations. In both operations, a combination of military interpreters and locally hired civilian interpreters were employed. These interpreters were allocated positions in accordance with their language proficiency. Those with the lowest proficiency were assigned to patrolling duties and assisted with reconnaissance and social patrols under the direction of a Non-Commissioned Officer (NCO). Interpreters, comfortable with technical vocabulary, worked alongside engineers and de-mining specialists to raise local awareness on the danger of mines. Interpreters with the most developed language skills assisted liaison officers and commanding officers in secretarial duties and running 'middle men' positions for public liaison duties (Bos & Soeters, 2006).

The interpreters' opinions were vital in analysing the success of meetings, negotiations, conversations and in defusing cultural confusion. Van Dijk & Soeters (2008) differentiate between the communication practices of 'high and low' context cultures. In 'high context' Western cultures, it is expected that messages are passed on succinctly without the need to go into specific detail about the situation or people involved. However, in 'low context' non-Western cultures where non-committal and

² Operation Enduring Freedom is the official name used by the US Government for the War in Afghanistan which commenced on October 7, 2001 and continues today.

³ International Security Assistance Force (ISAF) is a NATO-led security mission in Afghanistan.

elusive responses are the norm, a lot of emphasis is placed on non-verbal cues such as body language and facial expressions (van Dijk & Soeters, 2008). Consequently, in Bosnia and Afghanistan, the Dutch and Belgian military were perceived by locals to be too direct and impolite in their communication. Whereas the interpreters' innate knowledge and understanding of the local culture, history, political situation and language defused potentially damaging situations, and cemented them not only as translators, but mediators in the peacekeeping process (Bos & Soeters, 2006).

Interpreters play a central role in the peace process. However, as outsiders to the military realm their presence can be problematic. History incites distrust with regards to interpreters. Local community misfortune and poor job opportunities within a conflict zone, compounded by the opportunity for personal financial gain, can result in a locally-contracted interpreter's professionalism and motives being questioned by local parties (Bos & Soeters, 2006). This can be detrimental to the negotiation process. There are also recorded instances where hired interpreters have disseminated sensitive and classified information to opposing parties (van Dijk & Soeters, 2008). The experience of multinational forces in Bosnia and Herzegovina, as well as the difficulties associated with employing non-military linguists, reinforces the need for Service personnel, regardless of rank, to be prepared for the added-complexity of modern military operations. Thus, they require a basic, if not advanced level of foreign language skill in order to effectively carry out their taskings.

Retired military personnel and academics share the view that the 'just-in-time' model is no longer a satisfactory way of operating. Daubach & Mueller (1998, p. 65) for example, declare that it is "destined to fail in a long-term, engagement-oriented national security strategy". Such a strategy is what modern defence forces now strive to achieve. Even though contracted interpreters provide good service, having Service personnel capable of language and cultural understanding on the ground, is invaluable (Peters, 2005). The US Department of Defense, the North Atlantic Treaty Organisation (NATO) and other nations' defence forces now recognise the importance of having their own uniformed personnel perform the important role of interpretation. They are addressing this through recruitment, selection and training.

2.4.2 Current practice two – Recruitment, training and development of uniformed linguists and foreign affairs specialists

Daubach & Mueller (1998) place considerable emphasis on the need for defence forces to recruit personnel who already possess the required foreign language skills. Justification for this is the reduction in costs and time required to train an individual who has no prior second-language skills. It is suggested that two to three years are necessary to achieve adequate proficiency (Warwick, 2009). In order to address current Arabic language shortfall in the US Army and Marine Corps, both Services are actively recruiting native Arabic speakers into an Individual Ready Reserve – reservists who are not affiliated with any particular military unit (Peters, 2005). On completion of a short training course, the Arabic speakers are posted to Iraq for up to two years of active duty. Since August 2003, the US Army has recruited 350 soldiers by this means, and the expectation is that the success of this Arabic pilot trial will see recruitment of the short-term linguist contracts expanded into other languages (Peters, 2005).

There is no information available to suggest that the United Kingdom (UK) defence force recruits personnel with desired foreign language skills. However, through the Defence Academy of the United Kingdom and its partnerships with affiliated UK universities, 74 papers in 21 foreign languages are offered through the Defence Languages discipline (Defence Academy of the United Kingdom, 2011). Post-graduate uniformed students from the Services and civilian students from the Ministry of Defence can take language papers at survival, functional, professional and expert levels. Papers are also designed around specialisations, with most offered for generalist linguists, and some designed for joint capability, intelligence and operational linguists (Defence Academy of the United Kingdom, 2011).

While there do not appear to be specifically identified positions within the UK defence force for which second-language skill is a pre-requisite, there are career paths that see individuals studying to become specialised linguists. On completion of initial and trade training within the Royal Army Intelligence Corps, and depending on chosen

specialisation, a member may become a linguist. This career path involves gaining qualifications in language and cultural studies of a country or group of nations for a number of years, relative to requirements (Royal Army, 2011). The career path of a Royal Air Force Intelligence Analyst (Voice) requires foreign language skills from the outset, but up-skilling opportunities are provided so that analysts are able to fulfil the job description of listening, monitoring and analysing voice communications in order to provide intelligence to deployed military forces (Royal Air Force, 2011).

Like the UK, Canada and Australia do not specifically recruit personnel with foreign language skills. However, they do offer limited language training to junior officers and Service personnel through their respective military academies, the Royal Language Center of Canada (part of the Royal Military College of Canada (RMCC)) and the Australian Defence Force Academy (ADFA). Due to national legislation requirements and the bilingual status of the Canadian defence force, the language training offered at the RMCC is restricted to the country's two official languages – French and English. Following proficiency assessments involving tests in four communication competency areas in both languages, junior officers are provided with five periods of language instruction per week and an additional ten-week immersion course on completion of the initial year, if warranted. Where possible, cabin allocations pair an English speaking trainee with a French speaking trainee in order to enhance and consolidate learning (Royal Military College of Canada, 2011).

ADFA has a strong partnership with the University of New South Wales, with the University providing recognised undergraduate and postgraduate qualifications in four academic fields at the ADFA campus in Canberra. Offered through the School of Humanities and Social Science are undergraduate Bachelor of Science or Bachelor of Arts degrees, majoring in Indonesian language and cultural studies. Indonesian is the only language for which papers are offered at undergraduate level and there are no language papers available at the post-graduate level (UNSW@ADFA, 2012).

The US Army commenced a Foreign Area Officer (FAO) programme in 1987 aimed at training in-house candidates in second-languages and this programme has continued to evolve (Schwalbe, 2007). The US Army's FAO programme sees potential specialists provided with basic language instruction followed by a posting to the region in which the language is spoken. Immersion training enables the specialists to develop cultural competency, professional vocabulary and proficiency prior to being assigned to a three year FAO designated post (Schwalbe, 2007). Altogether, the US Army makes a five to seven year investment in each foreign specialist in order for them to competently undertake an FAO position.

Even though the US Army was training foreign area officers by the late 1980s, its FAO programme was in its infancy. However, the Army was well ahead of its counterparts who did not have any foreign language training packages in place. In recognition of the US military's human resource capability foreign language shortfalls, at least six reports and audits were initiated within the same number of years - Defense Intelligence Agency 1988, Government Accounting Office (GAO) 1990, Functional Management Inspection by Air Force Inspector General 1991, DLIFLC 1992, Department of Defense Inspector General 1993, GAO 1994 (Daubach & Mueller, 1998). These damning and critical inspections were authorised from the lowest internal level to the highest Government level.

The scrutiny prompted the US Air Force to form a Process Action Team (PAT) in 1994. The PAT advocated for a new attitude and approach to foreign language skills, and the need to relate current human resource requirements with the needs of likely future missions and military engagement (Conway, 2005; Daubach & Mueller, 1998). Its findings and recommendations included, among many others, the discovery of what second-language skills the Air Force already possessed, and the development of a pool of resources Service-wide, through tracking and managing foreign language proficient personnel. As a further PAT initiative, the US Air Force established its own FAO programme in 1997 with the aim of developing Service personnel more adept at thinking and acting in a global context (Sarnoski, 2005). The US Air Force FAO provided one-month in-country intensive immersion language and cultural training for

officers deemed suitable for posting into 'language inherent' positions [those where an individual's trade is tied to a language skill requirement] and 'language designated' positions [where a specific language is required] (Conway, 2005). From its inception in 1997 until 2005, the FAO had successfully graduated 1100 Air Force men and women proficient in 40 different languages (Conway, 2005).

The attack on the towers of the New York World Trade Centre on 11 September 2001, presented an unprecedented terrorist threat to US national security and international security. The US government placed a new emphasis on education as a national security initiative. Foreign language initiatives, such as the National Security Language Act 2003 and the National Security Language Initiative 2006, were rolled out in a bid to develop a US domestic community of foreign language experts. The spotlight also shone on the military with a view to developing its human resources as international and global thinkers (Parker, 2008). The Department of Defense's Defense Language Transformation Roadmap 2005 outlined the Department's plan to achieve a language-proficient military and intelligence network, as well as a diplomatic and Defence Attaché corps, capable of voicing the US argument and winning over foreign dignitaries in their mother-tongues (Parker, 2008). The ultimate objective was to bring foreign language and cultural expertise forward from being a 'just-in-time' afterthought, and to develop them into core human resource competencies that are amalgamated into operational and contingency planning (Daubach & Mueller, 1998).

The Roadmap's recommendations that all officers should learn a foreign language, and that a certain level of proficiency should be proven as a promotion pre-requisite for Colonel equivalent, has instigated change within the US military education sector (Peters, 2005). Conway (2005), Jalal & Yudhyono (2009) and Sarnoski (2005) describe the efforts that West Point and the US Air Force have gone to in a bid to align their education policies with the directorate. The US Military Academy at West Point broadened its curriculum and length of training courses in order to incorporate internationally focused classes, and the Air Force's FAO programme underwent a thorough restructure. West Point Academy's new emphasis on cross-cultural training

sees US Army cadets and officers taking classes with sixty foreign military students and undertaking an extended four years of training. Incorporated in this training are the traditional tactical and military strategy components. It is also mandatory that trainees undertake two years of foreign language tuition, as well as additional studies in a diverse range of previously un-offered subject areas such as liberal arts (Jalal & Yudhyono, 2009). The inclusion of the social and political aspects of security in the curriculum revamp is designed to create and arm young leaders with diplomacy and cross-cultural leadership skills (Jalal & Yudhyono, 2009).

Colonel Robert Sarnoski, the then Deputy Under Secretary of the Air Force International Affairs, was the figurehead for the new-look FAO programme roll out in 2005 - the International Affairs Specialist (IAS) Programme. He described the new programme in his 2005 DISAM Journal article. Instead of selecting trainees based on the 'language inherent' and 'language designated' criteria, officers are now competitively selected, retrained and developed (Sarnoski, 2005). Candidates require seven to twelve years of Service in their respective trades prior to initial consideration for selection. They can be selected for one of two career development paths – Politico-Military Affairs Strategist (PAS) or Regional Affairs Strategist (RAS). PAS officers undertake a year of study towards an advanced international relations degree specialising in the political-military field, prior to taking up international political-military affairs assignments. RAS officers complete a two year training programme comprising intensive language tuition, regional studies, international affairs and national security studies. On completion, an in-country immersion course may be considered and graduates can expect to post to a position in their primary trade, in a region relevant to their RAS specialisation (Sarnoski, 2005). This new IAS programme remains in its infancy, with the first group of trainees having commenced their courses in 2006. In order to fill the 260 identified PAS positions and the 250 RAS positions, 50 per cent of course positions were filled in 2005, 75 per cent in 2006 and 100 per cent from 2007 onwards. Given the length of time invested in the training, it is anticipated that the full benefits will not be reaped until 2015 at the earliest (Sarnoski, 2005).

The US Defense Language Institute Foreign Language Center (DLIFLC) has evolved from what was once a secret school established in San Francisco during World War II to teach US Army personnel Japanese (DLIFLC, 2011a). Now located in Monterey, the DLIFLC is responsible for Defence-wide policy-making, assessment and training in foreign languages. The DLIFLC provides language tuition for up to 3,500 students including tri-Service and Marine Regular Force and Reserve personnel, foreign military students, sponsored US Coast-Guard, law-enforcement and government agency officials (DLIFLC, 2011a). Language training in 23 languages and two dialects is offered by the DLIFLC's range of schools: Middle Eastern Schools (Modern Standard Arabic, Levantine, Egyptian, and Iraqi dialects); Asian Schools (Chinese, Japanese, Korean); European & Latin American School (French, Italian, Portuguese, Spanish, German, Russian, Serbian/Croatian); Persian Farsi School; Multi-Language School (Kurdish dialects Kurmanji and Sorani, Hindi, Urdu, Indonesian, Thai, Persian-Afghan (Dari), Pashto, Turkish, Georgian, and Uzbek). The DLIFLC offers language courses of between 24 and 64 weeks duration that are of relevance to the current and perceived future requirements of the defence force (DLIFLC, 2011c). Its website states that the determination of language courses offered is in direct response to the needs of current operations, citing Operation Desert Storm, Operation Restore Hope, Operation Noble Eagle, Operations Enduring and Iraqi Freedom and the Global War on Terror as new and challenging missions that the DLIFLC has had to rapidly address in recent years (DLIFLC, 2011b). Since 11 September 2001, the DLIFLC annual budget has more than doubled to over US\$160 million and the quality of training has improved through the use of computer technology, online training packages, and maintaining an instruction ratio of six students to one teacher (Peters, 2005).

2.4.3 Current practice three – Foreign language competency assessments and organisational registration

While a basic appreciation for language and cultural differences is beneficial, and arguably a necessity for all Service personnel posted to unfamiliar and non-English speaking locations, certain positions require a more advanced level of proficiency. In order to determine an individual's proficiency level, a range of proficiency tests are

available. The US military uses the Defense Language Proficiency Test (DLPT), recorded and invigilated by the DLIFLC, and NATO-led missions insist on STANAG and SHAPE tests. The Royal Language Center of Canada (as part of the Royal Military College of Canada) conducts proficiency assessments in French and English. There is no information available as to what test is used, but the trainees are assessed in four areas; oral comprehension, oral expression, written comprehension and written expression (Royal Military College of Canada, 2011). The ADF and NZDF use the Australian Defence Force English Language Profiling System (ADFELPS) to test for English proficiency levels. These are invigilated by the Australian Defence International Training Centre and the New Zealand Defence Language Centre respectively (Australian Government Department of Defence, 2011). Neither defence force tests for proficiency in foreign languages.

The DLPT is a component of the Defense Language Aptitude Battery and was formulated in the 1960s (Silva & White, 2002). The DLPT was devised by the International Language Roundtable (ILR) and measures participants' proficiency across three categories – reading, listening and speaking, against the ILR scale. The test itself consists of a 1.5 hour listening comprehension test, a 2.5 hour reading test and a 45 minute one-on-one interview, resulting in a 3-digit score. A score of 1/1/1 indicates that the individual has the necessary survival skills only, while a score of 4/4/4 suggests that the individual is comparable to a native speaker and bilingual (Conway, 2005).

International organisations such as NATO have plausible needs for determining individuals' language proficiency levels. They include the need to assign appropriate personnel to certain appointments, and to ensure generic understanding of, and ability to, draft international correspondence (Green & Wall, 2005). Consequently, NATO has opted to use STANAG language proficiency levels. STANAG is also derived from the ILR scales and grades participants across four competencies – listening, speaking, reading and writing. Participants' results provide a final Likert-scale grading ranging from '0 - no practical proficiency' to '5 – excellent'. In addition to the STANAG levels, personnel posted to NATO positions may also be required to

prove their proficiency level on arrival. The SHAPE test has come into fruition due to NATO having, in the past, misaligned personnel proficiency levels for positions (Green & Wall, 2005).

In an attempt to understand what foreign language capabilities it possessed, the US Air Force conducted a Foreign Language Self-Assessment Survey in 1996 in accordance with a PAT recommendation. However, Daubach & Mueller (1998) and Conway (2005) report conflicting survey results. Daubach & Mueller (1998) state that the survey identified over 72,000 people with skills in 207 languages and dialects, in comparison to Conway's (2005) report of 41,000 language-proficient Service members. Conway (2005) explains that the census survey was not statistically sound due to the fact that proficiency levels were not determined using a statistically validated measure. The fact that respondents could claim fluency in a language, but not have to prove the respective level of fluency, could go some way to explaining the significant differences in the reporting of results.

Since then, the 2005 Roadmap has called for similar surveys to be undertaken in order to ascertain the proficiency levels of all serving reserve force members, civilians and active force members. However, Conway (2005), Peters (2005) and a US GAO report (2009) all state that the US military continues to have an inaccurate understanding of its exact human resource capabilities. This is due to the fact that the online foreign languages surveys distributed for this purpose are voluntary. As a result, a number of foreign language speakers avoid participating so as to minimise the chance of being posted to certain positions (Peters, 2005). Others report that their unit commanders encourage non-participation, so as to retain individuals and reduce the risk of their deployment elsewhere (Conway, 2005). Consequently, those with recorded DLPT scores are typically graduates of DLIFLC courses, those in language-designated/language-inherent positions, or individuals who wish to receive their respective proficiency allowance entitlement of between US\$300 to US\$1000 per month depending on proficiency level (Daubach & Mueller, 1998; Peters, 2005).

2.4.4 Current practice four – Simulation training and online computer learning

Bishop (2008), Meng et al. (2007), Ng et al. (2005) and Vogel (2001) share the view that any language training programme, be it classroom instruction or online learning package, must have an infusion of both aspects of cross-cultural learning – language tuition cannot be separated from associated cultural awareness tuition. Black & Mendenhall (1990) add an additional layer to the proposed model for cross-cultural education. They split training into three categories: factual, analytical and experiential. Factual pertains to traditional learning via textbooks and lectures on a region and its culture. Analytical includes classroom language lessons, cultural assimilators, cultural sensitivity training and case studies. Experiential includes interactive language training, field trips and simulations.

The US and Australian defence forces are among those continually looking to implement innovative education initiatives that are inclusive of all three facets required in teaching cross-cultural differences and dynamics. One of the most recent US initiatives is the creation of the Sergeant John Smith simulation centre (Customs Check, 2005). The Defense Research Projects Agency and the University of Southern California have combined forces to create a simulation from which soldiers on pre-deployment training to Iraq can learn colloquial Arabic and learn to understand situation-appropriate body language (Customs Check, 2005). This project has been initiated in the hope that unintentional cultural faux pas can be avoided or at least minimised. The US DLIFLC also offers a considerable amount of on-line learning material for Service personnel to learn and maintain their foreign language skills. The learning packages available include area and country studies, cultural information packages, basic survival CD-Rom and i-phone downloadable kits, pre-deployment short introductory language modules, advanced language modules and on-line assessment tools.

The ADF utilises similar technology to the US, with personnel on pre-deployment training participating in 3D simulation games 'located' in Iraq and Afghanistan. In 2010 the ADF extended and added new foreign language/cultures courses and the

ADF's Army Simulation Wing are considering 'Australianising' the graphics. The ADF hopes that Service personnel will eventually be able to download the simulated courses and conduct self-study via a Learning Management System (LMS).

2.5 Addressing the gaps in military capability requirements

2.5.1 Acknowledging the slow response to address shortfalls

As suggested earlier, the concept of foreign language competency as a sophisticated human resource asset is new to the business world, and even newer within the military field. Conway (2005) provides some key reasons as to why defence forces have been slow to address foreign language skill shortfalls: 'linguistic complacency', the responsibility of intelligence and the fact that 'just-in-time' training has worked until now. Even though Conway (2005) discusses his reasons from a US perspective, his insights are equally relevant for other nations' forces.

Conway (2005) suggests that the military has been guilty for too long of assuming that English, the traditional language of international diplomacy, politics, economics and military operations, would remain the prevalent language. Consequently, the military sector has been slow to adapt to the new multi-national environment and its requirements. This is not dissimilar to the corporate sector and is reflective of the US and British populations which, since the 1960s, have shown a decreased national interest in foreign language learning. Results of Grant Thornton's 1996 European Business Survey (cited in Crystal, 2003) showed that 90 per cent of businesses in Belgium, Netherlands, Luxembourg and Greece employed at least one employee capable of conducting negotiations in a foreign language (other than English) compared to 38 per cent of British businesses. A repeat survey in 2002 showed little change for the European corporates, but showed a further decline to 29 per cent for British businesses. In terms of foreign language learning and education, a US report published by Jaschik (1985 cited in Cornick & Roberts-Gassler, 1991) reported a 49 per cent decrease in the number of bachelor degrees majoring in foreign languages being undertaken in the US between 1972 and 1983.

Conway (2005) also cites the perception that the 'intelligence field provides the language specialists' as another reason that foreign language shortfalls are not

addressed. It is believed that foreign languages are the responsibility of intelligence and are of little interest to other military career fields and trades. For example, in the 2003/2004 academic year, the DLIFLC educated 870 US Air Force personnel, of whom 90 per cent were destined for intelligence positions (Conway, 2005).

The final reason discussed by Conway (2005) is simply that defence forces have managed to get by until now and have successfully dealt with issues arising when needed. Be it, employing external linguists; deploying skilled reserve force personnel; or providing basic pre-deployment language instruction, these initiatives have had adequate and sufficient success despite their 'just-in-time' instigation (Conway, 2005). Internal reports by the US GAO into the status of foreign language tuition in the US Special Forces (2003), defence-wide officer training (2007), and on-going critique into proficiency recording measures (2009; 2010) all indicate a much increased strategic focus on foreign language and cultural awareness training over the last decade within the US defence system. While the terrorist attacks of 11 September 2001 were the catalyst for the US to respond to the modern security environment through foreign language capability, other nations' defence forces would be wise to recognise that maintaining the predominantly reactive status quo approach to modern war is naïve in light of the shifting security climate.

2.5.2 The future

The US Defense Language Transformation Roadmap provides the overarching information and guidance with respect to the development of foreign language and regional language proficiency within the US military. The Roadmap itself is not a strategic plan but provides the foundation from which the Department of Defense and the individual Services can work. Figure 2.1 shows the four key goals and corresponding objectives of the transformation.

Figure 2.1 – US Department of Defense Roadmap’s Goals & Objectives

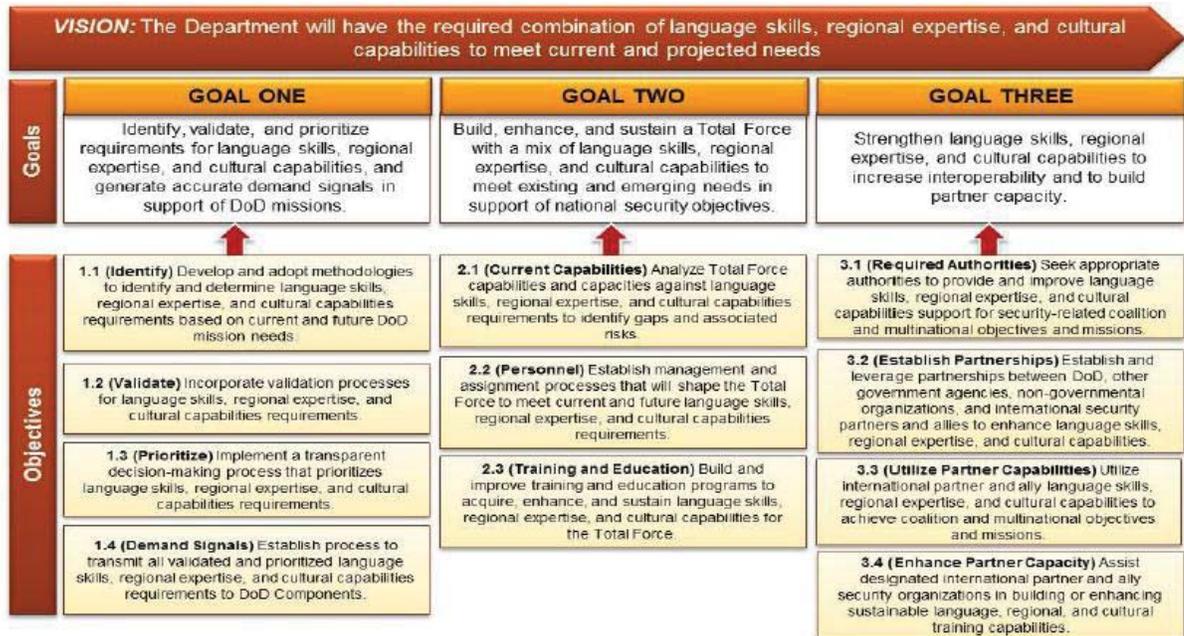
Table 2: DOD Goals and Objectives for Language and Regional Proficiency Capabilities Transformation

Goals	Objectives^a
Create foundational language and regional proficiency in the civilian, officer, and enlisted ranks for both Active and Reserve Components	<ul style="list-style-type: none"> • DOD has personnel with language skills capable of responding as needed for peacetime and wartime operations with the correct levels of proficiency. • The total force understands and values the tactical, operational, and strategic asset inherent in regional proficiency and language. • Regional area education is incorporated into Professional Military Education and Development.
Create capacity to surge language and regional proficiency resources beyond these foundational and in-house capabilities	<ul style="list-style-type: none"> • DOD has the ability to provide language and regional proficiency support to operational units when needed.
Establish a cadre of language specialists possessing general professional proficiency ^b for reading, listening, and speaking	<ul style="list-style-type: none"> • DOD understands the numbers of personnel and levels of proficiency and performance required for tasks involving general professional proficiency level and below language skills, and the DOD Components have established career paths and training plans to get the right people to the correct proficiency level. • Programs are in place to train personnel to achieve a general professional proficiency level or higher, along with specialized professional skills, where required to support DOD specified tasks. • Programs are in place to train personnel to achieve a general professional proficiency level or below to support DOD language specified tasks.
Establish a process to track the accession, separation, and promotion rates of language professionals and Foreign Area Officers.	<ul style="list-style-type: none"> • Military personnel with language skills and Foreign Area Officers are developed and managed as critical strategic assets. • All services have established professional career tracks for Foreign Area Officers and promote Foreign Area Officers competitively. • DOD oversight ensures the effective tracking and management of these strategic assets.

(Source: United States Government Accountability Office, 2009)

A total of 43 tasks were also identified in the Roadmap in support of the principal goals and objectives. Tasks such as the publication of an annual Strategic Language List have been completed, but the individual Service strategies for in-house language and proficiency transformation are yet to be completed. Consequently, the US Department of Defense has released a Vision and Strategic Plan for Language Skills, Regional Expertise and Cultural Capabilities (LREC) 2011-2016. Figure 2.2 provides a description of the Department’s five year strategic goals and objectives.

Figure 2.2 – Vision & Strategic Plan for Language Skills, Regional Expertise & Cultural Capabilities, 2011-2016



(Source: Bull, 2011)

In order to achieve Goal One, a Capabilities-Based Requirements Identification Process (CBRIP) project was undertaken. In September 2011, the year long project was to be completed, identifying and prioritising LREC requirements across the defence force (Johnson, 2011). At the time of drafting this review in November 2011, documentation could not be located indicating whether or not the September deadline had been met.

Figure 2.3 – Capabilities-Based Requirement Identification Process (CBRIP) Example

Priority	Level	Role	Minimum Quantity	GPF/SOF/ Intel	Military Required	Service	Level of Effort	Listening	Speaking	Reading	Writing	Core Culture	Technical Culture	Leader Culture	LREC Activity
.85	unit	Training team	1/unit	GPF	Yes	USA	24/7	2	2	0	0	H	L	L	Communicate with host nation military
.75	JTF	J2 analyst	1/org	Intel	No		24/7	3	3	3	0	H	H	L	Understand the political, military, and economic environment of host nation

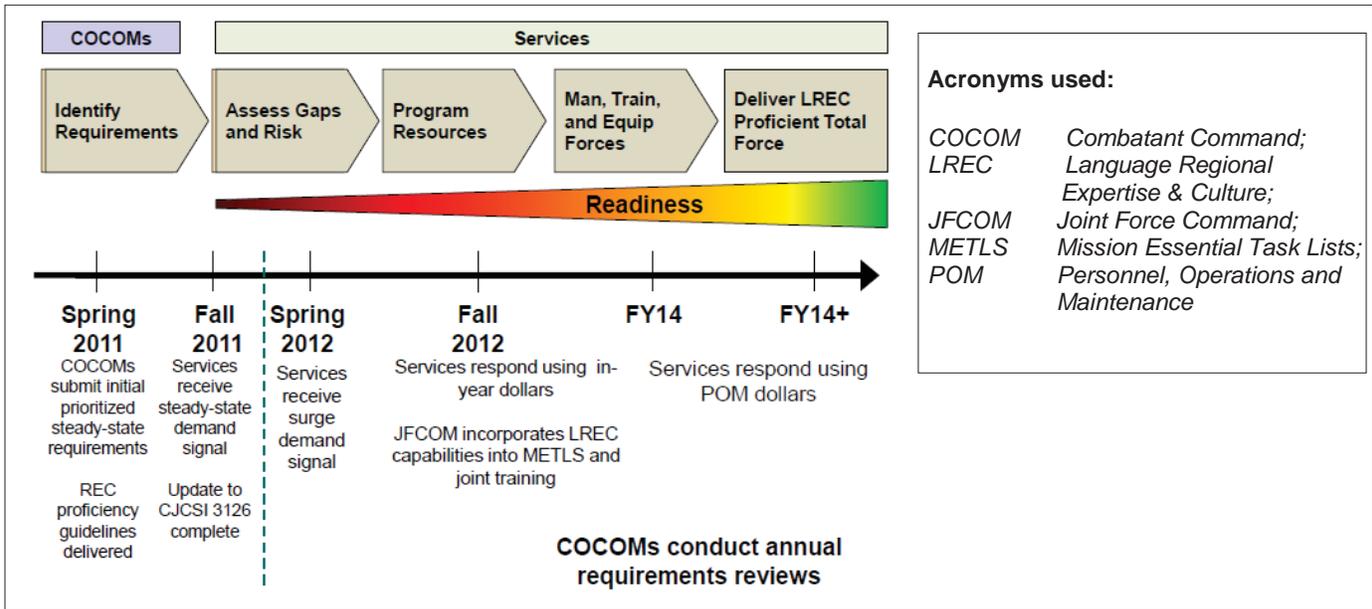
(Source: Johnson, 2011)

As shown in the example in Figure 2.3, the project aims to highlight where the capability requirements are; at which level of the organisation (e.g. Command HQ, Ship, Unit); what role/trade (e.g. intelligence analyst, Unit Commander); proficiency

level required in accordance with DLPT scores; and what missions and taskings require the capability (e.g. when conducting drug interdiction operations in Country X).

Based on the information and requirements sourced from the CBRIP project, a signal/document stipulating the language and proficiency requirements will be distributed to all Services. From 2012-2014, the individual Services have an obligation to train and up-skill their human resources to the levels identified by the CBRIP project. This information regarding Service demands and the timeline are shown in Figure 2.4.

Figure 2.4 – LREC Strategic Plan Implementation Timeline



(Source: Johnson, 2011)

The US is the only nation for which information concerning future planning around foreign language and cultural training could be found. The research available suggests that the US is ahead of other military counterparts in its implementation of human resource management policies focused on language and cultural awareness. It is therefore anticipated that although the US has relatively recently recognised the importance of foreign languages to the military, it will be a number of years before the more modest defence forces of the world look to follow suit, and instigate similar major policies. The US model provides a feasible template from which the RNZN

could learn, on which to base its own human resource development plans for second-language capability. Consequently, the planned direction for the US military will provide the basis for later discussion on the possible future development of the RNZN's second-language capability.

2.6 Opportunities for a foreign language competent workforce

2.6.1 *Achieving competitive advantage*

In the corporate world, employees' experience levels and expertise are inimitable (Hodgetts, Luthans, & Slocum, 1997). Channelling these innovative sources through the creation of human resource strategies that promote organisational learning and a knowledge-focused organisational culture (Lei, Slocum, & Pitts, 1999), enable an organisation to learn and adapt faster than its competitors, while also hindering competitors' abilities to copy (Caspersz, 2006). From a military standpoint, developing a system that fosters innovation and the generation of ideas will advance a military's ability to defeat its opponents.

Despite the similarities drawn in the opening paragraphs of this review by Cycyota & Ferrante (2004), it is accurate to state that "the military is not just another organisation, at least not all of it, all of the time" (Resteigne & Soeters, 2009, p. 307). A military's competition is its enemy but unlike an organisation, the impact a military's enemy has on the bottom line is irrelevant in comparison to its influence over life and death. Lorenz (2007) argues that defence forces can no longer continue with 'bandaid' strategies and 'knee-jerk' reactions as adequate means of combating emerging military threats. He advocates proactive innovation as the way forward in fighting the new and flexible enemies. Understanding cross-cultural perspectives through the development of human resources in language and cultural studies is one area where innovation is required.

Samuel P. Huntington (cited in Daubach & Mueller 1998 p. 66) argued that, "In the post-Cold War world, the most important distinctions between people are no longer ideological, political or economic. The distinctions are cultural". With globalisation and technological advancements having broken down a number of these divides, only cultural distinctions remain relevant (Daubach & Mueller, 1998). Therefore, language skills adequate for technical and mechanical intelligence purposes are no

longer sufficient in an international military arena where Service personnel are increasingly expected to work in foreign cultures alongside locals, as well as a variety of other national forces and non-governmental agencies (Ng, Ramaya, Teo & Wong, 2005). Daubach & Mueller (1998), Kay (2009), Lorenz (2007), Ng et al. (2005), Warwick (2009), and van Dijk & Soeters (2008) are all in agreement in calling for defence forces to address the linguistic and cultural challenges inherent in the contemporary military roles and operations. Daubach & Mueller (1998, p. 66) go so far as to state that “in the future, a lack of cross-cultural perspective will, at best, create obstacles to global engagement and, at worst, lead to disengagement and isolation fostering the kind of regional instability we seek to combat”.

2.6.2 Improved service provision and enhanced reputation in the international arena

In the business sense, foreign language ability enhances customers' experiences and satisfaction levels, which ultimately translates into improved performance, increased profit margins and greater competitive advantage (Ward, 2010). For profitable organisations, the spin-offs of foreign language ability are particularly relevant and prominent in service-oriented industries (Ward, 2010). In researching this topic, it became very apparent that a considerable amount of research has been conducted on the benefits of second-language skills within healthcare and social services sectors, as well as banking, tourism and hospitality.

Defence forces engaged in a multinational environment working in military-military and military-civilian partnerships, are ultimately providing a service. However, the international element and notion of foreign language skills as a facet of operational management and human resource management, is a relatively unrealised concept within the military (Resteign & Soeters, 2008). As non-profitable organisations, defence forces' spin-off from foreign language skills is not the bottom line, but rather an increase in value and reputation (Ward, 2010). The more a military uses language as a weapon to build rapport with locals and show empathy and understanding with its 'customers', the greater in-roads and advantage it gains (Bunchapattanasakda, Thitthongkam, & Walsh, 2011). As referred to previously

(Section 2.4.1), Resteign & Soeter's (2008) observation of ISAF commanding officers at Afghanistan's Kabul International Airport clearly highlights this concept - that language competency can be a key asset in empowering employees, building relationships, opening communication channels, gaining international respect, and establishing good-will amongst local communities.

Defence forces world-wide share a degree of commonality in terms of their hierarchical structure; rules and norms; comradeship; training procedures; and command leadership (Vuga, 2010). However, one's national identity and culture is intensified in a multinational setting, and this presents significant obstacles to cohesion and cohabitation. Vuga (2010, p. 557) states that a mission's ability to operate effectively in a multinational environment is determined by individuals' "ability to empathise, their 'emotionality; and level of 'cultural intelligence' and their ability to see things through a 'cultural lens'". Such missions need to establish their own common sets of rules and values, traditions and language that unite the team despite the national and cultural differences between members. While limited, a few studies have been conducted to support this and introduce the role of language competency as an important managerial asset.

Jelusic (2007, as cited in Vuga, 2010) and Vuga's (2010) studies into the Slovenian Armed Force's (SAF) experiences as a small nation defence force operating in the multinational environment, illustrate the difficulties and opportunities associated with language in international multicultural settings. Jelusic's examination of the Multinational Land Force (MLF) in Kosovo between 2004 and 2006 revealed that the Italians and Germans independently sought to resolve issues in their respective national languages prior to informing the other nations of their decisions in the mission's official language, English. The SAF were put in an interesting position in that they knew sufficient German from mandatory primary school lessons, and enough Italian, to understand both sides' debates and discussions. They were valuable in maintaining open communication within the MLF and in translating the English documentation for the other nations, further strengthening the SAF's bond with its colleagues (Jelusic 2007, as cited in Vuga, 2010).

Vuga's (2010) research concentrated on the cohabitation and working relationships of the SAF in the Italian-led United Nations Interim Force in Lebanon (UNIFIL II) from January 2008 to December 2009. Since Slovenia's initial deployment of personnel to Lebanon in December 2006, five rotations had been posted to UNIFIL II at the time of Vuga's study. It showed that Slovenian members of the UNIFIL II were in favour of learning Italian prior to deployment, given the lessons learned by predecessors. They believed that having a basic understanding of Italian, and having members within their contingent who could speak Italian, made it easier to conduct business and enhanced their contribution to the MLF (Vuga, 2010).

The experiences of the US in multinational engagements are similar. Kay (2009) states that one of the principle lessons learnt by forces in Iraq and Afghanistan was the necessity for personnel to have sufficient levels of language skills, cultural and political awareness, diplomacy, and competency in being able to operate under joint-force/multi-agency conditions. Ng et al. (2005) classify these new human resource competencies as 'cultural awareness' and 'cultural competence'. Resteign & Soeter's (2008) field study into the managerial roles in the military also highlighted the influence possession of language proficiency can have on one's ability to achieve a powerful central managerial position in the multinational setting.

2.6.3 Better utilisation and allocation of human resources and improved job satisfaction

As discussed in Section 2.4.3, the US Air Force has identified 'language inherent' and 'language designated' positions within its workforce. In 2004, it was established that the US Air Force had 3,700 'language inherent' positions and these positions needed to be filled by individuals with trade-specific second-language skills (such as a cryptologist within the intelligence field). In addition, 900 'language designated' positions (such as a Serbo-croatian speaking medical officer) were confirmed (Conway, 2005). Also discussed was the US Air Force's International Affairs Strategist Programme, developing 250 required Regional Affairs Strategists and 260

Politico-Military Affairs Strategists. All of this single Service information, combined with the Department of Defense's CBRIP project and overarching five year strategic plan to develop a language and culturally aware US Armed Forces by 2016, opens the door for focused and targeted personnel management. This data, when used in the career management context, will provide the information for posting allocations and undoubtedly ensure better utilisation of US Armed Forces personnel. Frequent review and evaluation of requirements will also highlight any gapped positions, and instigate recruitment or advanced training of current employees in order to overcome any shortfall.

The New Zealand Defence White Paper 2010 advocates a 'Total Defence Workforce' approach as a means of improving organisational performance. This approach encourages smarter allocation of personnel to positions based on competency and availability. The policy intent currently focuses on two key areas; civilianisation of predominantly corporate roles so as to free up uniformed personnel for military specific postings; and more targeted recruitment and selection of Reserve Force members in order to reduce current skill shortages across the organisation.

It is important to ensure that the resources of the NZDF are allocated in a way which supports the creation of deployable and useful military capability. This means harnessing the skills available across the total defence workforce... where it can add value to the NZDF's effectiveness" (New Zealand Government 2010, p. 66).

The lessons learnt by other nations' defence forces suggest that future opportunities lie in applying this principle of job-fit and skill-set matching with regards to second-language skills.

2.7 Key points of the Literature Review

In conclusion, the discussion on second-language proficiency and training within international academic literature is topical and sizeable. Studies into the needs and demands of the corporate business world are particularly prevalent. However, literature specifically relating to the military is severely restricted due to the relatively closed nature of the military; the security sensitive nature of relevant information; and the relatively recent and dramatic events that have spurred military officers and academics to focus on foreign language as a critical human resource capability within the military. Journal articles are typically US-example dominant, although there is limited information pertaining to the multinational peacekeeping involvement of the Dutch, Belgian and Slovenian defence forces. Publically accessible information on language training and career path options within the Australian, Canadian and British defence forces is also available on respective defence force and single Services' websites. Given that the US military is arguably the world's largest defence force currently engaged in contemporary military operations within the multinational environment, the US-heavy nature of this review provides a good platform for other nations to learn from US experiences, actions and efforts in this area of human resource management.

There is an apparent insistence that defence forces need to improve on 'just-in-time' pre-deployment training in order to achieve mission success and effectiveness. Sufficiently thorough cultural-linguistics training is critical. The US military appears to be ahead of its counterparts in this area through both recruiting and training. Examples include US Army and Marine recruitment initiatives; in-house linguist programmes such as the US Air Force's long-running Foreign Area Officer programme; and the inclusion of compulsory second-language tuition in West Point Academy's junior officer induction courses. Single Service investments of between five and seven years in an individual's career development, as well as varied learning packages provided through the DLIFLC, aim to provide US military human resources with the tacit knowledge required to adequately foster cross-cultural defence and agency relationships. The Australian and Canadian defence forces offer personnel

tuition in one or two languages, and the British defence force offers instruction in a multitude of foreign languages for all levels of proficiency. Where job description requires, the British single Services will also invest in lengthy immersion courses and advanced linguistics training.

Defence forces are using computer software and simulators as key tools in the effort to up-skill and prepare personnel for the language and cultural expectations of operations. Technology now enables such training to be factual, analytical and experiential. Traditional language, regional and cultural learning via textbooks and lectures can now be consolidated into experiential interactive language training modules and cultural simulations. Needless to say, training packages of this nature are lengthy and costly. Consequently, defence forces need to determine what their key foreign language requirements are, similar to the US Department of Defense's annual Strategic Language List. Once language requirements are known, training and investment options can be prioritised.

While it is not viable for the NZDF to instigate foreign language programmes and 'roadmaps' on a scale comparable to the US military, it is feasible that consideration be given to gaining an understanding into what human resource capabilities its Services currently possess in terms of second-language proficiency. It is inevitable that the 'just-in-time' language training for overseas deployments will continue to be the status-quo for NZDF personnel for some time yet. However, this study aims to mitigate this situation by drawing attention to the ideal and the current foreign language competencies of one of the Services, the RNZN. Using the RNZN as the platform for a pilot trial, it is hoped that this study will highlight potential sound investment opportunities; enable the development of a more efficient personnel-posting system; and enhance the service provided by the RNZN. The next chapter sets out the three primary research objectives and methodology for the study that aims to initiate this process.

CHAPTER THREE – RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an overview of the research design and methodology selected for a study into the human resource capabilities in foreign languages within the NZDF. While some nations' defence forces have investigated and implemented plans to address the ever-increasing importance of developing the linguistic skills of their personnel, the NZDF has paid little attention to the development of its human resources in this area. As a previously unexplored area of research, a preliminary investigation was conducted into one of the three Services, the RNZN. For manageability purposes it was determined that an investigation into the foreign language capabilities of a single Service's human resources would provide a starting point and foundation for future research to be undertaken NZDF wide. Consequently, a systematic quantitative analysis of foreign language ability, self-reported competency levels and Service requirements was conducted, focusing specifically on the RNZN.

The approval procedures required to undertake this research are discussed with reference to the study in its entirety. However, the methodologies for determining the RNZN's ideal versus current capabilities are discussed separately under the conceptual framework headings of 'Current Capabilities' and 'Ideal Capabilities' outlined in the next section.

3.2 Conceptual framework for research

Incorporated in this study is the need to depict what second-language skills RNZN personnel already possess and what the ideal and realistic requirements of the RNZN are in terms of its foreign language competency requirements.

Figure 3.1 - Conceptual Framework for Research

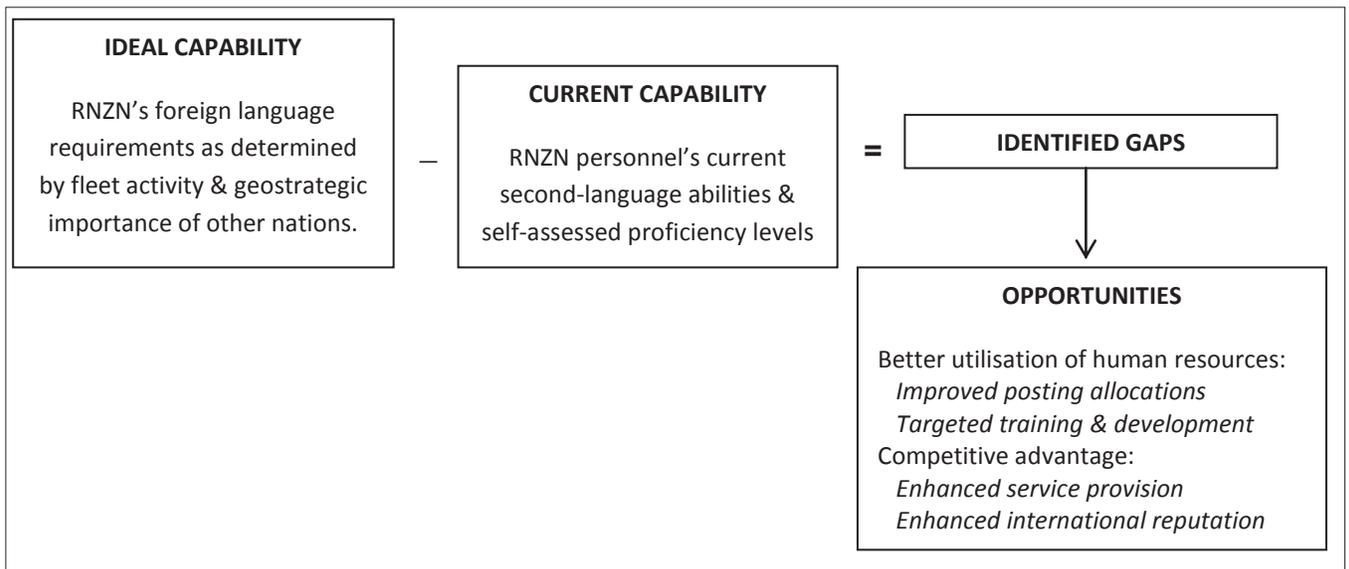


Figure 3.1 depicts the model and underlying framework on which this research is based. This study provides an insight into the current gaps between the Service's current versus ideal foreign language human resource capabilities, and provokes discussion on areas of opportunity for the RNZN should future consideration be given to bridging the identified gaps.

From the conceptual framework, 'Ideal Capability' correlates to Research Objective 1, "to determine the foreign language requirements of the RNZN". This involved a two-part research process: determining the countries with which the RNZN communicates the most, and then ranking these nations in order of their level of geostrategic importance to the RNZN. In order to answer the first component, information was

obtained by analysing data from the RNZN Fleet Activity Management Tool (FAMT) – an official record and planning tool used by the RNZN to log all activities conducted by RNZN assets. To further determine in which languages the RNZN would gain the most benefit by having linguistic capability, a model designed for an earlier study by Da Rocha (2007) on the importance of the Spanish and Portuguese languages to the US Air Force, was applied.

‘Current Capability’ and Research Objective 2, “to identify what foreign language capabilities the RNZN already possesses within its Regular Force”, involved ascertaining an understanding of what second-language skills the RNZN’s Service personnel already have. In order to determine what second-languages are understood by uniformed personnel, and individuals’ respective proficiency levels in these languages, a census survey of all uniformed RNZN personnel was conducted.

3.3 Approval procedures

3.3.1 NZDF and RNZN approval

In order to commence this study, approval was sought from both the RNZN and the Massey University Southern B Human Ethics Committee. In accordance with NZDF policy, obtaining approval is mandatory in order to protect Service members' individual rights as respondents, and ensure the integrity and standard of research conducted within the NZDF (New Zealand Defence Force, 2002). A research application [file number NSC 4508-0001] was submitted to the RNZN Senior Psychologist, and a consultation meeting was instigated in order to appease any Service concerns and to discuss the complexities of the study.

A component of the research required access to, and sourced information from the FAMT, a classified and restricted document. At the meeting, it was deemed that permission to publish information contained in the document was required from the FAMT owner, the Joint Staff Officer for Exercise and Activity Development (Maritime) (L. Hunn, personal communication, June 10, 2011). The request submission was limited to historical RNZN port visit information and visiting ship information only. Approval was granted on the basis that information on previous ship movements is already in the media and public domain (S. Walker, personal communication, June 22, 2011) and therefore is not considered to be restricted information.

All documentation was forwarded to the approving authority and official endorsement for the research to be conducted was granted by the Deputy Chief of Navy (Approval Minute File Number NC 4508-0001).

3.3.2 Research ethics approval

Details of the study were presented to the Massey University Human Ethics Committee: Southern B on Thursday, 14 April 2011. The Human Ethics Application 11/25 was provisionally accepted. Clarifications required by the Committee were, in part, due to the unique organisational context and structure of the military. There was concern that as a Lieutenant, the researcher outranked, and therefore had a power relationship over many of the potential respondents (P. Broad, personal communication, April 28, 2011).

It was recommended that an independent third party make the initial approach and distribute the questionnaire so as to eliminate the perceived issue of rank. Guidance and assistance was sought from the Organisational Research and Development Department of the Defence Personnel Executive, and it was subsequently arranged to have the questionnaire emailed out to all respondents under the auspices of the generic Organisational Research email address. The researcher's name, minus rank, was noted in the covering letter, but no additional information regarding the researcher's RNZN affiliation was provided, thus resolving the potential issue.

A clearer explanation regarding the dual purpose of the study was also requested. For academic purposes, all respondents were treated anonymously, with individuals assigned a case number as the only identifier in the dataset. However, the research aimed to serve a secondary purpose of enabling the RNZN access to the information at a later date, should the organisation opt to develop a database of personnel's second-language skill and respective proficiency. This aim required respondents to provide their Service numbers should they wish to have their responses registered with the RNZN. The concern in this instance was that individuals would be identifiable by Service number and written consent would subsequently be required. Given the significant disbursement of RNZN personnel across the world, the concept of having all volunteers sign and submit a written consent form was considered impractical. The content in the Information Sheet and covering email was amended to incorporate a more thorough explanation of the survey's dual purpose. An explicit

statement was also included stating that participants' provision of their Service numbers was at their own discretion, and by doing so, implied voluntary consent for the RNZN to have access to their individual responses.

A revised ethics application addressing and rectifying previous issues was submitted, and full approval was subsequently obtained (Southern B Application 11/25).

3. 4 Study design - Ideal capabilities

The first component of the overall research is the determination of the RNZN's second-language requirements, if any. In order to achieve this, a ten year analysis of the RNZN FAMT from 01 July 2000 until 30 June 2011 was conducted. This depicts both the frequency and duration of overseas port visits RNZN vessels have undertaken. The data included only visits where a vessel was berthed alongside a wharf. Visits where a vessel was at anchor just off a port were excluded during data collection. Analysis of the information provided a list of countries (and their respective national languages) with which the RNZN is in most regular operational and diplomatic contact. Using the results of this analysis, a depiction of the geostrategic importance of these nations and languages could then be made from the RNZN perspective.

Da Rocha (2007) developed a potential indicator (PI) for ranking the level of geostrategic importance of various countries in the world to the US Air Force. Using his model, a country's respective PI value can be calculated by measuring four accessible, objective and comparable variables: 'population', 'territorial area', 'gross national product' and 'military expenditure'. Once calculated, countries can then be ranked in order of geostrategic relevance. This New Zealand study measured the PI values of the countries identified in the RNZN FAMT analysis and ranked them in the order of geostrategic importance to the Service. Da Rocha (2007) reported that test results, applying the PI to countries typically deemed the most important in the world according to size-of-economy, validated the indicator. Like Da Rocha's (2007) study, information pertaining to the four variables of the PI were sourced from The World Factbook 2011, published by the US Central Intelligence Agency.

3.5 Study design - Current capabilities

3.5.1 Quantitative Approach

Given that the RNZN is currently unaware of what second-language capabilities its Service personnel possess, and given the RNZN's uniformed population of approximately 2,000 people, it was determined that a census survey was both an appropriate and manageable method of information gathering. A quantitative approach facilitated the gathering of initial information and the development of straightforward statistics, so that the RNZN can gain a basic and generic understanding of its second-language capabilities; one of the primary goals of the study. Should the RNZN require further in-depth analysis to be conducted, the door remains open for qualitative methods to be employed, such as follow-up interviews and focus groups.

The questions contained in the survey were such that respondents knew the answers outright and did not need to provide any additional information. For example, 'highest level of education in language'; 'highest qualification attained in language'; and 'frequency of language use'. Additionally, the use of a descriptor scale enabled respondents to read clear proficiency level descriptions, and select the level most reflective of their second-language ability. The standardised descriptors also eliminated the need for additional information to be supplied by respondents. Consequently, in comparison to alternative methods, it was considered that a questionnaire was the most time efficient and effective method of obtaining the data required for the 2,000-plus sample size.

The census of the RNZN also provides an externally valid survey template for future research. Should a subsequent investigation into the capabilities of the remainder of the NZDF (Air Force, Army, Reservist/Territorial Forces and civilian employees) be undertaken, the questionnaire distributed for this study could be applied defence-wide so as to obtain the information required.

3.5.2 *Pilot trial*

A pilot trial of the survey questionnaire was conducted prior to its final full email distribution. Ten respondents were selected for the trial using convenience sampling. The purpose of the pilot trial was to test the reliability and clarity of the questions contained in the survey. The trial prompted a number of both technical and linguistic changes. One participant posted to sea (on ship), and three participants working ashore, found that their server computer settings responded negatively to the security and macro settings of the Excel-formatted survey. All macros were removed and the security properties of the document altered to ensure compatibility with all ship and shore server settings.

Additionally, certain words and phrases contained within the illustrative proficiency descriptors in the questionnaire were found to be more difficult than necessary. Consequently, phrases such as *“I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance”* were simplified to read, *“I can understand phrases and frequently used words that have relevance to me personally”*. Whilst the changes made did not alter the meaning or intent of the statements, they reduced the possibility for confusion or misunderstanding created by the original vocabulary.

3.5.3 *Sampling procedure*

The sample population comprised all Regular Force officers and sailors of the RNZN. As at September 2011, the RNZN employed 2,835 personnel. Included in this figure are 392 civilian employees, 342 Volunteer Reservists and 2,101 Regular Force personnel. This survey targeted the Regular Force population of 2,101. A census was considered appropriate given the small population number and the need to ensure external validity.

The email list for this sample frame was generated by the Fleet Personnel and Training Organisation (FPTO) Analyst Developer. In ATLAS (the RNZN personnel database), all Service members can be categorised according to their employment

status - Regular Force, RNZN Volunteer Reserve, Civilian. The FPTO Analyst Developer completed a dump of all Service numbers in the Regular Force category into an email-ready addressee list. On the researcher's behalf, the Organisational Research and Development Department emailed out the questionnaire (Appendix B) and covering information email (Appendix C) to all of the pre-set Service numbers from the Organisational Research email address. A follow-up email (Appendix D) was sent to the full distribution list ten days after the original email. It reminded all personnel that responses were due within the next four days. This short two week period in which to receive responses was recommended by the Organisational Research and Development Department based on both experience, as well as the climate of the RNZN at the time of distribution.

3.5.4 Sample

Of the 2,101 Regular Force personnel, only 2,073 received the survey. The remainder rebounded 'Undeliverable' mail system errors. Of the 2,073 recipients, 251 had automated alerts announcing they were "Out of Office", be it on annual leave; leave without pay; or posted overseas without access to their DIXS email account (the email address to which the questionnaire was sent). Therefore, it is estimated that the survey reached a maximum possible sample size of 1,822, of which 428 valid responses were returned - a response rate of 23%.

Due to the small sample frame, it was deemed that individuals would be too easily identifiable should they provide their rank and trade details as part of the demographic information collected in the survey. Given these preclusions for ethical reasons, only generic comparisons can be drawn between the characteristics of the RNZN Regular Force total population and the sample population. Of the responses received: six respondents opted not to declare, or incorrectly inputted their birthdates; nineteen chose not to declare, or provided incorrect enlistment dates; and two opted not to disclose their gender.

Tables 3.1 and 3.2 outline the basic demographic characteristics of the sample and total RNZN population including gender breakdown, age and length of service.

Table 3.1 – Descriptive Statistics: Age & Gender Breakdown of the RNZN & Sample Populations

AGE	FEMALE				MALE				TOTAL			
	Sample		RNZN		Sample		RNZN		Sample		RNZN	
17<20 yrs	2	0%	57	3%	4	1%	95	5%	6	1%	152	7%
20<25 yrs	32	7%	176	8%	33	8%	511	24%	65	15%	687	33%
25<30 yrs	28	7%	111	5%	61	14%	275	13%	89	21%	386	18%
30<35 yrs	17	4%	60	3%	56	13%	200	10%	73	17%	260	12%
35<40 yrs	10	2%	31	1%	41	10%	143	7%	51	12%	174	8%
40<45 yrs	8	2%	21	1%	44	10%	156	7%	52	12%	177	8%
45<50 yrs	5	1%	13	1%	32	7%	112	5%	37	9%	125	6%
50<55 yrs	0	0%	5	<1%	35	8%	100	5%	35	8%	105	5%
55<60 yrs	0	0%	0	0%	9	2%	23	1%	9	2%	23	1%
60+ yrs	0	0%	0	0%	5	1%	12	1%	5	1%	12	1%
Not Declared									6	1%		
Total	102	24%	474	22%	320	75%	1627	77%	428	100%	2101	100%

Table 3.2 – Descriptive Statistics: Length of Service Breakdown for the RNZN & Sample Populations

LENGTH OF SERVICE	FEMALE				MALE				TOTAL			
	Sample		RNZN		Sample		RNZN		Sample		RNZN	
Less than 5 yrs	32	7%	240	11%	63	15%	695	33%	95	22%	935	45%
5<10 yrs	29	7%	135	6%	70	16%	383	18%	99	23%	518	25%
10<15 yrs	19	4%	51	2%	48	11%	167	8%	67	16%	218	10%
15<20 yrs	12	3%	19	1%	24	6%	93	4%	36	8%	112	5%
20<25 yrs	4	1%	22	1%	42	10%	139	7%	46	11%	161	8%
25<30 yrs	3	1%	5	0.24%	25	6%	73	3%	28	7%	78	4%
30<35 yrs	0	0%	2	0.10%	18	4%	52	2%	18	4%	54	3%
35<40 yrs	0	0%	0	0%	16	4%	21	1%	16	4%	21	1%
40<45 yrs	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
45<50 yrs	0	0%	0	0%	3	1%	3	0.14%	3	1%	3	0.14%
50<55 yrs	0	0%	0	0%	1	0.23%	1	0.05%	1	0.23%	1	0.05%
Not declared									19	4%		
	99	23%	474	23%	310	72%	1627	77%	428	100%	2101	100%

Comparing the age of the survey respondents to the total RNZN population, the research sample is significantly under-represented (-16%) by males aged between 20-25 years old. Given that the minimum age to join the RNZN is 17 years, these figures provide a logical explanation for the evident under-representation (-15%) of males who have served less than five years of Service in Table 3.2. The remaining comparative variances in characteristics concerning age, gender and length of Service equate to less than 6% difference between the sample and the total

population. Consequently, besides the skewed number of responses from males in both the 20-25 age bracket, and those having served less than five years, the research sample is, for the most part, representative of the wider total RNZN population.

3.5.5 Measures

The survey questionnaire requested information across three sections; Background Information, Language Portfolio and Self-Assessment. A combination of non-parametric nominal and ordinal measures was used, as well as a pre-existing descriptor scale. The Background Information section comprised of five questions identifying respondents' gender, age, length of Service, whether or not he/she has a level of competency in a second-language, and whether he/she has an interest in learning a second language. Responses to these questions were written in by respondents or selected from predetermined drop-down lists. All respondents were able to complete this first section. However, only those who declared a second-language ability continued on to complete the remainder of the questionnaire.

The second section established the respondents' language education and qualification history; regularity of language use for work purposes; and frequency of contact with native speakers in their respective second-languages. Respondents were asked to select the educational levels (primary school through to postgraduate tertiary) at which they had received language tuition, and select any language qualifications attained (NCEA Level 3/5th Form School Certificate through to PhD). To gain an understanding of the level of second-language use within the workplace, as well as the frequency of contact with speakers of the second-languages, respondents were asked to rate their typical level of exposure and use along an eight-point Likert scale. This scale ranged from 'never', 'biennially', 'annually', 'six monthly', 'monthly', 'fortnightly' 'weekly' to 'daily'.

The final section of the questionnaire required respondents to conduct a self-assessment of their proficiency in their declared second-languages, using a pre-

existing descriptor scale from the Common European Framework Reference for Languages (CEFR). The CEFR is the result of a seven year project initiated by the Council of Europe between 1989 and 1996. The CEFR applies to all languages in the Europe Union (EU) and was introduced as the system of language ability validation in all EU countries in 2001. The CEFR enables a common basis for the development and planning of language learning programmes, language certification, and self-directed learning, that is recognised across Europe (Council of Europe, 2001a).

So as to enable comparisons to be drawn across different qualification systems, standards and examinations, the CEFR has developed common reference levels and validated descriptor scales of language proficiency (Council of Europe, 2001a). This study uses the proficiency descriptors contained in the Council of Europe's, European Language Portfolio (ELP) Language Passport. The ELP was released in 2001 and is an internationally recognised document containing information on an individual learner's language skills, qualifications and cultural experiences (Council of Europe 2001b). The ELP consists of three sections: a language passport; a language and cultural biography; and a dossier of the learner's work. A copy of the ELP's Language Passport is included in Appendix E.

The ELP Language Passport's 'Profile of Language Skills' section enables individuals to assess their second-language abilities in five areas: Listening, Reading, Spoken Interaction, Spoken Production and Writing. Figure 3.2 is the Global Scale which divides learners into three broad divisions which can be divided into six levels: **A** Basic Speaker, **A1** Breakthrough, **A2** Waystage; **B** Independent Speaker, **B1** Threshold, **B2** Vantage; **C** Proficient Speaker, **C1** Effective Operational Proficiency, **C2** Mastery.

Figure 3.2 - Common European Reference Framework: Global Scale

Proficient User	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

(Source: Council of Europe, 2001a)

The CEFR illustrative descriptors have been mathematically scaled and standardised using intuitive, qualitative and quantitative methodologies. The Rasch Scaling Item Response Theory (IRT) was used as the scaling model in the development of the descriptors. The IRT is a robust scaling method which enables items to be calibrated to the same scale (Council of Europe, 2001a). Consequently, the different proficiency levels can be analysed as scale data. The CEFR has been the subject of four independent large-scale international studies in which the validity of the descriptor scales has been tested. All of these studies, recorded high validity levels of between 0.90 and 0.97 (Council of Europe, 2001a).

3.6 Conclusion

This chapter has outlined the two separate components of analysis undertaken in this research: FAMT analysis and PI calculations to identify the RNZN's ideal foreign language capabilities; and census survey of RNZN Regular Force personnel to determine current in-house foreign language capabilities. Rationale was provided for the decision to conduct a census survey of the RNZN as opposed to using an alternative procedure. Findings from the survey, and the results of the FAMT/PI analysis will be presented in the next chapter.

CHAPTER FOUR – PRESENTATION OF RESULTS

This chapter presents the results of the survey responses in conjunction with the information obtained from both the RNZN FAMT and the geostrategic importance PI calculations. The first section focuses on the foreign language requirements of the RNZN. The ten year analysis of the FAMT data determines the number of days RNZN vessels spent visiting ports in each respective nation, as well as the number of days these nations have visited New Zealand on reciprocal visits. This data is compiled and presented in a table ranking nations according to their overall level of naval engagement with the RNZN (bilateral ship visits). The second section ranks the nations identified in order of geostrategic importance as dictated by the PI model. Linking this data produced a prioritised list of nations and official national languages that equate to the RNZN's ideal foreign language capability requirements.

The census survey of the RNZN asked all Regular Force Service personnel to record any second-language ability they have, and to conduct a self-assessment with regards to their proficiency level in each language. All self-reported proficiency levels are presented in the first instance, followed by a detailed breakdown of proficiency levels across communication categories for the national languages identified as being top-priority languages for the RNZN.

This analysis highlights both the ideal and current second-language capabilities of the RNZN. More importantly, it reveals current gaps in capability, and identifies education and investment priorities to be discussed in the next chapter.

4.1 Ideal second-language capabilities as determined by frequency of RNZN engagement with foreign navies

The RNZN FAMT is a database of all recorded past, present and future activities for RNZN fleet units. The calendar-like schedule records the duration of sea passages, port visits and provides a description of specific operational taskings. This research involved a data analysis of all information pertaining to naval ship visits to and from all nations other than Australia from 01 July 2000 to 30 June 2011.

In order to highlight the ideal foreign language capabilities of the RNZN, the analysis of the data obtained from the FAMT is presented in four tables: a ranked list of nations visited by RNZN vessels and the duration of each visit to the nations' respective ports; a ranked list of other nations' navies' ship visits to New Zealand and the duration of each visit; a ranked total frequency list of RNZN and reciprocal ship visits to/from each nation; and a list of nations categorised by level of naval engagement. It can be inferred from this last table which foreign national languages that offer the greatest potential for the RNZN in the conduct of its business.

4.1.1 Limitations

Australia was deliberately excluded from the analysis due to the fact that English is its only official language. Other pre-dominantly English speaking nations such as the US, Canada and Singapore were included in the analysis due to the fact that they have additional national languages.

On occasion, two RNZN ships will deploy together for an operational deployment dependent on deployment duration and the locations of operations. The oil tanker and replenishment vessel, HMNZS ENDEAVOUR will typically accompany an ANZAC Frigate (HMNZS TE MANA or HMNZS TE KAHA) on lengthy deployments in order to conduct food and fuel replenishments at sea. This is also the case for the Indian Navy and French Navy (New Caledonia) who have sent two vessels to visit New Zealand simultaneously during the last ten years. So as to not skew the data by doubling up on port visits, data pertaining to the vessel with the longest visit in a respective port was used in the analysis.

The analysis does not factor in any days spent by vessels at anchor off the coast of a foreign port (or New Zealand port in the case of a foreign vessel). For example, HMNZS CANTERBURY's deployment to Tonga and Samoa for tsunami relief efforts following the September 2009 tsunami, are not reflected in the results. However, visit days are included where official tenders were operated so as to transfer RNZN personnel ashore, such as is standard practice in Hong Kong.

The FAMT only captures data relating to ship activities and RNZN single Service deployments. A considerable number of RNZN personnel have served overseas in support of land-based operations, such as UN peace-keeping missions in Afghanistan, Sinai, Solomon Islands, Timor-Leste, Sudan, to name a few. However, these positions fall under the NZDF umbrella and are therefore, not captured within FAMT. Furthermore, due to the restricted nature of the FAMT material, access to future planned deployments and activities was precluded, limiting discussion on emerging threats and trends.

4.1.2 Ten years of RNZN ship visits to foreign ports 2000-2011

Table 4.1 (overleaf) provides the annual data for RNZN vessels visiting other nations for the ten year period, July 2000 to June 2011. It ranks the nations visited in terms of the number of days RNZN vessels have spent berthed alongside ports of each host-nation.

Table 4.1 – RNZN Ship Visits to Foreign Ports, 01 June 2000 – 30 July 2011

RANK	COUNTRY	PORT	YEAR											SUB	TOTAL (Days)	
			00	01	02	03	04	05	06	07	08	09	10			11
1	Republic of Singapore	Changi							5	8	5	13	6		37	245
		Sembawang			29	39	8	9	28	18	17	32	3	25	208	
2	Malaysia	Kemaman						11			5				16	97
		Kota Kinabalu			4					5					9	
		Kuantan						3	4						7	
		Langkawi									3				3	
		Lumut				11		6		11		4			32	
		Penang			4									5	9	
3	New Caledonia	Port Klang					3	5		5		8		21		
3	New Caledonia	Noumea	10	9	9	5	7		8		9	10	12	7	86	
4	Samoa	Apia		5		5	11	5			14	15		8	63	
5	People's Republic of China	Hong Kong					5		5			4	4		18	45
		Qingdao										7			7	
		Shanghai			4						6			6	16	
		Zhanjiang									4				4	
6	Japan	Fukuoka			4										4	43
		Kure								4					4	
		Nagoya						9							9	
		Okinawa			5						4				9	
		Sasebo									5				5	
		Tokyo			7					5						
7	United Arab Emirates	Abu Dhabi									5				5	43
		Jebel Ali				24					14				38	
8	Kingdom of Tonga	Nukualofa	4	7		6	5				9		4	35	39	
		Vava'u Islands									4					4
9	India	Port Blair								4			5	9	30	
		Cochin / Kochi							5							5
		Mumbai				5			6		5					16
10	Cook Islands	Manihiki Island		3											3	24
		Puka Puka						3							3	
		Rarotonga		5		3		4						6	18	
11	Republic of Vanuatu	Port Vila	4	6		4	4						6		24	
12	Kingdom of Thailand	Bangkok					5		4						9	20
		Sattahip			6		5								11	
13	Kingdom of Bahrain	Kingdom of Bahrain			6	4						9			10	19
		Manama													9	
14	Republic of Korea	Chinhae			5				5						10	18
		Incheon											8		8	
15	United States of America	Hawaii												9	9	26
		San Diego												5	5	
		San Francisco												5	5	
		Seattle												7	7	
16	Socialist Republic of Vietnam	Ho Chi Minh			5				5				5		15	
17	Sultanate of Oman	Muscat				14									14	
18	Sultanate of Brunei	Sultanate of Brunei				7			5						12	
19	Tokelau Islands	<i>Not specified</i>		5		4									9	12
		Nukunonu						3							3	
20	Canada	Esquimalt												6		11
		Vancouver												5		
21	Nuie	Nuie		4		3		4							11	
22	Philippines	Manila			4		6								10	
23	Indonesia	Jakarta										5	4		9	
24	French Polynesia	Papeete											6		6	
25	Qatar	Doha									5				5	
26	Russia	Vladivostok						5							5	
27	Sri Lanka	Colombo							5						5	
28	Papua New Guinea	Manus				3									3	
29	Democratic Republic of Timor-Leste	Dili			2										2	

Of the 941 days and 29 countries visited by RNZN ships over the last ten years, the majority of engagement centres on East Asia, South East Asia and the South Pacific. Singapore and Malaysia are understandably the most visited nations due to

contracted ship maintenance agreements. Singapore hosted a quarter of the total RNZN ship visits (26%) and 85% of these visits were alongside Sembawang Port, where the British Ministry of Defence runs a small logistics base. Under the Five Power Defence Arrangement, this unit provides repairs, replenishment and refuelling for the RNZN and other Commonwealth nations' navies. Scheduled maintenance is also undertaken in Malaysia. Of the 10% of total RNZN visits to Malaysia, a third of them have been alongside in Lumut for maintenance at the Naval Dockyard Sdn Bhd.

RNZN ship visits to New Caledonia and Samoa have been consistent over the years, and equate to 9% and 6% respectively of the total time spent alongside in overseas ports. Visits to the Peoples' Republic of China have been predominantly to non-military ports such as Hong Kong and Shanghai. However, the RNZN was invited to visit Zhanjiang, the home of the People's Liberation Army (Navy) South Sea Fleet in 2007, and participated in the PLA(N) 60th Anniversary International Fleet Review in Qingdao in 2009.

Visits to Japan (ranked 6th) and India (ranked 9th) are typically diplomatic rather than operational visits. Port visits alongside in the United Arab Emirates (ranked 7th) in 2003 and 2009 were ships' company liberty, refuelling and replenishment visits undertaken by ANZAC frigates during coalition operations, conducted in support of Operation Enduring Freedom in the Persian Gulf. Tonga (ranked 8th) and the Cook Islands (ranked 10th) complete the top ten nations visited by RNZN vessels over the last ten years. Ship visits to these South Pacific nations are in support of New Zealand's interest in being a trusted member of the South Pacific community, and are in line with the 1983 Letters Patent requirement to provide defence assistance to the Cook Islands.

4.1.3 Foreign naval ship visits to New Zealand ports 2000-2011

Table 4.2 provides the annual data for other nations' reciprocal naval ship visits to New Zealand ports for the same period.

Table 4.2 – Foreign Naval Ship Visits to New Zealand Ports, 01 June 2000 – 30 July 2011

RANK	COUNTRY	YEAR											TOTAL (Days)		
		00	01	02	03	04	05	06	07	08	09	10		11	
1	France														226
	New Caledonia	3	16	8				3	33	92	30	35			220
	French Polynesia									6					6
2	India		4					5			21				30
3	Republic of Singapore		17												17
4	People's Republic of China		3						8			5			16
5	Canada	10	5												15
	Japan		10						5						15
6	Spain		10												10
7	Republic of Korea							4					4		8
8	Argentina									6					6
9	Chile								5						5
	Mexico							5							5
10	Malaysia									4					4
11	Denmark								3						3

As illustrated, since June 2000, New Zealand has hosted the French Navy and Armed Forces of New Caledonia (French Navy) the most regularly. Of the 360 days that all nations' navies have visited New Zealand ports, almost two thirds (63%) have been from France, be it from ships based in New Caledonia or French Polynesia.

New Caledonia is a special collective of France and as such, the Armed Forces of New Caledonia are bolstered by a standing French Navy deployment to the area. The French Navy has a surveillance frigate, two patrol vessels, a light transport ship and a patrol craft permanently stationed at the Pointe Chaleix naval base in Noumea in order to protect New Caledonia's maritime zone. In order to distinguish between French Navy vessels visiting from French Polynesia as opposed to New Caledonia, the countries of origin were deliberately separated for analysis purposes.

The two patrol boats P686 FNS LA GLOREIUSE and P688 FNS LA MOQUEUSE and the light transport vessel L9033 FNS JACQUES CARTIER are the French ships which most frequently visit New Zealand ports. The surveillance frigate, F734 FNS

VENDERMIAIRE, based in New Caledonia, has visited twice in the last ten years. Its sister ship, F731 FNS PRAIRIAL, based in French Polynesia, has visited once for a period of six days. A 92 day-visit in 2008, which accounts for 73% of the French Navy's total visit duration, was undertaken by FNS JACQUES CARTIER, and this involved an extensive period of maintenance in the RNZN dry-dock. If this visit had not taken place, the figures would be substantially different, with a total of only 34 days spent by visiting French Navy ships alongside New Zealand ports.

Over the last ten years, the navies of India (ranked 3rd), the People's Republic of China (ranked 5th), Japan (ranked 6th) and the Republic of Korea (ranked 8th) have conducted ship visits to New Zealand every three to six years. The Singaporean, Canadian and Spanish navies have not visited New Zealand since 2001. Other unreciprocated ship visits of three to six days duration have been undertaken by non-traditional Navy partners such as Argentina, Chile, Mexico and Denmark.

4.1.4 RNZN levels of engagement with foreign navies

The data relating to RNZN ship visits to foreign ports and foreign naval ship visits to New Zealand is collated in Table 4.3, and the nations are categorised according to the frequency of engagement in Table 4.4.

Table 4.3 – RNZN Level of Bilateral Engagement with Foreign Navies

RANK	COUNTRY	RNZN VISITS	RECIPROCAL VISITS	TOTAL (Days)
1	France			317
	New Caledonia	86	220	306
	French Polynesia	5	6	11
2	Republic of Singapore	245	17	262
3	Malaysia	97	4	101
4	Samoa	63		63
5	People's Republic of China	45	16	61
6	India	30	30	60
7	Japan	43	15	58
8	United Arab Emirates	43		43
9	Kingdom of Tonga	39		39
10	Cook Islands	28		28
11	Canada	11	15	26
	Republic of Korea	18	8	26
	United States of America	26		26
12	Republic of Vanuatu	24		24
13	Kingdom of Thailand	20		20
14	Kingdom of Bahrain	19		19
15	Socialist Republic of Vietnam	15		15
16	Sultanate of Oman	14		14
17	Sultanate of Brunei	12		12
	Tokelau Islands	12		12
18	Nuie	11		11
19	Philippines	10		10
	Spain		10	10
20	Indonesia	9		9
21	Argentina		6	6
22	Chile		5	5
	Mexico		5	5
	Qatar	5		5
	Russia	5		5
	Sri Lanka	5		5
23	Denmark		3	3
	Papua New Guinea	3		3
24	Democratic Republic of Timor-Leste	2		2

Table 4.4 – Distribution of Countries According to Bilateral Engagement Levels

Extremely High Level of Engagement (≥10%)		High Level of Engagement (5<10%)		Moderate Level of Engagement (2<5%)		Low Level of Engagement (<2%)	
France	24%	Malaysia	8%	Japan	4%	Kingdom of Bahrain	1.5%
<i>New Caledonia</i>	14%	Samoa	5%	United Arab Emirates	3%	Socialist Republic of Vietnam	1.1%
<i>French Polynesia</i>	0.4%	People's Republic of China	5%	Kingdom of Tonga	3%	Sultanate of Oman	1.1%
Republic of Singapore	20%	India	5%	Cook Islands	2%	Sultanate of Brunei	0.9%
				Canada	2%	Tokelau Islands	0.9%
				Republic of Korea	2%	Nuie	0.8%
				United States of America	2%	Philippines	0.8%
				Republic of Vanuatu	2%	Spain	0.8%
				Kingdom of Thailand	2%	Indonesia	0.7%
						Argentina	0.5%
						Chile	0.4%
						Mexico	0.4%
						Qatar	0.4%
						Russia	0.4%
						Sri Lanka	0.4%
						Denmark	0.2%
						Papua New Guinea	0.2%
						Democratic Republic of Timor-Leste	0.2%

The duration of ship visits to New Zealand by French naval ships from Noumea and Papeete (combined total of 63%) is considerably greater than the duration of return visits conducted by RNZN vessels; 9% to Noumea and 0.06% to Papeete. As mentioned previously, the lengthy stay of FNS JACQUES CARTIER is a significant factor in the 226-day total visit duration of French naval ships to New Zealand.

Despite the disparity in frequency of ship visits to and from Singapore (26% compared to 5%), the extent to which the RNZN has conducted maintenance in Singapore cements the nation as an outlier in terms of the high level of engagement. The same can be said, but to a lesser extent, for the RNZN's relationship with the Royal Malaysian Navy (RMN). The RNZN has conducted significantly more visits to Malaysia (10% RNZN to Malaysia compared to 1% RMN to New Zealand). This is predominantly due to the scheduling of planned maintenance whereby RNZN ships remain alongside in Malaysia for more than ten days at a time.

The RNZN has visited the People's Republic of China six times in the last ten years, and this is reflective of a moderate level of engagement. In the three years since the New Zealand-China Free Trade Agreement was signed in April 2008, New Zealand has spent 21 days alongside China's ports, equating to 47% of the total time spent in China for the full ten year period. Had planned visits to Shanghai and Zhanjiang

scheduled for early 2011 not been hampered by ship maintenance issues, this figure would be higher.

India is the only nation with which the RNZN has matched ship visits. Both the Indian Navy and the RNZN have visited each other's countries for a total of 30 days indicating an equal and moderate level of engagement between the two navies. Given the small sizes, capabilities and constitutional restraints of defence forces in the South Pacific (Tonga, Cook Island, Samoa, Vanuatu, Tokelau Islands, Niue and French Polynesia), it is to be expected that RNZN ship visits have not been reciprocated.

The remainder of the nations categorised as having a low level of naval engagement with New Zealand are located in South East Asia, South America, Europe and the Middle East. They are countries with which neither New Zealand nor the RNZN have strong diplomatic or military ties. The visits conducted over the last ten years are predominantly one-sided, with the foreign navies visiting New Zealand. Deployments of such distances, given the operational tempo and small size of the RNZN, are such that reciprocal visits have not been a fixture in the RNZN FAMT.

4.2 Geostrategic importance of identified nations to New Zealand

In order to determine the geostrategic importance of the nations with which the RNZN has naval engagement, the PI designed by Da Rocha (2007) was used. PI calculations used in his study published in 2007 on the prevalence of Spanish and Portuguese languages within US Air Force journals, was mirrored in this research. A PI based on population, geographical area, economic wealth and military expenditure was calculated for the nations identified in the previous section, in order to evaluate the countries' level of importance from New Zealand's perspective. The results are presented in Table 4.5. These results can also be categorised by order of magnitude of their PI. Only those with significant PI values are presented in Table 4.6.

Table 4.5 – PI Values for Countries with which the RNZN has a Level of Engagement

GEOSTRATEGIC IMPORTANCE (Ranked)	COUNTRY	A Population x 10 ⁶ people	B Territorial area -	C GNP x US\$ 10 ⁹ (PPP)	D Military expenditure x US\$ 10 ⁹	PI (AxBxCxD) -	Fx of ENGAGEMENT (Days)
1	People's Republic of China	1343.8405	9.5981	10415.80	433.870	58,288,606,612	61
2	United States of America	313.2320	9.8267	14660.00	595.196	26,857,572,171	26
3	India	1189.1729	3.2873	4060.00	101.500	1,610,910,948	60
4	Russia	138.7399	17.0932	2223.00	86.697	457,055,907	5
5	Indonesia	245.6130	1.9046	1030.00	30.900	14,888,256	9
6	Japan	126.4757	0.3779	4310.00	34.480	7,103,062	58
7	Canada	34.0306	9.9847	1300.00	11.830	5,225,541	26
8	France	65.3122	0.6438	2145.00	55.77	5,030,072	125
9	Mexico	113.7724226	1.964375	1567	7.835	2,743,907	5
10	Spain	46.754784	0.50537	1369	16.428	531,403	10
11	Argentina	41.769726	2.7804	596	4.768	330,028	6
12	Republic of Korea	45.7547	0.0997	1459.00	39.393	262,236	26
13	Socialist Republic of Vietnam	90.5494	0.3312	276.60	6.915	57,363	15
14	Philippines	101.8339	0.3000	351.40	3.163	33,952	10
15	Malaysia	28.7286	0.3298	414.40	8.412	33,034	101
16	Chile	16.88876	0.756102	257.9	6.9633	22,932	5
17	Sri Lanka	21.2839	0.0656	106.50	27.690	4,118	5
18	United Arab Emirates	5.1487	0.0836	246.80	7.651	813	43
19	Sultanate of Oman	3.0280	0.3095	75.84	8.646	614	14
20	Denmark	5.529888	0.043094	201.7	2.6221	126	3
21	Qatar	0.8480	0.0116	150.60	15.060	22	5
22	Republic of Singapore	4.7407	0.0007	291.90	14.303	13	262
23	Papua New Guinea	6.1876	0.4628	14.95	0.209	9	3
24	Sultanate of Brunei	0.4019	0.0058	20.38	0.917	0.04330394	12
25	Kingdom of Bahrain	1.2147	0.0008	29.71	1.337	0.03666927	19
26	Democratic Republic of Timor-Leste	1.1778	0.0149	3.05	0.004	0.00021380	2
27	Kingdom of Thailand	66.7202	0.5131	586.90	10.564	0.0000004016	20
28	Kingdom of Tonga	0.1059	0.0007	0.75	0.007	0.00000040	39
	Republic of Vanuatu	0.2246	0.0122	1.14	<i>Police only</i>	<i>N/A</i>	24
	Cook Islands	0.0111	0.0002	0.18	<i>NZ assists</i>	<i>N/A</i>	28
	Nuie	0.0013	0.0003	0.01	<i>NZ assists</i>	<i>N/A</i>	11
	Samoa	0.0028	0.1932	1.06	<i>NZ assists</i>	<i>N/A</i>	63
	Tokelau Islands	0.0014	0.0000	0.00	<i>NZ assists</i>	<i>N/A</i>	12

Table 4.6 – Distribution of Countries According to PI Values

Extremely High Order of Magnitude ($\geq 10^8$)	Very High Order of Magnitude (10^7)	High Order of Magnitude ($\geq 10^6$)	Fairly High Order of Magnitude (10^5)	Significant Order of Magnitude (between 10^3 and 10^4)
P.R. China	Indonesia	Japan	Spain	Socialist Republic of Vietnam
U.S.A.		Canada	Argentina	Philippines
India		France	Republic of Korea	Malaysia
Russia		Mexico		Chile
				Sri Lanka

Four countries have extremely high PI values that reflect their geostrategic importance: People’s Republic of China, USA, India and Russia. However, when analysed alongside the level of naval engagement New Zealand has with these countries, only the first three (bolded in Table 4.6) are of particular importance given that these nations were also identified as having moderate-extremely high levels of engagement. Indonesia follows in an intermediate category, with a very high order of magnitude. However, Indonesia is arguably of little importance to the RNZN given the 0.7% level of historical engagement over the last ten years. Three of the four countries: Japan, Canada and France, deemed to have a high level of geostrategic importance, can be considered equally important in the RNZN context, given the moderate level of engagement the RNZN has had with Japan and Canada over the last decade, and the extremely high level of interaction with the French. The Republic of Korea, which is ranked 12th in terms of its level of engagement with the RNZN, is located between Spain and Argentina in the group whose PI is fairly high in the order of magnitude.

4.3 RNZN second-language requirements as determined by naval engagement levels and geostrategic importance of foreign nations

Analysis conducted in Section 4.1, highlighted the top ten nations with which the RNZN has had frequent engagement (by way of naval ship visits) during the ten year period from 01 July 2000 to 30 June 2011. Section 4.2 presented PI calculations for these nations based on psychosocial, political, economic and military variables. The PI values specify the level of geostrategic importance a foreign nation is to New Zealand. By compiling the data from both sections, a list of ideal and priority second-languages can be determined.

Table 4.7 aligns the top ten geostrategically important countries with the top ten nations based on naval engagement. In the matching process, Russia, Indonesia, Mexico and Spain were removed as the level of engagement the RNZN has with these nations is too low to warrant language prioritisation. Additionally, Malaysia and Samoa were removed from the level of engagement category as neither of these nations feature as being of geostrategic importance to New Zealand. The end result is a list of four key foreign languages considered to be of the greatest benefit to the RNZN in terms of developing its human resource capabilities. These four languages represent one third of the nations (eight of the 25 countries) with which the RNZN has contact. Based on figures from the last decade, these nations total 62% of all of the RNZN's engagement with foreign navies.

Table 4.7 - Top Priority Languages for RNZN Requirements

GEOSTRATEGIC IMPORTANCE		LEVEL OF ENGAGEMENT			OFFICIAL LANGUAGE
Rank	Top 10 Countries	Rank	Top 10 Countries	Other Countries	
1	People's Republic of China	2	Republic of Singapore		Mandarin Chinese
		5	People's Republic of China		
3	India	6	India		Hindi
6	Japan	7	Japan		Japanese
8	France	1	France	Canada	French
				French Polynesia	
				New Caledonia	
				Republic of Vanuatu	

Table 4.8 - Second Priority Languages for RNZN Requirements⁴

GEOSTRATEGIC IMPORTANCE		LEVEL OF ENGAGEMENT			OFFICIAL LANGUAGE
Rank	Remaining Top 20 Countries	Rank	Remaining Top 20 Countries	Other Countries	
2	USA	11	United States of America		Spanish
9	Mexico				
10	Spain	19	Spain		
11	Argentina				
16	Chile				
5	Indonesia	20	Indonesia		Bahasa Indonesian
12	Republic of Korea	11	Republic of Korea		Korean
13	Socialist Republic of Vietnam	15	Socialist Republic of Vietnam		Vietnamese
14	Philippines	19	Philippines		Filipino (defacto of Tagalog)
15	Malaysia	3	Malaysia	Sultanate of Brunei	Bahasa Malay
18	United Arab Emirates	8	United Arab Emirates	Kingdom of Bahrain	Arabic
19	Sultanate of Oman	16	Sultanate of Oman	Qatar	

The same process was repeated for the remaining top 20 countries for both geostrategic importance and naval engagement. Table 4.8 presents seven foreign languages deemed to be second priority languages with regards to the RNZN's ideal requirements. These additional languages represent a further 15 nations and 23% of total engagement.

Table 4.9 - Additional Languages for Consideration by the RNZN

COUNTRY	OFFICIAL LANGUAGE
Samoa	Samoan
Kingdom of Tonga	Tongan
Cook Islands	Cook Island Maori
Kingdom of Thailand	Thai
Tokelau Islands	Tokelauan
Niue	Niuean
French Polynesia	Tahitian
Papua New Guinea	Hiri Motu
	Tok Pisin
Democratic Republic of Timor-Leste	Tetun
	Portugese

The other nine nations equating to the final 15% of the RNZN's total engagement are listed in Table 4.9 according to respective levels of engagement. Besides the Kingdom of Thailand and the Democratic Republic of Timor-Leste, which are both

⁴ The USA does not have an official language. However, English is regarded as the de facto national language, and Spanish is the second most common language. The USA is included in Table 4.8 on the basis that Spanish is a prominent national language.

situated in South East Asia, all other countries are located in the South Pacific. The Defence White Paper 2010 provided a 25 year strategic assessment of the international security environment, and stipulated security expectations and capabilities required of the New Zealand Defence Force until 2035. In the Defence White Paper, the New Zealand Government clearly denotes the South Pacific region as an important security and strategic interest (New Zealand Government, 2010). Consequently, while the official languages of these nations are not considered to be of priority in terms of developing the RNZN's human resource capabilities, there is merit in determining current capabilities in each language and looking to match skills with job allocations where possible.

4.4 Current self-reported second-language capabilities of RNZN Regular Force personnel

The initial section of the RNZN census survey sought background information about respondents' second-language abilities. Table 4.10 presents the key statistics pertaining to responses to the question asking, "Do you have some level of conversational ability in any language other than English?". There were 427 valid responses to this question, as one respondent of the 428 total sample opted not to declare his/her gender.

Table 4.10 – Descriptive Statistics: Second Language Ability within the RNZN Regular Force

			Second Language Ability		Total
			No	Yes	
Gender	Female	Count	46	57	103
		Expected Count	49.7	53.3	103.0
		% within Gender	44.7%	55.3%	100.0%
		% within Second Language Proficiency	22.3%	25.8%	24.1%
		% of Total	10.8%	13.3%	24.1%
	Male	Count	160	164	324
		Expected Count	156.3	167.7	324.0
		% within Gender	49.4%	50.6%	100.0%
		% within Second Language Proficiency	77.7%	74.2%	75.9%
		% of Total	37.5%	38.4%	75.9%
Total	Count	206	221	427	
	Expected Count	206.0	221.0	427.0	
	% within Gender	48.2%	51.8%	100.0%	
	% within Second Language Proficiency	100.0%	100.0%	100.0%	
	% of Total	48.2%	51.8%	100.0%	

From the descriptive statistics, it is evident that 48% of the sample do not have a second-language ability, and 52% possess some sort of ability. Of those with a self-reported ability, a quarter are female.

Table 4.11
Foreign Languages in which RNZN Regular
Force Personnel have Proficiency

ALPHABETICAL ORDER	
Language	No. of Pers
Afrikaans	4
Arabic	1
Bahasa Indonesian	1
Cantonese	1
Chinese (Unspecified)	2
Cook Island Maori	3
Dari	1
Dhari	1
Dutch	5
Fijian	1
French	75
German	37
Greek	1
Hebrew	1
Hindi	2
Icelandic	1
Indonesian	2
Italian	11
Japanese	15
Kiribati	1
Korean	2
Lao	1
Latin	3
Mandarin	9
Maori	67
Marathi	1
Neopolitan	1
Niuean	1
NZ Sign Language	1
Pashto	1
Punjabi	1
Romanian	2
Russian	5
Samoan	7
Sign Language	2
Spanish	29
Tahitian	1
Tetun	1
Thai	2
Tokelauan	1
Tongan	2
Turkish	1
Welsh	1

If respondents answered 'yes' to having a second-language ability, they were then asked to list the languages in which they considered themselves to have some level of competency. RNZN personnel declared levels of ability in 43 different languages as Table 4.11 depicts⁵.

A number of respondents also reported proficiency in more than one language (refer Table 4.12). Of the 221 respondents with self-reported second language competency, 29% reported a level of ability in two languages; a further 9% reported being able to speak a third language; and less than 2% have a level of proficiency in up to six languages. This equates to a total of 308 RNZN Regular Force personnel with self-reported competency in 43 different languages.

Table 4.12
Number of RNZN Regular Force Personnel with
Multiple Language Proficiency

NUMBER OF LANGUAGES	RNZN RF PERS	%
2	63	29%
3	19	9%
4	5	2%
5	2	0.9%
6	1	0.4%

⁵ The survey asked respondents to declare any second-language ability. Therefore, despite the study focusing on foreign language capability, a significant number of respondents reported proficiency in Maori and NZ Sign Language.

Most respondents have self-reported proficiency in what Conway (2005) and the US Navy consider to be ‘Enduring Languages’ (Table 4.13). As defined in the Literature Review (Chapter 2), Immediate and Emerging languages are those that the US military deem necessary to prioritise in terms of internal training and investment. Enduring languages are those for which translation skills can be sought externally such as through the employment of civilian/reserve linguists and contracted interpreters.

Table 4.13 – RNZN Second-Languages Categorised According to US Classifications

IMMEDIATE		EMERGING		ENDURING		OTHER	
Language	Total	Language	Total	Language	Total	Language	Total
Arabic	1	Hindi	2	French	75	Maori	67
Dari	1	Marathi	1	German	37	Samoan	7
Pashto	1	Punjabi	1	Spanish	29	Dutch	5
				Japanese	15	Afrikaans	4
				Italian	11	Cook Island Maori	3
				Mandarin	9	Latin	3
				Russian	5	Romanian	2
				Chinese	2	Sign Language	2
				Indonesian	2	Tongan	2
				Korean	2	Dhari	1
				Thai	2	Fijian	1
				Bahasa Indonesian	1	Greek	1
				Cantonese	1	Icelandic	1
				Hebrew	1	Kiribati	1
				Lao	1	Niuean	1
				Neopolitan	1	NZ Sign Language	1
				Turkish	1	Tahitian	1
						Tetun	1
						Tokelauan	1
						Welsh	1
TOTALS	3		4		195		106

Part three of the questionnaire asked respondents to conduct a self-assessment into their respective proficiency levels in each of their identified second-languages. Respondents were asked to report their proficiency level for communication competencies: Listening, Reading, Spoken Interaction, Spoken Production and Writing as best described by CEFR descriptors. The data obtained provided proficiency levels for each of the five communication competency categories. As described in the previous chapter, the CEFR proficiency level descriptors can be analysed as scale data. Consequently, an ‘Overall Proficiency’ variable was able to be computed using IBM SPSS Statistics 19 software. Table 4.14 overleaf presents the Overall Proficiency scores for respondents.

As is evident in Table 4.14, of the 308 speakers of a second-language or multiple languages, 24 (7%) were deemed to have nil proficiency once all communication competencies were averaged out. It was hypothesised that this could be due to individuals' being confident in holding a verbal conversation in a language, but having difficulty reading and writing the language. This was considered a plausible explanation, particularly in relation to non-Latin alphabet based languages such as Chinese (3 respondents), Japanese (1 respondent), Hebrew (1 respondent), Dari (1 respondent) and Thai (1 respondent). In order to test the hypothesis and determine whether any of the communication competencies impacted significantly on overall proficiency, a standard multiple regression statistical analysis was undertaken.

Table 4.15
Descriptive Statistics: Proficiency Levels Across Communication Competencies

Communication Competencies	Mean	Standard Deviation	Total number of second / multiple language speakers (N)
Overall Proficiency	1.96	1.195	308
Listening	2.1721	1.40715	308
Reading	2.0747	1.34247	308
Spoken Interaction	1.9838	1.38503	308
Spoken Production	1.8799	1.24329	308
Writing	1.6721	1.18882	308

Table 4.15 shows that the means for the individual competencies do not differ greatly from each other. These descriptive statistics were supported in the regression analysis, reiterating the fact that there is no one communication competency that best predicts overall proficiency.

4.5 The RNZN's current second-language capabilities in the identified top-priority languages

Section 4.4 presented three prioritised tables of foreign languages relevant to the RNZN's capability needs. Top priority should be given to Mandarin Chinese, Hindi, Japanese and French. Second priority languages are Spanish, Bahasa Indonesian, Korean, Vietnamese, Filipino (Tagalog), Malay and Arabic. Pacific Island languages and Thai are worthy of consideration in context of the RNZN's projected future areas of operations.

The following table (Table 4.16) presents detailed proficiency levels for RNZN Regular Force personnel in the top-priority languages. Of all the survey respondents, 101 reported proficiencies in at least one of these four languages. Consequently, the figures can be read as indicative percentages. The self-reported proficiency levels are broken down into communication competencies so that a clearer picture of overall skill and ability can be provided. This will enable an assessment to be made into an individual's suitability for liaison roles and translation duties.

Table 4.16 - Detailed Proficiency Levels for RNZN Regular Force Personnel in the Top-Priority Languages

LANGUAGE	LISTENING						READING						SPOKEN INTERACTION						SPOKEN PRODUCTION						WRITING									
	NIL	A1	A2	B1	B2	C1	C2	NIL	A1	A2	B1	B2	C1	C2	NIL	A1	A2	B1	B2	C1	C2	NIL	A1	A2	B1	B2	C1	C2	NIL	A1	A2	B1	B2	C1
Mandarin		5	2		1		1	1	3	3		1		1	1	3	1	2	1	1		1	3	1	2	1	1	2	2	2	2	1		
French		37	20	13	4		1		27	21	19	5	2	1	2	39	21	10	2	1		2	39	23	9		2	5	40	18	10	1	1	
Hindi				1			1		1			1				1				1			1					1			1			
Japanese	1	8	4	3				1	10	5					1	10	3	1				1	12	2		1		1	10	3	1			
	UNDERSTANDING												SPEAKING												WRITING									
	NIL		BASIC		INDEP.		PROF.		NIL		BASIC		INDEP.		PROF.		NIL		BASIC		INDEP.		PROF.											
Mandarin	1		6		1		1		1		5		1		2		2		4		3													
French			56		17		2		3		61		10		1		5		58		11		1											
Hindi			1				1				1				1				1		1													
Japanese			14		1				1		13		1				1		13		1													

The CEFR Global Scale can be used to gain a general understanding of the levels of proficiency presented above for each communication competency. However, a more detailed list of task-specific proficiency levels is also possible. Using the proficiency levels as interval data, the five communication competencies were re-calculated into three: 'Understanding', 'Speaking' and 'Writing'.

'Understanding' is the culmination of 'Listening' and 'Reading', both of which are self-explanatory. It is clear from Table 4.16 that the RNZN has a small number of

‘Understanding’ proficient users in Mandarin (1), French (2) and Hindi (1). Across all languages, the overriding majority (95%) of personnel are categorised as Basic or Independent Users. The proficiency level of all Japanese speakers is relatively low, with all except one person categorised as having a Basic ‘Understanding’ proficiency.

‘Spoken Interaction’ and ‘Spoken Production’ comprise the ‘Speaking’ category, and relate to an individual’s ability to negotiate the meaning and context of speech, and respond in kind. The results are very similar to those for ‘Understanding’, with four respondents proficient at ‘Speaking’ and the majority possessing a basic or intermediate-level ability in Mandarin, Hindi and French. There is a lack of proficient Japanese speakers, and only one Independent-level speaker. 87% of Japanese speaking personnel have a Basic skill, with the majority falling into the lower A1 Breakthrough quadrant.

‘Writing’ has the lowest levels of proficiency of the five communication competencies with only one individual self-assessed as ‘Writing’ proficient and this is in French, the only Latin alphabet based language of the four top-priority languages. As discussed in the previous section, there is no statistical evidence to suggest that any of the communication competencies have a significant impact on overall proficiency levels. However, a further non-parametric chi-squared test (Table 4.17) was conducted specifically to determine whether there was a relationship between writing proficiency scores and the type of language, be it script-based or Latin-based. As the statistical results indicate [$\chi^2(1, N = 308) = .089, p > .05$], there is no significant difference. However, it is of note that due to counts of 5 or less in Script(Independent) and Script(Proficient), an assumption of chi-square was violated.

Table 4.17 - Writing Proficiency Levels Crosstabulation and Chi-Square Tests

			Writing Proficiency Level				Total
			Nil Proficiency	Basic	Independent	Proficient	
Type	Latin	Count	18	188	45	11	262
		% within Type	6.9%	71.8%	17.2%	4.2%	100.0%
	Script	Count	8	32	5	1	46
		% within Type	17.4%	69.6%	10.9%	2.2%	100.0%
			Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square			6.528 ^a	3	.089		
Likelihood Ratio			5.718	3	.126		

Results of the FAMT/PI data analysis identified 21 foreign languages considered to be of importance to the RNZN. These languages were subsequently ranked into three prioritised lists detailing four top-priority languages, seven second-priority languages, and nine additional languages worth consideration by the RNZN. The census survey results highlighted that 52% of respondents reported some level of second-language ability across 40 foreign languages. The vast majority of those with an ability in the top-priority languages declared 'basic user' proficiency across all communication competencies. Less than 20% of respondents assessed themselves as having 'independent' or 'proficient' levels of understanding, speaking and writing. These results will be discussed in the next chapter with emphasis placed on the gaps that appear evident between the ideal and current foreign language capabilities of the RNZN.

CHAPTER FIVE – DISCUSSION

This study investigates a previously unexamined area of human resource capability within the RNZN (and wider NZDF). The NZDF is arguably two decades behind the western world's greatest military power, the USA, in terms of its acknowledgement and development of second-language competency as a viable and critical human resource capability. The lessons learnt and strategic planning already undertaken by the US armed forces through the Defense Language Transformation Roadmap and corresponding initiatives will provide a guideline for discussion on the RNZN results.

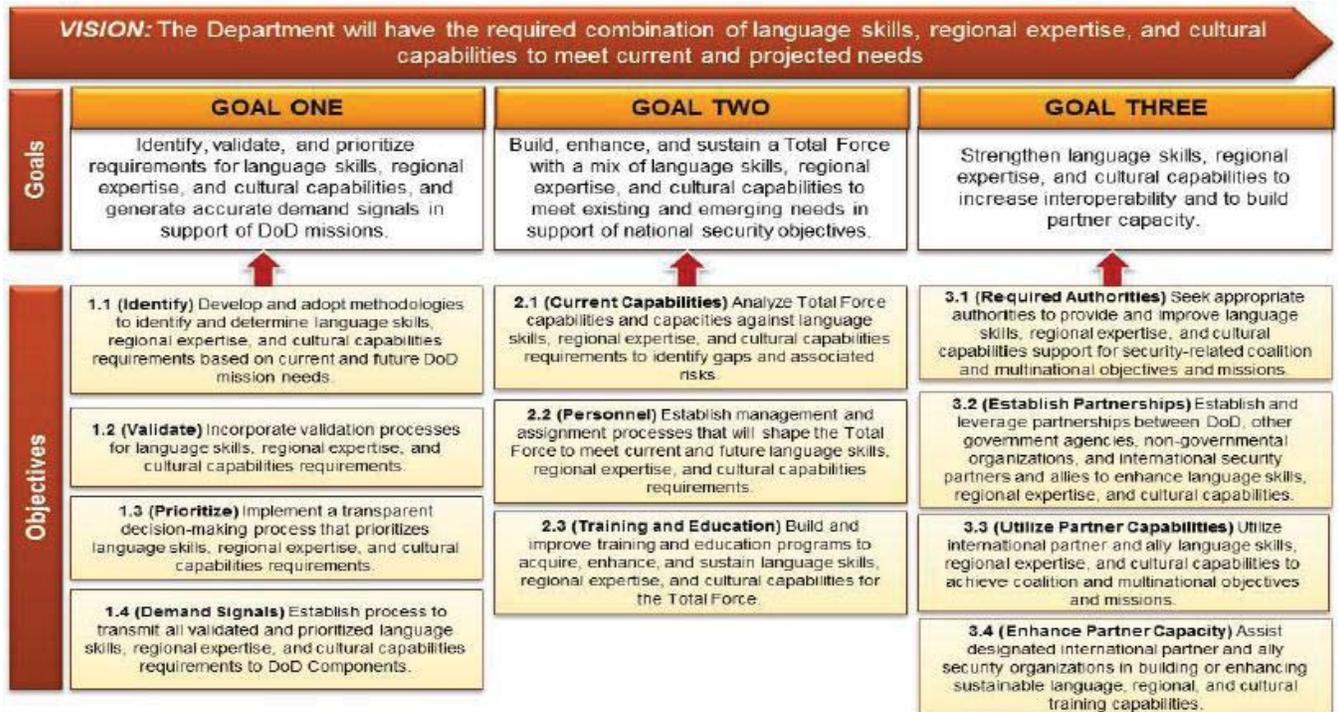
As discussed in the literature review, the US Department of Defense became increasingly concerned with addressing the lack of foreign language competency within the nation's defence force in the late 1980s to mid-1990s. The US Air Force, in particular, came under intense scrutiny, and was the subject of six separate reports and audits between 1988 and 1994. It consequently embarked on a fact-finding mission under the guidance of a newly formed Process Action Team (PAT). The PAT was tasked with developing new initiatives and plans with respect to the Service's second-language capabilities in a bid to overcome the Air Force's widely-reported shortfalls. Individual Services continued to progress their own foreign language recruitment and training initiatives until the US Department of Defense released its Defense Language Transformation Roadmap in 2005, detailing its goals and objectives for the centralised development of second-language skills across the defence force. The Roadmap reflected the findings and recommendations of the US Air Force PAT, which called for the alignment of task and mission language requirements; assessment of current capabilities; and the implementation of a personnel resource tracking and management system specifically for second-language capability.

There is no policy or New Zealand Government mandate demanding the NZDF develop its foreign language competency. However, as the military environment and the role requirements and expectations of the NZDF evolve, it is a matter of time before the NZDF looks introspectively for new and smarter ways of conducting its business. The knowledge and understanding that the NZDF currently has with regards to its second-language capabilities is minimal. Those with previously proven aptitude are remembered and called-on if needed, but there is no proactive

placement or tracking plan of personnel with foreign language skills. Similar to the experiences of the US during the Gulf War (Daubach & Mueller, 1998), as well as those of the Dutch and Belgian forces in Bosnia and Herzegovina and UN peacekeeping forces in Kosovo, Lebanon, Iraq and Afghanistan (Bos & Soeters, 2006; van Dijk & Soeters, 2009), the NZDF is guilty of the same ‘just-in-time’ application and training of second-language skills.

The US Defense Language Transformation Roadmap was drafted on the back of the 2001 US terrorist attacks, and championed a fresh approach to foreign language competency. Derived from the Roadmap was the ‘Vision and Strategic Plan for Language Skills, Regional Expertise and Cultural (LREC) Capabilities 2011-2016’. This document provides an ideal template for use by other nations’ defence forces, large and small. The strategic model (Figure 2.2 from Section 2.5, repeated below) will provide the foundation to shape discussion on the RNZN’s current situation, and the role it may play in bridging current capability shortfalls. It will also provide a workable strategy for the development of the wider NZDF’s human resource capability in second-languages.

Figure 2.2 – Vision & Strategic Plan for Language Skills, Regional Expertise & Cultural Capabilities, 2011-2016



(Source: Bull, 2011)

5.1 Goal one

Identify, validate and prioritise requirements for language skills, regional expertise, and cultural capabilities, and generate accurate demand signals in support of Department of Defense missions.

5.1.1 Identify

This objective correlates to one of this study's primary objectives – determining what the ideal foreign language requirements are for the RNZN. Requirements were determined by correlating fleet activity calculations with geostrategic importance potential indicator calculations for the respective nations. The final collated information, when analysed in conjunction with the content of the Defence White Paper 2010 (outlining the NZDF's strategic priority areas of operation), initiated the development of three lists of foreign languages ranked in order of priority for the RNZN:

Top Priority	Mandarin Chinese, Hindi, Japanese and French
Second Priority	Spanish, Bahasa Indonesian, Korean, Vietnamese, Filipino (Tagalog), Bahasa Malay, Arabic
Additional	Samoan, Tongan, Cook Island Maori, Thai, Tokelauan, Niuean , Tahitian, Hiri Motu, Tok Pisin, Tetun, Portugese

These prioritised lists could be considered the RNZN equivalent to the US Navy Strategic Language List 2011 at Appendix A and categorised as 'Immediate', 'Emerging' and 'Enduring'. Given the different security interests and defence strategies of the US to New Zealand, all languages in the top and second-priority RNZN tables, except for Hindi and Arabic, are considered by the US Navy to be 'Enduring' languages. For obvious reasons, given the US Navy's involvement in Iraq and its missions in support of Operation Enduring Freedom in the Gulf, Arabic is deemed an 'Immediate' language. Hindi is considered to be an 'Emerging' language from the US Navy perspective. Of the RNZN's additional languages, only Thai and Portugese feature on the US Navy's Strategic Language List, with both categorised as 'Enduring' languages. Based on projected New Zealand security interests; national defence strategies; and the needs of the RNZN, the categories above

provide an RNZN-specific strategic language list for both current and projected mission requirements 2011 to 2035.

The procedural analysis to obtain these results is undeniably basic in comparison to the US Capabilities-Based Requirements Identification Process (CBRIP) discussed in Section 5.2. However, it provides a starting point and foundation on which such a process could be developed within the RNZN. The most difficult challenges for defence forces embarking on the development of foreign language capability are the determination of the number of linguists required, as well as ascertaining the level of language proficiency required for specific positions. A key deterrent to the progress of the US Defense Language Transformation Roadmap continues to centre on this issue.

Two reports published by the US GAO in 2009 and 2010 were both critical of the lack of strategy and planning in place regarding the defence force’s identification of potential language and proficiency level requirements, and the subsequent inability to generate gap and risk assessments. As discussed by Conway (2005) and Sarnoski (2005), the US Air Force undertook a project in the late 1990s to identify all ‘language inherent’ and ‘language designated’ positions. However, the issue of proficiency was not taken into full consideration in the process. A revised and significantly improved methodology, the CBRIP, was unveiled in 2011 by the US Department of Defense for defence wide implementation. Figure 2.3 (repeated below) provides two examples of confirmed language capability requirements.

Figure 2.3 – Capabilities-Based Requirement Identification Process (CBRIP) Example

Priority	Level	Role	Minimum Quantity	GPF/SOF/ Intel	Military Required	Service	Level of Effort	Listening	Speaking	Reading	Writing	Core Culture	Technical Culture	Leader Culture	LREC Activity
.85	unit	Training team	1/unit	GPF	Yes	USA	24/7	2	2	0	0	H	L	L	Communicate with host nation military
.75	JTF	J2 analyst	1/org	Intel	No		24/7	3	3	3	0	H	H	L	Understand the political, military, and economic environment of host nation

(Source: Johnson, 2011)

The CBRIP is position based. The process identifies the position; unit level; Service; whether the position is military/civilian; a brief description of language/cultural

knowledge required; and a breakdown of the proficiency levels required for each communication competency.

There is no guiding policy or methodology with respect to developing such a process within the NZDF and its single Services. Should a CBRIP project be considered for implementation across the NZDF, a replica of the position based US model would be suitable. This is due to the Special Air Service (SAS), intelligence, peacekeeping, Defence Attaché and overseas based positions being included in the mix. Other than for the SAS, personnel are selected for all of the other positions on a rotational basis and from all three Services. The NZDF does not have any career progression policies that see certain individuals destined to take up these positions. Rather, the best of the available candidates are appointed at the time of selection. Consequently, identifying second-language capability requirements for these positions, and attributing relevant proficiency level requirements to the selection process has merit. At the single Service level, the approach needs to differ.

Given the day-to-day nature of the work of the RNZN for example, and the vast number of shore based support positions that comprise the organisation, it would undoubtedly be 'over the top' to undertake a CBRIP for every position within the RNZN. It is estimated that the greatest use of personnel's second-language skills is through foreign ship visits to New Zealand and RNZN deployments to overseas ports, with the predominant language use being for liaison and translation duties. Consequently, it would be in the RNZN's best interest to explore language requirements on a task-oriented, as opposed to, position-oriented basis.

A ship expecting to depart on an operational deployment would be an ideal platform on which to conduct a task-oriented capability identification process. Prior to an operational deployment, the process could be undertaken for the appointed fleet unit(s) in order to ensure that where possible, personnel with the destination desired foreign language skill sets are embarked for assistance in liaison and translation duties. It is accepted that deployed sea-going vessels are frequently at full complement and therefore there would be limited ability to embark an additional crew member solely for such duties. This also supports the suggestion of a task-oriented approach. This would allow for the posting of an individual/individuals with the foreign language competency requirements to be weighed up in conjunction with

his/her primary function onboard the ship. Use of the foreign language skill would ultimately be in addition to the individual performing his/her typical duties.

The Maritime Component Commander and his staff are responsible to Chief of Navy and Commander Joint Forces New Zealand for the planning, preparedness, conduct and command of all RNZN vessels deployed on operation or exercise. This office is responsible for the programming and maintenance of the FAMT (depicting when and where the fleet units will sail). As well as ensuring that all organisational capability expectations are met, RNZN official engagements with and invitations to visit/exercise with other nations, as required by the Ministry of Defence and government, provide the justification for deployments and form the basis of the fleet programme. Consequently, the Maritime Component Commander and his staff have a good understanding of the tasks being asked of a ship, and of the level of engagement with other navies an operation/exercise requires.

A pre-deployment capabilities identification project could be undertaken in an effort to ensure that RNZN representation can communicate with the host-nation(s) in their respective languages. The process would also protect the RNZN, and its representative, from any situation in which the individual is not competent or confident. For example, an individual being asked to assist with translation for an informal luncheon between an RNZN Commanding Officer and foreign senior officials, requires significantly different proficiency levels to those required for radio calls to a foreign vessel prior to conducting a boarding. Through the clarification of proficiency levels required for the various foreign language tasks, the risk of embarrassment to the individual and organisation is minimised.

5.1.2 Validate

The second objective of Goal One is 'Validation' and identifying a robust means of confirming second-language proficiency level requirements. As discussed in the review of the literature, the US defence force uses the Defense Language Proficiency Test (DLPT) administered by the DLIFLC, while NATO-endorsed missions prefer posted personnel to prove their proficiency using STANAG and SHAPE tests. Despite the different content and composition of the three tests, they are all derived from the same ILR scale. The proficiency scale used in this study was the CEFR

Global Scale developed by the Council of Europe, and typically used in corporate and education circles. For the purposes of this study, the word-based illustrative descriptors for each level of the Global Scale were used. Respondents self-assessed their proficiency levels for each communication competency from these descriptors.

Should the RNZN wish to conduct a full examination and direct a blanket survey of the second-language capabilities of its entire personnel, a decision will need to be made as to the type of assessment used for this purpose. This method will also need to be applied to, and aligned with, the capabilities identification process so that accurate proficiency level requirements for tasks can be stipulated. The three fundamental concepts of an assessment or evaluation are: validity, reliability and feasibility (Council of Europe, 2001a). Validity is concerned with the degree of accuracy to which the construct or measure used depicts what is being assessed. Reliability is concerned with the extent to which the construct is consistent at measuring the same thing every time. Feasibility is relatively self-explanatory in that the determination of an appropriate assessment method needs to be practical for the organisation and individuals using it (Council of Europe, 2001a).

The method of proficiency assessment used in this research was self-assessment. The prevalent issue with this is its diminished reliability given that respondents' declared ability is not able to be proven (Conway, 2005). As discussed by Daubach & Mueller (1998) and Conway (2005), the US Air Force's 1996 Foreign Language Self-Assessment Survey faced the same criticism. However, adding to the criticism was the fact that the US Air Force survey did not use a validated scale, thereby breaching the validity concept of assessment. The CEFR scale used in this study is a validated measure and can be used as scale data.

CEFR documentation (Council of Europe, 2001a) provides a detailed discussion on the various forms that a proficiency assessment can take. A list of examples of the various types of assessment that could be employed is provided in Figure 5.1.

Figure 5.1 – Types of Assessment

Achievement assessment	Proficiency assessment
Norm-referencing (NR)	Criterion-referencing (CR)
Mastery learning CR	Continuum CR
Continuous assessment	Fixed assessment points
Formative assessment	Summative assessment
Direct assessment	Indirect assessment
Performance assessment	Knowledge assessment
Subjective assessment	Objective assessment
Checklist rating	Performance rating
Impression	Guided judgement
Holistic assessment	Analytic assessment
Series assessment	Category assessment
Assessment by others	Self-assessment

(Source: Council of Europe, 2001a)

From Figure 5.1, it is evident that such a decision is complex, and experts would need to be consulted should the RNZN wish to create its own CEFR scale based assessment, or introduce a pre-existing assessment such as DLPT, STANAG or SHAPE. Consideration then needs to be given to the feasibility of such tests including their administration and invigilation requirements.

Even though the CEFR global scale is designed only to be a point of reference on which to design assessments rather than a practical assessment tool itself (CEFR, 2001b), it had high feasibility, and was the most practical option available for the purpose of this study i.e. gaining a basic initial understanding of the second-language capabilities within the RNZN.

5.1.3 *Prioritise and demand signals*

The final two objectives of Goal One are ‘Prioritise’ and ‘Demand Signals’. ‘Prioritise’ refers to the establishment of a robust and transparent decision-making policy and process around developing foreign language requirements and foreign language skills. ‘Demand Signals’ is the end result. It refers to correspondence of information regarding language capability requirements and the dissemination of demands for language skills. Both of these objectives are undertaken at the higher strategic level. Under the US defence wide model, the prioritisation process and the issuing of surge demand signals is conducted at the Unified Combatant Command level⁶. It then becomes the role of the Joint Force Command and the Joint Chiefs of Staff to

⁶ A Unified Combatant Command is a US Department of Defense command tasked with command and control of US military forces within a designated geographical or functional area. As at September 2011, there are nine Unified Combatant Commands. The chain of command: President of USA – Secretary of Defense – Combatant Commanders.

incorporate the prioritised language requirements and capability demands into the resource planning for training and personnel (Johnson, 2011).

Just as the tasks of these two objectives are undertaken at the tri-Service and highly strategic level in the US, the same would need to be instigated in the NZDF context. Based on the description of both objectives, the appropriate department to complete these functions is Headquarters Joint Forces New Zealand, with requirements and demands issued to the single Services via the three component commanders⁷, who are responsible for the generation, delivery and sustainment of their respective Service's capabilities.

⁷ The Maritime Component Commander (MCC), the Land Component Commander (LCC), and the Air Component Commander (ACC), are responsible to Commander Joint Forces New Zealand (COMJFNZ) and their respective Service Chiefs.

5.2 Goal two

Build, enhance, and sustain a Total Force with a mix of language skills, regional expertise, and cultural capabilities to meet existing and emerging needs in support of national security objectives.

5.2.1 Current capabilities

At the beginning of this process, an understanding of what second-language skills and aspirations a force has is critical in order to build on and develop the skills required for mission success. This study has provided an indicative overview of the second-languages and respective skill-levels possessed by RNZN Regular Force Service personnel. This study's voluntary census survey captured the attention of 428 of 1,822 internal-email accessible Regular Force personnel, yielding a response rate of 23%. It is possible that a number of individuals comprising the other 67% have unreported second-language skills. Consequently, the results of this survey cannot be viewed as a total capability breakdown. In order to allow for a complete total force analysis, a high-level directive regarding mandatory survey completion, and the requirement for personnel to identify themselves for information recording purposes would need to be issued.

Once total force capabilities are known, and Goal One has been achieved with the tasked-oriented capabilities identification process completed, a gap assessment can be undertaken to highlight shortfalls. The study's reported capability analysed against the RNZN's identified language skill requirements (Table 5.1), suggests that there are gaps in current skill capability.

Table 5.1 – RNZN Identified Second-Language Requirements and Current Capabilities

	LANGUAGE	BASIC		INDEPENDENT		PROFICIENT		TOTAL
		A1	A2	B1	B2	C1	C2	
Top-Priority	Mandarin	2	3		1	1		7
	French	43	18	8	1	1		71
	Hindi	1			1			2
	Japanese	11	3					14
Second-Priority	Spanish	19	4	2		1		26
	Bahasa Indonesian	1						1
	Korean	2						2
	Vietnamese							0
	Filipino							0
	Bahasa Malay							0
	Arabic				1			1
Additional for Consideration	Samoan	3	2	1	1			7
	Tongan				1	1		2
	Cook Island Maori	2			1			3
	Thai			1				1
	Tokelauan	1						1
	Niuean	1						1
	Tahitian			1				1
	Hiri Motu (PNG)							0
	Tok Pisin							0
	Tetun (Timor-Leste)	1						1
	Portugese							0

The highest skill sets currently available in top-priority languages within the RNZN are: one proficient Mandarin user, one proficient French user, and one independent user of Hindi. Japanese is the weakest area with all fourteen users assessed as having a ‘basic’ skill level. The gaps in the second-priority languages are even more pronounced, with only one proficient Spanish user out of the seven languages and three independent users (two in Spanish and one in Arabic). Of note, is the lack of any skill sets in the South East Asian languages of Vietnamese, Filipino (Tagalog) and Bahasa Malay.

Assuming that the ‘basic user’ level is insufficient for language required tasks, the RNZN is lacking any capability and required skill sets in six of the eleven (55%) identified top and second-priority languages. While these weak or non-existent capabilities are apparent, it is impossible to say with certainty how great the gaps are between current and ideal capability requirements without the completion of the

capabilities identification process. Only then, will the gaps and associated potential risks cease to be prediction and guesswork.

Perhaps, despite not being of immediate use to the RNZN, there is future promise and opportunity present in the number of individuals self-assessed as ‘basic’ and ‘independent’ users. The model’s definition of this objective calls for the analysis of “Total Force capabilities and capacities”. By virtue of having pre-existing skills in a second-language, the fourteen individuals who have reported ‘independent’ level proficiencies in the top and second-priority languages, have proven capability and potential capacity to develop their respective language skills further.

Beyond the reported 52% of personnel with self-assessed proficiency in a second-language, the survey also revealed that almost 60% of the 428 respondents would like to learn a second-language if the opportunity arose, bolstering the Service’s potential capacity for second-language capability development. The detailed figures are provided in Table 5.2 and are broken down into results for those who do and do not already profess to have proficiency in a second-language(s).

Table 5.2 – Number of RNZN personnel wishing to learn a second-language

Current second-language ability	Wish to learn							
	YES		NO		Invalid Response		TOTAL	
YES	113		73		7		193	45%
NO	127		106		2		235	55%
TOTAL	240	56%	179	42%	9	2%	428	100%

The gender breakdown of these figures reflected almost identical percentages for the number of males and females willing to learn a new language. Of the 324 male respondents and 103 female respondents⁸, 56% of the men and 57% of the females reported an interest in learning one or more foreign languages.

⁸ One respondent opted not to declare their gender.

Table 5.3 – Second-Languages RNZN Personnel Wish to Learn

LANGUAGE		TOTAL
Any		1
Arabic		26
Celtic (unspecified)		1
Chinese	<i>Unspecified</i>	24
	Cantonese	4
	Mandarin	33
Cook Island Maori		1
Croatian		2
Danish		1
Dari		2
Dutch		3
Fijian		1
French		80
Gaelic (unspecified)		2
German		25
Greek		1
Hebrew		3
Hungarian		2
Indonesian	<i>Unspecified</i>	4
	Bahasa Indonesian	3
Italian		17
Japanese		32
Korean		2
Latin		4
Malay	<i>Unspecified</i>	1
	Bahasa Malay	3
Maori		63
Niuean		1
Pidgin English (unspecified)		1
Polish		2
Portugese		3
Russian		7
Samoan		4
Sign Language	<i>Unspecified</i>	3
	NZ Sign Language	2
Singaporean (unspecified)		1
Spanish		86
Tokelauan		1
Tongan		1
Vietnamese		1
Welsh		3

The languages that RNZN respondents reported an interest in learning are listed alphabetically in Table 5.3. New Zealand Maori and traditional European languages such as French, Spanish, German and Italian remain popular, and there is marked interest in Chinese languages, Japanese and Arabic. Of note for the RNZN is the existing small interest, in the currently non-existent or limited capability second-priority languages of Indonesian, Malay and Vietnamese. The list of languages individuals wish to learn is reconfigured into the RNZN Strategic Language List in Table 5.4 below⁹.

Table 5.4 – Number of RNZN personnel wishing to learn RNZN required second-languages

	LANGUAGE	TOTAL		LANGUAGE	TOTAL
Top-Priority	Mandarin	33	Additional for Consideration	Samoan	4
	French	80		Tongan	1
	Hindi	0		Cook Island Maori	1
	Japanese	32		Thai	0
Second-Priority	Spanish	86		Tokelauan	1
	Bahasa Indonesian	3		Niuean	1
	Korean	2		Tahitian	0
	Vietnamese	1		Hiri Motu (PNG)	0
	Filipino	0		Tok Pisin	0
	Bahasa Malay	3		Tetun (Timor-Leste)	0
	Arabic	26	Portugese	1	

⁹ Only responses specifically stipulating ‘Bahasa Indonesian’, ‘Bahasa Malay’ and ‘Mandarin’ are counted towards the tally. For unspecified responses, assumptions that respondents meant the official language as opposed to a local dialect could have created reporting inaccuracies.

As with any business venture, the aim is typically to reap the greatest returns on investment. In the context of developing its second-language capabilities, the RNZN needs to identify where the gains will be the greatest should it tap into the capacity of its human resource pool. Age and gender are factors that may indicate where the greatest potential for aptitude lies. Consequently, two-way between-groups analysis of variance tests were conducted using the RNZN survey results in order to explore the impact of gender and age on levels of second-language proficiency, as measured using the overall CEFR scale proficiency scores.

Respondents were divided into three groups according to their age (Group 1: Less than 30 years; Group 2: 30-44 years; Group 3: 45 years and above). The differences in the statistical means of the three age groups suggested a trend - regardless of gender, the younger the respondents, the higher their second-language proficiency level. A stringent significance level of $p < 0.01$ was used for evaluating the main effects and interaction effects reflected in the two-way ANOVA results. The results¹⁰ indicated that the mean score for the <30 age group ($M=2.24$, $SD=1.3$) was significantly different from both the 30-44 year age group ($M=1.83$, $SD=1.$) and the 45+ age group ($M=1.69$, $SD=1.00$). The 30-44 age group and the 45+ age group did not differ significantly from each other. These statistics ultimately suggest that the age group offering the best investment, given its significantly higher overall proficiency levels, is the under-30 category. It is worth mentioning that these results could be explained by the possibility that, some within this age group, may have recently undertaken second-language tuition at secondary school. Of the RNZN's total population, 58% are under 30 years of age. The survey indicated that 39% of the total number of individuals reportedly wishing to learn a second-language fall into this age category, with the greatest majority (48%) of keen learners aged between 30-49, and the remaining 11% being over 50 years of age.

The main effect for gender [$F(1, 298)=.556$] and the interaction effect [$F(2, 298)=.71$] did not reach statistical significance, indicating that males and females do not differ in terms of their proficiency level scores, and that there is no significant difference in the

¹⁰ A stringent significance level of $p < 0.01$ was used for evaluating the main effects and interaction effects reflected in the two-way ANOVA results. There was a statistically significant main effect for age [$F(298)=3.19$, $sig.=.043$]; however, the effect size was small (partial eta squared=.02). Consequently, a post-hoc comparison of marginal means was conducted using the Tukey HSD Test.

effect of age on proficiency levels for males and females. These results were supported by independent samples t-test statistics comparing the proficiency level scores for males and females and across the three different age groups¹¹. The magnitude of the differences in the means was very small ($\eta^2=.00077$) stipulating that only 0.7% of the variance in second-language proficiency levels is explained by gender and therefore gender is not a predictor of aptitude for second-language learning.

5.2.2 Personnel and training & education

The latter two objectives of Goal Two are 'Personnel' and 'Training and Education'. In order to develop a force that possesses sufficient second-language skills within its personnel to meet its needs, there must be alignment to a centrally developed vision and strategy for human resource development in second-language capability. Such a plan will require the cooperation of career management personnel, technical support for recording individuals' proficiency information, and the development of appropriate and feasible training and education options. Previous research has provided insight into the ways in which the US defence force, in particular, tackles these two objectives.

Personnel management initiatives that derived from the 2005 Roadmap included the establishment of a centralised tracking and management database capable of capturing data concerning language and proficiency requirements, but also the registered skills of defence force personnel. A restructure within the Department of Defense has introduced new language authorities into the organisation responsible for promoting the vision for language transformation. Such promotion has seen all officers at West Point Academy mandatorily studying a foreign language (Jalal & Yudhyono, 2009), and the push for second-language proficiency to be a pre-requisite for promotion to Colonel (equivalent) has increased the value placed on second-language skill at single Service promotion boards (Peters, 2005). The US Congress has also approved monetary skill-factor based incentives of between US\$300 to US\$1,000 a month in recognition of the extra second-language skills personnel

¹¹ Equal variances were assumed for the two groups (males/females). There was no significant difference in scores for males ($M=1.95$, $SD=1.2$) and females [$M=1.98$, $SD=1.2$; $t(306)=-.153$, $p=.9$].

possess (Daubach & Mueller, 1998; Peters, 2005). It is acknowledged that foreign language capability development is not on the short term agendas of the RNZN or wider NZDF. Therefore, it is for future consideration that thought be given to Daubach & Mueller (1998) and Schwalbe's (2007) recommendation of developing human-resource policies that outline a clear and well-tailored promotion process, with provision for extra skill payments or incentives for foreign language proficiency, should the RNZN or NZDF look to attract and retain foreign language experts.

As highlighted by Conway (2005) and Peters (2005), the US Department of Defense's greatest challenge in implementing its defence-wide strategy and policies, is the establishment of a centralised database capable of capturing all of the relevant information regarding the second-language capability of its defence force. Conway (2005) outlined poor response rates for voluntary yet defence-wide promulgated surveys, and the independent ambitions of senior personnel in retaining employees, as the primary reasons the US continues to not have a grasp on its internal capabilities. Peters (2005) states that without this accurate picture of the in-house skill base available, as well as a lack of finite language requirements and correlated proficiency level requirements, the design of a suitable database remains years off completion. US GAO reports (2009; 2010) reinforce Peters' (2005) prediction of the lack of such a database continuing to be a significant target for criticism.

The RNZN is in some ways in a better position to achieve what the US has not, given the Service's small size, and arguably small capability and capacity for second-languages within the human resource pool. The RNZN already utilises the ATLAS database for the recording of all personnel's personal and career information such as postings and appointments, and qualifications and achievements. While it is assumed that language proficiency data could be loaded onto the current system with relative ease, the researcher's lack of technical understanding of the database's operating system precludes a judgement being made as to whether ATLAS could support data derived from a task-oriented CBRIP project. Until all RNZN demands are known regarding foreign language requirements, and how to meet them, design specifications for a suitable database will remain unclear.

Just as the US Roadmap's intent of creating a centralised database remains far from being realised, defence-wide management of second-language capability also

remains a pipe dream. At present, the training pipelines and resource allocation remain the responsibility of the individual Services. Should the RNZN opt to instigate a task-oriented approach to second-language capability development, the new-look training continuum of the US Air Force's 2005 revamped FAO Programme provides a possible training pipeline for RNZN personnel entering the Service with pre-existing second-language skills and for those who demonstrate an aspiration to learn a Service required language. Under the FAO scheme, all potential candidates for Politico-Military Affairs Strategist and Regional Affairs Strategist positions, must have completed seven to twelve years of service in their primary core trade prior to selection consideration (Sarnoski, 2005). Based on the RNZN survey results, of respondents with reported pre-existing second-language skills, 29 have completed between seven and twelve years of service (16 of whom are under 30 years of age). Of respondents who do not currently have a second-language ability, but wish to learn a second language, only ten individuals have completed the required period of core trade experience (of whom five are under 30 years of age). Should the RNZN opt to invest in developing the second-language capabilities of its human resources, these individuals are considered prime candidates.

An organisation wide acceptance of the efforts being made to enhance foreign language capability would need to be achieved in order to foster its development. Daubach & Mueller (1998, p. 64) believe "command-sponsored foreign language immersion programmes as well as a flexible and responsible personnel-assignment system in which otherwise qualified people who have language skills receive priority for foreign language related assignments" will go far in ensuring that individuals' language skills are maximised for organisational benefit and do not deteriorate.

5.3 Goal three

Strengthen language skills, regional expertise, and cultural capabilities to increase interoperability and to build partner capacity.

To state that the budget and resources available to the NZDF is small compared to that of the US Department of Defense, is a gross understatement. However, lessons can be learnt from US initiatives. Assessment of their applicability to the NZDF, on a smaller scale, may provide possible solutions to address capability shortfalls. The US defence force boasts a number of training facilities, resources and initiatives in place, aimed at addressing the present gaps between their national security language requirements and personnel capabilities. As previously mentioned, all officers studying at West Point Academy learn a foreign language (Jalal & Yudhoyono, 2009), the US DLIFLC provides tuition for 3,500 students in 23 languages and two dialects (DLIFLC 2011a). As a result of technical partnerships between the Defense Research Projects Agency and the University of Southern California, the DLIFLC is also able to offer a considerable number of on-line learning packages and tailor-made classroom instruction packages designed to up-skill personnel in foreign languages and cultures (DLIFLC 2011d; Customs Check, 2005).

It is unlikely that the NZDF and RNZN can afford to offer in-house training packages of the calibre of the US examples provided. Consequently for an RNZN application, the 'Training and Education' objective of Goal Two and the entirety of Goal Three merge. In order to attain the skills necessary to bridge the (yet to be fully identified) gaps between ideal and current second-language capability, a substantial portion of the training and education will need to be provided by external parties and military partners. Objectives 3.1 'Required Authorities', 3.2 'Establish Partnerships' and 3.3 'Utilise Partner Capabilities' could see the RNZN approach Headquarters level decision makers requesting the development of policies and agreements to enable the RNZN to 'piggy-back' on the resources of its Australian, Canadian, British and possibly American counterparts.

Teaming up with ADFA/University of New South Wales would provide skill development in the second-priority language of Bahasa Indonesian and the ADF's progress in foreign language and cultural simulation training could assist NZDF

personnel prior to deployment to Iraq and Afghanistan. Through the Canadian's RMCC language centre, RNZN personnel with pre-existing language proficiency in French, a top-priority language, could upskill to levels required by the Service. The Defence Academy of the UK also offers Bahasa Indonesian instruction, as well as offering papers at various levels in Mandarin, a top-priority language, as well as four other second-priority languages: Spanish, Korean, Bahasa Malay and Arabic. The remaining top and second-priority languages not catered for by these three nations' defence forces are Hindi, Japanese, Filipino (Tagalog) and Vietnamese. The US DLIFLC currently offers a range of free and password-activated on-line training packages in these languages on its website. The RNZN could use the extensive range of freely available resources, or consider liaising with the Institute for a more formal arrangement regarding the use of the free and secure resources.

Once second-language skill capability has been developed by whichever means deemed feasible and appropriate, the RNZN will be able to realise the positive spin-offs and opportunities of a foreign language competent workforce as described in Section 2.6. Second-language skill capability ensures that RNZN personnel can be appointed into positions with the right skill sets, at the right time, fully prepared for task and duty requirements. Having the ability to apply the second language skills for in-house purposes, or for those of the wider NZDF and national security objectives, also ensures that the Service is operating at optimum capacity, and ahead of its counterparts. The RNZN's developed skill set will also be able to assist other nation's navies, defence forces and security organisations. Objective 3.4 'Enhance Partner Capacity' highlights the fact that once the RNZN fulfils the strategic model's plan for developing its human resource capability in second-languages, it has the opportunity to bolster its efforts within the wider security community. The improved service able to be offered by the RNZN and its personnel will enhance the RNZN's reputation, and will have positive implications for the NZDF and New Zealand within the international arena.

5.4 Limitations of research

5.4.1 Survey response rate

The use of these results to generalise trends for the RNZN is potentially hindered by the relatively low response rate of 23%, given the small total population of the RNZN Regular Force of 2,101 personnel. Furthermore, in comparison to total population statistics, males in the 20-25 year age bracket were significantly under-represented by 16% in the data. This coincides with the 15% under-representation of males who have served less than five years.

While it cannot be proven, and despite the low survey response rate, it is anticipated that the survey canvased and prompted responses from the majority of RNZN Service personnel who speak a second-language. This prediction is based on the influential motive of human theory, 'self-interest'. Self-interest is a strong determinant for individuals' behaviour and can drive decisions regarding saying or doing something (Miller, 1999). Consequently, the opportunity to provide the organisation with information regarding previously unreported skills may have been perceived to fulfil the self-interest motives of respondents and prompted their participation.

5.4.2 Logistics of ship visits

The fleet data analysis regarding the frequency with which operational ship visits were conducted between nations from July 2000 to June 2011, excluded any port visits for which naval ships were at anchor off the coast. Consequently, RNZN visits to tsunami affected Pacific island nations in 2009 were not included in the analysis. Although it could be assumed that RNZN personnel were airlifted or tendered ashore to aid and assist in the aftermath, it is not possible to say with absolute certainty. Therefore, in order to keep the integrity of the data, the decision was made that unless otherwise stipulated in the RNZN FAMT that personnel were tendered ashore (as is the case for Hong Kong entries), the ship visit was excluded from analysis. Data relating to future planned ship activities was also excluded due to the classified nature of such information.

5.4.3 Self-assessment

A methodological issue requiring consideration is the use of self-assessment to gather capability data. Similar to the self-interest motive mentioned above, it is widely acknowledged by psychologists that people tend to hold a higher opinion of themselves than perhaps they should based on their actual performance (Dunning, Johnson, Ehrlinger & Kruger, 2003; Dunning, Heath & Suls, 2004; Alicke & Govorun, 2005).

Put bluntly by Dunning, Heath & Suls (2004, p. 70),

On average, people say that they are “above average” in skill (a conclusion that defies statistical possibility), overestimate the likelihood that they will engage in desirable behaviors and achieve favorable outcomes, furnish overly optimistic estimates of when they will complete future projects, and reach judgments with too much confidence.

Given human nature’s (for the most part) unintentional bias, and tendency to report higher than accurate self-assessments, the results reported by survey respondents should be read ‘with a grain of salt’. Respondents were not asked to prove their reported proficiency level and as such, the results remain judgements as opposed to actual performance indicators.

5.4.4 Cultural proficiency

As highlighted in the literature review, language and culture are part of each other. Through language, cultural attitudes; values; behaviours; and norms are expressed (Bunchapattanasakda, C., Thitthongkam, T., & Walsh, J. (2011). However, researching proficiency levels relating to cultural understanding was considered beyond the ability of the researcher. For quality information to be obtained, such research should be undertaken by an expert. Consequently, while the inseparable partnership of language and culture is acknowledged, only the language proficiency component was incorporated into the scope of the study.

5.4.5 Organisational application

One of the primary purposes of this study was to provide an overview of what capability the RNZN's human resource pool currently possesses in terms of second-language ability. For academic purposes, the objective has been met. However, the benefit to the organisation is not as great as anticipated. This is due to the low survey response rate, and also the number of respondents who wish to keep their identity private from the organisation. Due to ethical reasons and the voluntary nature of the survey, respondents could choose whether or not to allow their responses to be recorded by the organisation in due course. The vast majority of those with declared second-language proficiency opted to allow their responses to be recorded, but there were a few who selected to keep their personal information private.

5.5 Future research

Compared to the substantial reports on the US Department of Defense's efforts to transform the US military's second-language capability, there has been little investigation into the policies and practices of smaller defence forces within the area of foreign language competency. Future research should explore this further, noting that this will only be achieved through uniformed military liaison between nations. Consultation and discussion between military personnel will need to take place given the lack of availability of such information within the publicly accessible domain.

This study, and particularly the Discussion chapter, has outlined a possible way-forward for the RNZN, should it consider the development of its second-language capability to be of benefit. Moreover, this study proves the possibility and feasibility of similar surveys being undertaken in the future by the Royal New Zealand Air Force, New Zealand Army, territorial/reservist forces and civilian staff, should the NZDF see merit in ascertaining the capability of its entire force. Should similar information gathering be undertaken by another party (i.e. another single Service or defence force), one of the recommendations learnt from this pilot study is the need to instigate a top-down policy directive stipulating mandatory completion of the survey by all targeted personnel. Otherwise, there remains the risk of incomplete findings.

An additional avenue for future research is the inclusion of the cultural component. Given the diplomatic role played by defence forces internationally, there is often a misplaced expectation that uniformed personnel have an understanding of the local customs and traditions of the regions to which they are posted or visit. In order to boost and maintain the reputation of the NZDF, ensuring that its uniformed representatives have a sufficiently in-depth understanding of cultural practices is critical. Consequently, there is a need for the NZDF to have an understanding of who, in-house, could be called on to provide cultural guidance and advice. A number of individuals within the Services may have spent some time in countries where the required languages are spoken, and have expert knowledge of the regions' cultures. They may, however, have inadequate language ability. Tapping into their cultural knowledge will be beneficial for tasks such as briefing senior officials and ships' companies prior to official visits, deployments or foreign delegation visits to New Zealand.

CHAPTER SIX - CONCLUSION

This study researched the development of foreign language capability as a valued human resource asset within the military sector. Review of the international literature denoted that foreign language capability is already a sought after human resource asset within the civilian corporate sector. However, the military sector has been slower to recognise the potential benefits and opportunities that the development of a foreign language competent workforce presents. Isolation in the comfort zone of the English language, and reliance on the latest weapons technology is no longer sufficient in deterring and eliminating the new terror threats. Re-education and innovation of defence forces is necessary in order to develop global thinkers who can understand the new enemies, and who can cooperate and liaise with allied forces on common ground.

Previous studies shed light on the issues faced by defence forces deployed to operations in non-English speaking areas, alongside non-English speaking military partners and civilians. The pros and cons of initiatives designed to address these issues, such as the use of non-uniformed interpreters and 'just-in-time' pre-deployment training were discussed. Various nations' recruitment, training and proficiency assessment policies were outlined, and the opportunities created by advanced computer software in the area of linguistics and cultural training were also highlighted.

The development of foreign language capability is a new concept to the NZDF; unexamined until now. A pilot investigation into one of the three single Services was considered a feasible starting point. The RNZN became the platform on which an investigation into the second-language requirements and current human resource capabilities of an NZDF Service was undertaken.

In relation to the initial objectives of this research, the study's main findings were:

1. *The foreign language requirements of the RNZN* were determined and ranked in three prioritised lists. Mandarin, French, Hindi and Japanese were identified as the top-priority languages.

2. *Identification of what foreign language capabilities the RNZN already possesses within its Regular Force* showed that over half of the RNZN's human resource pool has some level of proficiency across more than 40 second-languages. In addition, the RNZN has depth in capacity of new learners with over half of surveyed personnel volunteering to learn a second-language if the opportunity were to arise.
3. *Gaps between the RNZN's ideal and current human resource capabilities with respect to foreign languages* are evident. Despite the RNZN having required skill sets in the top-priority languages, most of these personnel have inadequate proficiency levels for anticipated taskings. However, the extent of the gaps between desired and current requirements will not be fully determined until the Service conducts a task-oriented capabilities identification project.

This study contributed to the limited amount of research available on the development of foreign language capability within the military. Moreover, it presents a case study on one of the Western world's smallest defence forces, the NZDF, and in particular, the RNZN. The most widely-reported information available is on the US defence force and the efforts and lessons learnt by its single Services and Department of Defense in developing a foreign language capable military. The terrorist attacks of 11 September 2001 were the catalyst for the US instigation of nation-wide foreign language policies and the Defense Language Transformation Roadmap 2005. The US defence force leads other English speaking defence forces in terms of the development of a foreign language capable force. Other than offering language packages and career related immersion courses, the Australian, Canadian and British defence forces do not have publicised strategic ambition to develop defence wide second-language capability.

However, it is argued that as the military environment continues to evolve, and the introduction of unconventional responses to new threats increases, the pressure on defence forces for innovation and investment in foreign language skill as a human resource asset will grow. Consequently, while it is not viable for the NZDF to

implement the extensive range of language programmes and initiatives employed by the US and other larger defence forces, there is merit in creating a 'roadmap' outlining strategic intentions for the development of its human resources. The US Department of Defense's Vision and Strategic Plan for Language Skills, Regional Expertise and Cultural Capabilities 2011-2016, provides a blueprint for the NZDF to emulate and alter as required, but the ground work has ultimately been done.

This study used the US model to discuss a potential way forward for the development of foreign language capability within the RNZN. The model's three strategic goals and associated objectives were applied to the New Zealand context and used as a guideline for the identification of the RNZN's ideal foreign language requirements; determination of the Service's current capabilities; and options available to the RNZN through military partnerships for the strengthening of current capability.

Ultimately, this study showed that the RNZN has a human resource pool with the capabilities and capacity to develop into a foreign language competent workforce in the languages required by the Service. Further research is required in order to ascertain the full and exact requirements of the Service, and subsequent gap analysis. However, a proposed blueprint for this process has been presented. The research evidence suggests that the RNZN could make a valuable contribution to the development of foreign language capability as a human resource asset within the New Zealand military. Moreover, it has the potential to be a role model within the NZDF, as well as for other English speaking small nation navies and defence forces.

BIBLIOGRAPHY

- Alicke, M. & Govorun, O. (2005). The self in social judgement. In Alicke, M., Dunning, D., & Krueger, J. (Eds.), *Studies in Self and Identity* (pp. 85-106). New York: Psychology Press.
- Arn, J., Kordsmeier, W., & Rogers, B. (2000). Foreign language needs of U.S. businesses. *Journal of Education for Business*, (January/February), 169-171.
- Australian Government Department of Defence. (2011). *Defence International Training Centre*. Retrieved from <http://www.defence.gov.au/ditc/index.html>
- Bishop, V. (2008). Why learn a language? The potential of additional language tuition for linguistic identity awareness and anti-discriminatory practice with British social work education. *Social Work Education*, 27(8), 913-924.
- Black, J., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *The Academy of Management Review*, 15(1), 113-136.
- Blain, J., Churchill, R. , Hodson, S., Richards, B., & Wright, P. (2003). Future conflict and its implications for personnel in the Australian Defence Force. *Geddes Papers 2003*. Retrieved from http://www.defence.gov.au/adc/docs/publications2010/PublicnsGeddes2003_300310_FutureConflict.pdf
- Bos, G. & Soeters, J. (2006). Interpreters at work: Experiences from Dutch and Belgian peace operations. *International Peacekeeping*, 13(2), 261-268.
- Bridges, W. (1994). *Jobshift: How to prosper in a workplace without jobs*. Reading, Massachusetts: Allen & Unwin.

- Bull, I. (2011, April). *An overview of DoD Initiatives for Language, Regional Expertise and Culture*. Paper presented to the DoD Command Language Program Manager. Retrieved from [http://www.dliflc.edu/file.ashx?path=archive/documents/01-05_DLO_PUBLIC\[1\]](http://www.dliflc.edu/file.ashx?path=archive/documents/01-05_DLO_PUBLIC[1])
- Bunchapattanasakda, C., Thitthongkam, T., & Walsh, J. (2011). The roles of foreign language in business administration. *Journal of Management Research*, 3(1), 1-14.
- Caspersz, D. (2006). The 'talk' versus the 'walk': high performance work systems, labour market flexibility and lessons from Asian workers. *Asia Pacific Business Review*, 12(2), 149-161.
- Central Intelligence Agency. (2011). *The World Factbook 2011*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- Conway, J. (2005). The view from the tower of Babel: Air Force foreign language posture for global engagement. *Air and Space Power Journal*, (Summer) 57-69.
- Cornick, M. & Roberts-Gassler, V. (1991). The value of foreign language skills for accounting and business majors. *Journal of Education for Business*, 66(3), 161-164.
- Council of Europe. (2001a). *A Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.
- Council of Europe. (2001b). *A Common European Framework of Reference for Languages: learning, teaching, assessment – a general guide for users*. Strasbourg: Council of Europe.

- Council of Europe. (2004). *Preliminary pilot version of the manual for relating language examinations to the Common European Framework of Reference for Languages: learning, teaching, assessment*. Strasbourg: Council of Europe.
- Crystal, D. (2003). *English as a global language*. (2nd Ed.). Cambridge: Cambridge University Press.
- Cycyota, C. & Ferrante, C. (2007). Guest editors' note: Human resources and leadership lessons from the military. *Human Resource Management*, 46(1), 1-4.
- Customs Check. (2005, March 1). *Foreign policy*. Retrieved from http://www.foreignpolicy.com/articles/2005/03/01/customs_check.
- Daubach, C., & Mueller, G. (1998). Global skills: Vital components of global engagement. *Airpower Journal*, 12(2), 64-71.
- Defence Academy of the United Kingdom. (2011). *Courses at the Defence Academy – Defence Languages*. Retrieved from http://www.da.mod.uk/prospectus/course_results?Category=languages
- Defence Language Institute Foreign Language Center (DLIFLC). (2011a). *About DLIFLC - Home*. Retrieved from <http://www.dliflc.edu/index.html>
- Defence Language Institute Foreign Language Center (DLIFLC). (2011b). *About DLIFLC – History of DLIFLC*. Retrieved from <http://www.dliflc.edu/historyofdil.html>
- Defence Language Institute Foreign Language Center (DLIFLC). (2011c). *Program Overview – Language schools*. Retrieved from <http://www.dliflc.edu/schools.html>

- Defence Language Institute Foreign Language Center (DLIFLC). (2011d). *Language Resources – Products*. Retrieved from <http://www.dliflc.edu/products.html>
- van Dijk, A. & Soeters, J. (2008). Language matters in the military. *Armed Forces and conflict resolution: Sociological perspectives*, 7, 303-325.
- Dunning, D., Heath, C. & Suls, J. (2004). Flawed Self-Assessment: Implications for Health, Education, and the Workplace. *Psychological Science in the Public Interest*. 5(3), 69-106.
- Enderwick, P. & Akoorie, M. (1994). The employment of foreign language specialists and export success – The case of New Zealand. *International Marketing Review*, 11(4), p. 4-18.
- Green, R. & Wall, D. (2005). Language testing in the military: Problems, politics and progress. *Language testing*, 22(3), 379-398.
- Hamel, G., & Prahalad, C. (1999). Competing in the new economy. *New Zealand Strategic Management*, 17(3), 22-28.
- Hodgetts, R., Luthans, F., & Slocum, J. (1997). Redefining roles and boundaries, linking competencies and resources. *Organisational Dynamics*, 28(2), 7-21.
- Jalal, M. & Yudhoyono, A. (2009). Unlikely routes: Stronger militaries through the transformation of military education. *Harvard Kennedy School Review*, 10, 109-113.
- Johnson, L. (2011, April). *Language, regional expertise and culture: Capabilities-based requirements identification process*. Paper presented to the United States Navy Chief of Naval Operations. Retrieved from [http://www.dliflc.edu/file.ashx?path=archive/documents/01-07_USN_SLA-PUBLIC\[1\]](http://www.dliflc.edu/file.ashx?path=archive/documents/01-07_USN_SLA-PUBLIC[1])

- Kay, S. (2009). From Sputnik to Minerva: Education and American national security. *Defense Horizons*, 65, 1-8.
- Lang, K. (1972) Military career structure: Emerging trends and alternatives. *Administrative Science Quarterly*, 17(4), 487-498.
- Lei, D., Slocum, J. & Pitts, R. (1999). Designing organisations for competitive advantage: the power of unlearning and learning. *Organisational Dynamics*, 27(3), 24-38.
- Lorenz, S. (2007). Transforming Air Force education for the long war and beyond. *Air & Space Power Journal*, 21(2), 5-9.
- Meng, Y., Ong, J., Tan, A., & Tan, D. (2007). RSAF in operations other than war – The challenges. *Pointer – Journal of the Singapore Armed Forces*, 33(1), 34-42.
- Miller, D. (1999). The norm of self-interest. *American Psychologist*. 54(12), 1053-1060.
- New Zealand Defence Force. (2002). Defence Force Order 21/2002. *Authority to conduct personnel research*. Wellington, New Zealand: Author.
- New Zealand Government. (2010). Defence White Paper 2010. Retrieved from <http://www.beehive.govt.nz/feature/defence-white-paper-2010>.
- Ng, K., Ramaya, R., Teo, T., & Wong, S. (2005). Cultural intelligence: Its potential for military leadership development. *International Military Testing Association: Presented at the 47th IMTA Meeting*, Singapore, 1-13. Retrieved from <http://www.internationalmta.org/>
- Parker, W. (2008). "International education" – What's in a name? *Phi. Delta Kappan*, 90(3), 196-202.

- Peters, K. (2005). At a loss for words. *Government Executive*, 37(10), 46-53.
- Reeves, N. (1990). The foreign language needs of U.K.-based corporations. *Annals of the American Academy of Political and Social Science*, 511, 60-73.
- Resteigne, D., & Soeters, J. (2009). Managing militarily. *Armed Forces & Society*, 35(2), 307-331.
- Royal Air Force. (2011). *Communications and intelligence – Intelligence analyst (voice)*. Retrieved from <http://www.army.mod.uk/intelligence/4225.aspx>
- Royal Army. (2011). *Intelligence Corps opportunities – Ongoing training* Retrieved from <http://www.army.mod.uk/intelligence/4225.aspx>
- Royal Military College of Canada. (2011). Language Center – Language training. Retrieved from <http://www.rmc.ca/aca/lc-cl/index-eng.asp>
- Sarnoski, R. (2005). United States Air Force international affairs specialist program. *Defense International Security Assistance Management Journal*, 28(1) 12-14.
- Scharer, R. (2001). *A European language portfolio - Final report on the pilot project (1998-2000)*. Strasbourg: Council of Europe.
- Schwalbe, S. (2007). Potential Air Force shortfalls in implementing the Defense Language Transformation Roadmap. *Air & Space Power Journal*, 21(1), 44-47.
- Sergio da Rocha, A. (2007). Military institutional communication – Its geostrategic importance. *Air & Space Power Journal*, 21(3), 55-66.
- Silva, J. & White, L. (2002). Relation of cognitive attitudes to success in foreign language training. *Military Psychology*, 5(2), 79-93.

Soma, N. & Waldman, L. (2006). Language and culture in Wisconsin international businesses. *Journal for Global Business Education*, 7, 49-63.

Tucci, I & Wagner, G. (2004). Foreign language skills - An important additional qualification in the services sector. *Economic Bulletin*, 44(1), 43-46.

United States Government Accountability Office (USGAO) (2009). DoD needs a strategic plan and better inventory and requirements data to guide development of Language Skills and Regional Proficiency. *Highlights* (GAO-09-568 Military Training). Washington: US GAO.

University of New South Wales Canberra at the Australian Defence Force Academy (USNW@ADFA). (2012). *Guide to undergraduate studies 2012*. Canberra: University of New South Wales. Retrieved from http://sas.unsw.adfa.edu.au/publications/pdf/undergraduate_studies_guide.pdf

Vuga, J. (2010). Cultural differences in multinational peace operations: A Slovenian perspective. *International Peacekeeping*, 17(4), 554-565.

Vogel, T. (2001). Internationalization, interculturality, and the role of foreign languages in higher education. *Higher Education in Europe*, 26(3), 381-389.

Ward, S. (2010). The road to foreign language competency in the United States: A leadership perspective. *Journal of Leadership Studies*, 4(3), 6-22.

Warwick, J. (2009). The dilemmas of providing language instruction for the US Airforce. *Air & Space Power Journal*, 24(1), 44-51.

APPENDIX A – US NAVY STRATEGIC LANGUAGE LIST 2011



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

Canc frp: May 2012

OPNAVNOTE F5300
Ser N13F/

OPNAV NOTICE F5300

From: Chief of Naval Operations

Subj: NAVY STRATEGIC LANGUAGE LIST

Ref: (a) OPNAVINST 7220.7F
(b) DoD Directive 5160.41E of 21 Oct 2005
(c) DoD Strategic Language List of 9 Mar 2011 (NOTAL)
(d) OPNAVINST 5200.37

Encl: (1) Navy Strategic Language List

1. Purpose

a. To issue the Navy Strategic Language List (SLL).

b. The intent of the Navy SLL is to inform the Navy total force of Navy's foreign language requirements. The list is used to shape foreign language capability and capacity in the force, prioritize development of related training, and facilitate administration of Navy's Foreign Language Proficiency Bonus (FLPB) Program as contained in reference (a).

2. Background. Based on national security and defense strategies, and representing the collective needs of the Military Services, the Department of Defense (DoD) projects language priorities through 2020. Reference (b) authorizes DoD components to develop and incentivize capability in languages not contained in the DoD list, but which may be required for current and projected mission needs.

3. Discussion. The Navy SLL is prioritized into three language categories: "Immediate," "Emerging," and "Enduring." Immediate languages are those for which DoD requires an increased near-term capacity. "Emerging" languages are expanding requirements, and "Enduring" languages are forecasted as strategic needs for

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the next 10 to 15 years. Enclosure (1) contains the Navy SLL and, consistent with reference (c), includes "Immediate," "Emerging," and "Enduring" languages and dialects for which Navy requires organic or surge capability. Navy's SLL was vetted with Navy communities (foreign area officers, intelligence, information warfare) and stakeholders having a major interest in foreign language capability. To ensure its priorities align with DoD and Navy long-term strategic objectives, the list reflects a 10-year outlook. Enclosure (1) will be reviewed annually and republished as required.

4. Prevalent in the Force (PIF) Languages. These languages continue to be of strategic importance to DoD and Navy, but already are present in the force in numbers well in excess of required capacity. As discussed in reference (c), FLPB limitations may exist for languages identified as PIF. FLPB limitations may exist for dialects or languages in one language group.

5. Action. Enclosure (1) shall be used as follows:

a. Force Shaping. The Navy SLL constitutes a general guide for recruitment and training prioritization, and should be used as appropriate to build capacity and capability in both the linguistic and related regional and cultural aspects of the languages. Navy activities with active duty, reserve, or civilian personnel professing proficiency in foreign languages listed in enclosure (1) shall ensure those personnel are afforded the opportunity to test in the language. Reference (d) provides guidance for foreign language testing. Language skill, as measured by the Defense Language Proficiency Testing (DLPT) system, shall be recorded in military and civilian personnel data systems, as appropriate.

b. Incentives. Used in conjunction with references (a) and (b), enclosure (1) shapes the Navy FLPB Program. This program provides one-time or monthly bonus payments per the eligibility requirements outlined in reference (a).

6. Point of Contact. The Navy Language, Regional Expertise, Culture, and Irregular Warfare Office (OPNAV (N13F), Policy Section (OPNAV (N13F1)) is the point of contact for all inquiries regarding the SLL and can be reached at (703) 695-3055/DSN 225, or e-mail at NXAG_N13F1@navy.mil.

7. Cancellation Contingency. This notice is in effect for 1 year or until it is superseded by another notice, whichever occurs first. Thereafter, this notice may be retained for reference purposes. The organization action will remain effective until changed by Director, Military Personnel Plans and Policy (OPNAV (N13)).

M. E. FERGUSON III
Vice Admiral, U.S. Navy
Deputy Chief of Naval Operations
(Manpower, Personnel, Training
and Education)

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(FOUO) IMMEDIATE LANGUAGES

Arabic - Iraqi (QAI)
Arabic - Yemeni (AU/QAY)
Baluchi (BT/BAL)
Pashto-Afghan (Pushtu) (PV/PBT)
Persian-Afghan (Dari) (PG/PRS)
Persian-Iranian (Farsi) (PF/PES)
Somali (SM/SOM)
Swahili (SW/SWA)
Urdu (UR/URD)

Enclosure (1)

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(FOUO) EMERGING LANGUAGES

Amharic (AC/AMH)
Arabic - Sudanese (AV/APD)
Armenian (AR/HYE)
Azerbaijani (AX/AZE)
Bambara (BA/BAM)
Bengali (BN/BEN)
Divehi (DV/DIV)
Fulani (FV/FUL)
Gujarati (GW/GUJ)
Hindi (HJ/HIN)
Kazakh (KE/KAZ)
Krio (KW/KRI)
Lingala (LJ/LIN)
Madurese (MD/MAD)
Marathi (MR/MAR)
Nepalese (NE/NEP)
Punjabi (PJ/PAN)
Sindhi (SD/SND)
Singhalese (SJ/SIN)
Tadjik (TB/TGK)
Tamazight (TZM)
Tamil (TC/TAM)
Telugu (TE/TEL)
Tigrinya (TL/TIR)
Uighur (UJ/UIG)
Ukrainian (UK/UKR)
Uzbek (UX/UZB)
Wolof (WQ/WOL)

(FOUO) ENDURING LANGUAGES

African dialects/languages ¹ Hausa (HS/HAU) Igbo (JB/IBO) Yoruba (YQ/YOR)	Japanese (JA/JPN) ³ Korean (KP/KOR) ³ Kurdish dialects/languages Kurmanji (XK/KMR) Sorani (XS/SDH)
Arabic dialects/languages ² Algerian (DH/ARQ) Egyptian (AE/ARZ) Gulf (DG/QAG) Levantine (AP/QLB) Maghrebi (AM/QAM) Modern Standard (AD/ARB) Moroccan (BS/ARY)	Lao (LC/LAO) ³ Malay (ML/MLY) Philippine Island languages ⁵ Cebuano (VB/CEB) Ilocano (JL/ILO) ³ Maguindanao (NG/MDH) Maranao (LY/MRW) ³ Tagalog (TA/TGL) ³ Tausug/Moro (MH/TSG) Yakan (YN/YKA) ³
Cambodian (CA/KHM) ³ Chinese dialects/languages ⁴ Cantonese (CC/YUE) ³ Mandarin (CM/CMN) Min (CD/YD/NAN) ³	Portuguese dialects/languages Brazilian (PQ/QPB) ³ European (PT/QPE) ³ Russian (RU/RUS) ³ Serbo-Croatian (SC/HBS) ³ Spanish (QB/SPA) ³ Thai (TH/THA) ³ Turkish (TU/TUR) Turkmen (UB/TUK)
Czech (CX/CES) ³ French (FR/FRA) ³ Georgian (GG/KAT) German (GM/DEU) ³ Haitian-Creole (HC/HAT) ³ Hebrew (HE/HEB) Italian (JT/ITA) ³ Indonesian dialects/languages Indonesian (JN/IND) Javanese (JV/JAV)	Vietnamese dialects/languages ⁶ Central (VC/QNC) ³ Hanoi (VN/VIE) ³ Saigon (VS/QNS) ³

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¹ Navy considers these African dialects and languages one language group.

² Navy considers these Arabic dialects and languages one language group.

³ PIF language - Paragraph 4 of this notice pertains.

⁴ Navy considers these Chinese dialects and languages one language group.

⁵ Navy considers these Philippine Island dialects and languages one language group.

⁶ Navy considers these Vietnamese dialects and languages one language group.

APPENDIX B – RESEARCH QUESTIONNAIRE

Second-language Skills in the RNZN (Masters Thesis Survey)

Purpose:

In light of changing external security threats and new operational focuses of today, there is increasing relevance and importance being placed on second-language ability as a key operational and human resource capability within the military sector. **This survey aims to determine what second-language skills and training RNZN Regular Force members already have.** The data obtained from this survey will provide an insight into the gaps between the Service's current versus ideal foreign language skills in relation to its operational outputs.

Authority to conduct this survey has been attained in accordance with DFO 21/2002. The information collected from respondents will be accessible to only the researcher & supervisor and treated strictly as 'in-confidence'. Individuals will not be identified in the reporting of results. Completing the questionnaire implies your consent to use this information for the purpose of determining second-language proficiency skills within the RNZN.

Separate to the academic requirements of this survey, if you are happy for the RNZN to keep a record of your second-language skills & training information, please enter your Service Number:

(This is voluntary and should only be entered if you consent to the RNZN knowing your identity and keeping your responses on file).

While response is voluntary, I do strongly encourage you to take the time to complete this questionnaire (approx 10-15 minutes). It is your chance to highlight your skills, and your assistance will help in identifying areas of opportunity for the RNZN and for you as employees.

I appreciate the interest you may have in the results of this survey, and am committed to providing feedback to personnel once the analysis of the collected data is complete. If you have opted to provide your Service Number above, do you wish to receive a one-page summary of results?

Select response

NOTE: ONCE COMPLETED PLEASE SAVE THE SURVEY AS 'SURVEY' AND EMAIL BACK TO OrgResearch@nzdf.mil.nz

Section One: Background Information

Make your responses by entering text into the grey shaded cells or clicking on the cells to activate a drop-down list.

	Type / select responses below
1.1 Date of Birth	<input type="text"/>
1.2 Month / Year of Enlistment in RNZN	<input type="text"/>
1.3 Gender (select response from drop down list)	<input type="text"/>
1.4a Is English your mother tongue?	<input type="text"/>
b If 'No', please state your mother tongue:	<input type="text"/>
1.5a Do you have a level of conversational ability & reading/writing ability in any languages other than English?	<input type="text"/>
b If 'Yes', please list languages:	L1 <input type="text"/>
	L2 <input type="text"/>
	L3 <input type="text"/>
	L4 <input type="text"/>
	L5 <input type="text"/>
	L6 <input type="text"/>
1.6a If you don't already know another language, would you like to learn one (other than English)?	<input type="text"/>
b If 'Yes', please list languages:	L1 <input type="text"/>
	L2 <input type="text"/>
	L3 <input type="text"/>
	L4 <input type="text"/>

Section Two: Language Portfolio

For the next four questions, make your responses by *clicking on the grey shaded cells, which will activate a drop-down box*.

2.1 Select the **highest level of education** (if any) you received in the languages you identified in Section One:

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

Select responses below

2.2 Select the **highest qualification** (if any) you have achieved in the languages you identified in Section One:

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

Select responses below

2.3 How regularly do you use the languages you identified as part of your work with the RNZN?

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

Select responses below

2.4 How regularly are you in contact with native speakers of the languages?

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

Select responses below

Section Three: Self-Assessment

Using the descriptors provided, please determine the grade that best describes your proficiency level in each of the languages for the following categories: Listening.

3.1 What description below best describes your **LISTENING** ability in the languages you have identified?

- A1** I can understand familiar words & very basic phrases concerning myself, my family & immediate surroundings when people speak slowly & clearly.
- A2** I can understand phrases & frequently used words that have relevance to me personally (eg. very basic personal & family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages & announcements.
- B1** I can understand the main points of clearly spoken speech on familiar matters regularly encountered in work, school leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when speech is relatively slow and clear.
- B2** I can understand lengthy speeches and lectures & follow complex arguments provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.
- C1** I can understand lengthy speeches even when it is not clearly structured & when meaning is implied rather than stated. I can understand television programmes & films without too much effort.
- C2** I do not have any difficulty understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.

Select responses below (A1-C2)

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

3.2 What description below best describes your **READING** ability in the languages you have identified?

- A1** I can understand familiar names, words & very simple sentences, eg. on notices & posters or in catalogues.
- A2** I can read very short, simple articles. I can find specific information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.
- B1** I can understand articles that consist mainly of frequently used everyday or job-related language. I can understand the description of events, feelings & wishes in personal letters.
- B2** I can read articles & reports concerned with modern issues on which the authors have particular attitudes or viewpoints. I can understand modern literature.
- C1** I can understand and recognise the difference between long & complex factual articles versus literary articles. I can understand specialised articles & longer technical instructions, even when they do not relate to my field.
- C2** I can read virtually all forms of the written language easily, including abstract or complex texts such as manuals, specialised articles & books.

Select responses below (A1-C2)

L1	0	<input type="text"/>
L2	0	<input type="text"/>
L3	0	<input type="text"/>
L4	0	<input type="text"/>
L5	0	<input type="text"/>
L6	0	<input type="text"/>

3.3 What description below best describes your **SPOKEN INTERACTION** ability in the languages you have

- A1** I can communicate in a simple way as long as the other person is prepared to repeat or rephrase things slowly & help me formulate what I'm trying to say. I can ask & answer simple questions on relevant and familiar topics.
- A2** I can exchange simple information on routine tasks & activities that I am familiar with. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.
- B1** I can deal with most situations likely to come up whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or essential to everyday life (e.g. family, hobbies, work, travel & current events).
- B2** I can communicate with a level of fluency & spontaneity that makes conversation with native speakers quite possible. I can actively participate in discussions on familiar topics and state my point of view.
- C1** I can express myself fluently & spontaneously without having to give much thought to my choice of words. I can communicate effectively for social & professional purposes. I can formulate ideas & opinions & discuss them in relation to the thoughts of other speakers.
- C2** I can take part in any conversation or discussion & have a good understanding of native expressions & colloquialisms. I can express myself fluently & precisely. If I have a problem I can backtrack & re-word what I wanted to say so smoothly that other people are hardly aware of it.

Select responses below (A1-C2)

L1	0	<input type="text"/>
L2	0	<input type="text"/>
L3	0	<input type="text"/>
L4	0	<input type="text"/>
L5	0	<input type="text"/>
L6	0	<input type="text"/>

3.4 What description below best describes your **SPOKEN PRODUCTION** ability in the languages you have

- A1** I can use simple phrases & sentences to describe where I live & people I know.
- A2** I can use a series of phrases & sentences to describe in simple terms my family & other people, living conditions, my educational background & my present or most recent job.
- B1** I can connect phrases in a simple way in order to describe experiences & events, my dreams, hopes & ambitions. I can briefly give reasons & explanations for opinions & plans. I can tell a story or explain the plot of a book or film & describe my reactions.
- B2** I can present clear, detailed descriptions on a wide range of subjects that I am interested in. I can explain a viewpoint on a topical issue giving the advantages & disadvantages of various options.
- C1** I can present clear, detailed descriptions of complex subjects, building on certain points & rounding off with an appropriate conclusion.
- C2** I can present a clear, structured & smoothly-flowing description or argument suitable to the situation in a way that helps others to notice & remember significant points.

Select responses below (A1-C2)

L1	0	<input type="text"/>
L2	0	<input type="text"/>
L3	0	<input type="text"/>
L4	0	<input type="text"/>
L5	0	<input type="text"/>
L6	0	<input type="text"/>

3.5 What description below best describes your **WRITING** ability in the languages you have identified?

- A1** I can write a short, simple postcard, eg. sending holiday greetings. I can fill in forms with personal details, eg. entering my name,
- A2** I can write short, simple notes and messages. I can write a very simple personal letter, eg. thanking someone for something.
- B1** I can write simple passages on topics that I'm familiar with or am interested in. I can write personal letters describing experiences & impressions.
- B2** I can write clear, detailed articles on a wide range of subjects that I'm interested in. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events & experiences.
- C1** I can express myself in clear, well-structured articles that express detailed viewpoints. I can write about complex subjects in a letter, an essay or a report, underlining what I consider to be the key issues. I can select a style appropriate to the
- C2** I can write clear, smoothly-flowing text in an appropriate style. I can write complex letters, report or articles which present a case with an effective logical structure which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.

L1	0
L2	0
L3	0
L4	0
L5	0
L6	0

Type responses from A1 - C2

Thank you for completing this survey - your participation is greatly appreciated.

NOTE: Please save the survey as 'Survey' and email back to OrgResearch@nzdf.mil.nz

Remember: Unless you have consented to the RNZN keeping your information on file (by providing your Service Number at the start), your responses are confidential to the researcher & supervisor. No one else will be able to view your individual responses.

APPENDIX C – COVERING INFORMATION EMAIL

From: Org Research
To:
Cc:
Subject: Second-language skills in the RNZN - Survey request
Attachments:  Survey - Second Language Skills.xls (69 KB)

Sent: Tue 23/08/2011 9:57 a.m.

MASTERS THESIS SURVEY - INFORMATION SHEET

Researcher: Fiona Smith

I am currently studying towards a Masters in Business Studies (Massey University) and as part of this qualification, I am undertaking a final research thesis:

What second-language skills do RNZN personnel have & what are the realistic Service requirements for foreign language skills?

You are invited to complete the attached questionnaire which will take **10 - 15 minutes** to complete.

The survey requests information across three areas: Personal Background information;
Second-language skills; and
Language qualifications & experiences.

Please save your completed questionnaire as 'Survey' and return via email to:
orgresearch@nzdf.mil.nz [Under 'Org Research' in DIXS Outlook Contacts list]

Alternatively, you can return via post to: Fiona Smith, Leadership Development Group, DNB

Please complete and return by Mon 05 Sept 11.

Participant Rights

The survey is being conducted in accordance with DFO 21/2002 and the Privacy Act 1993. You are under no obligation to accept this invitation to participate. If you decide to participate, completion and return of the questionnaire implies consent. Consequently, you are accepting and note that:

- Participation in this research is voluntary;
- You can ask any questions about the study at any time during participation;
- You have the right to decline to answer any particular question;
- Any data pertaining to your responses is solely for the purpose of academic study, and will only be disclosed to the RNZN if you provide your Service Number;
- Your responses will be incorporated into a research report. Any information which may lead to you being identified will not appear in the research report, any subsequent report, presentation or publication;
- You may request to view any complete drafts or sections of the research report at any time; and
- A one-page summary of research findings will be made available to you, on request, at the conclusion of the report.

Contact Details

If you have any questions or would like to receive more information about the study, please contact me or my thesis supervisor:

Researcher	Fiona Smith Phone: (09) 445 5660 Email: fiona.smith2@nzdf.mil.nz
Supervisor	Dr. Paul Toulson, LFHRINZ Associate Professor of Human Resource Management School of Management, College of Business Massey University Phone: (06) 350 5799 Ext 2389 Email: P.Toulson@massey.ac.nz

Research Ethics

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 11/25. If you have any concerns about the conduct of this research, please contact:

Dr Nathan Matthews
Acting Chair, Massey University Human Ethics Committee: Southern B
Phone: 06 350 5799 x 8729
Email: humanethicssouthb@massey.ac.nz.

Data Management

The DIXS email system will enable me (Fiona Smith) to identify you when you send your responses via email. However, when entered into a written report, your answers will be inputted anonymously; you will not be identified personally. Your responses will be accessible and treated strictly as "in-confidence" to myself and my research supervisor. They will be destroyed on completion of the project.

For the purposes of the study, I do not require you to identify yourself. However, should you wish to have the Navy maintain a record of your second-language skills, you can provide your Service Number at the start of the attached survey. This is voluntary and will mean that your responses are available to Navy after thesis completion (separate to my study). If you do not want your responses made available to Navy, do not provide your Service Number.

Research Results

The research results will be presented in a thesis which will be submitted for marking by my supervisor, an internal examiner and the external examiner. A copy may be deposited in the Massey University Library and consideration may be given to its publication in scholarly journals.

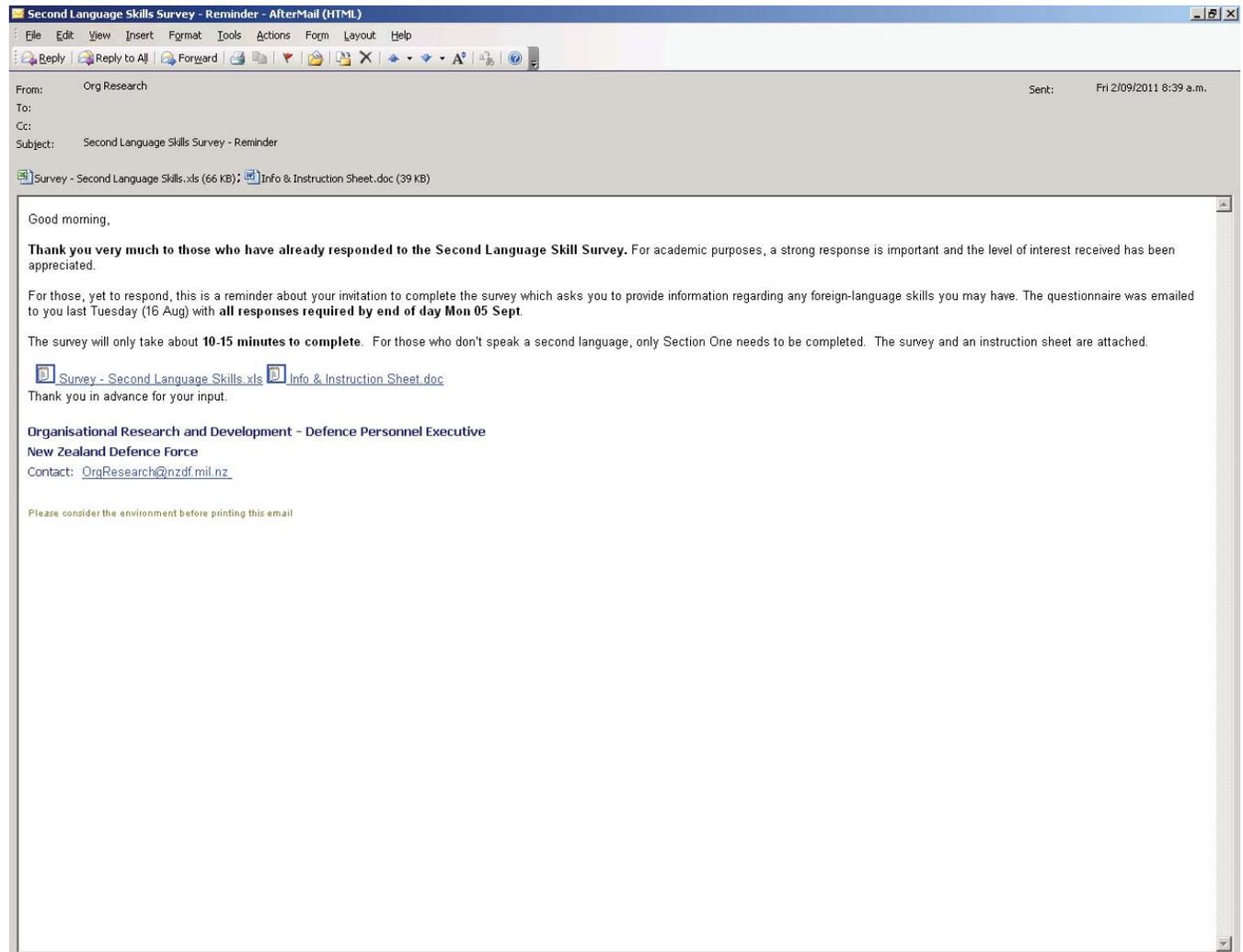
Should you wish to receive a summary of the results, please select 'Yes' to the final question of the questionnaire: "Would you like to receive a one-page summary of the research results?"

Thank you in advance for taking the time to complete the questionnaire.

**Organisational Research and Development – Defence Personnel Executive
New Zealand Defence Force**
Contact: OrgResearch@nzdf.mil.nz

Please consider the environment before printing this email

APPENDIX D – REMINDER EMAIL



APPENDIX E – COUNCIL OF EUROPE'S EUROPEAN LANGUAGE PASSPORT



Le Conseil de l'Europe est une organisation intergouvernementale dont le siège permanent est à Strasbourg, France. Sa mission première est de renforcer l'unité du continent et de protéger la dignité des citoyens de l'Europe en veillant au respect de nos valeurs fondamentales: la démocratie, les droits de l'homme et la prééminence du droit.

Un de ses objectifs principaux est de susciter la prise de conscience d'une identité culturelle européenne et de développer la compréhension mutuelle entre les peuples de cultures différentes. C'est dans ce contexte que le Conseil de l'Europe coordonne l'introduction d'un Portfolio Européen des Langues, comme étant un document personnel fait pour encourager et faire reconnaître l'apprentissage des langues et les expériences interculturelles de toutes sortes.

Contact:
Direction des Langues vivantes
Direction Générale IV
Conseil de l'Europe, Strasbourg, France
site Internet: <http://culture.coe.int/lang>
© 2000 Conseil de l'Europe, Strasbourg, France

Ce Passeport de langues fait partie du Portfolio européen des langues (PEL) remis par:
Nom de l'Institution / Instance (avec site Internet)

The Council of Europe is an intergovernmental organisation with its permanent headquarters in Strasbourg, France. Its primary goal is to promote the unity of the continent and guarantee the dignity of the citizens of Europe by ensuring respect for our fundamental values: democracy, human rights and the rule of law.

One of its main aims is to promote awareness of a European cultural identity and to develop mutual understanding among people of different cultures. In this context the Council of Europe is coordinating the introduction of a European Language Portfolio to support and give recognition to language learning and intercultural experiences at all levels.

Contact:
Modern Languages Division
Directorate General IV
Council of Europe, Strasbourg, France
Web site: <http://culture.coe.int/lang>
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This Language Passport is part of the European Language Portfolio (ELP) issued by:
Name of Institution / Body (with web site)



COUNCIL
OF EUROPE
CONSEIL
DE L'EUROPE
European Language Portfolio
Portfolio européen des langues

Portfolio Européen des Langues: modèle accrédité N° 0.2000
European Language Portfolio: accredited model No. 0.2000
Accordé à / Awarded to

Passeport de langues

Ce document est un bilan des savoir-faire, des certifications ou des diplômes ainsi que des expériences vécues dans différentes langues. Il fait partie d'un Portfolio Européen des Langues qui se compose du présent Passeport, d'une Biographie Langagière et d'un Dossier comprenant des matériaux qui documentent et illustrent les expériences effectuées et les compétences acquises. Les compétences en langues sont décrites dans les termes des niveaux de compétence présentés dans le document «Un Cadre européen commun de référence pour les langues: apprendre, enseigner, évaluer». L'échelle est présentée dans le présent Passeport de langues (grille pour l'auto-évaluation).

Ce Passeport de langues est recommandé pour utilisation par des adultes (16+).

Le Passeport de langues inclut la liste des langues dans lesquelles le titulaire a des compétences. Il se compose:

- d'un profil des compétences en langues en relation avec le Cadre Européen Commun
- d'un résumé d'expériences linguistiques et interculturelles
- d'une liste de certificats et diplômes

Pour tout renseignement concernant les niveaux de compétences en plusieurs langues, consultez le site Internet du Conseil de l'Europe: <http://culture.coe.int/lang>

Language Passport

This document is a record of language skills, qualifications and experiences. It is part of a European Language Portfolio which consists of a Passport, a Language Biography and a Dossier containing materials which document and illustrate experiences and achievements. Language skills are defined in terms of levels of proficiency presented in the document «A Common European Framework of reference for languages: learning, teaching, assessment». The scale is illustrated in this Language Passport (Self-assessment grid).

This Language Passport is recommended for adult users (16+).

The Language Passport lists the languages that the holder has some competence in. The contents of this Language Passport are as follows:

- a profile of language skills in relation to the Common European Framework
- a résumé of language learning and intercultural experiences
- a record of certificates and diplomas

For further information, guidance and the levels of proficiency in a range of languages, consult the Council of Europe web site: <http://culture.coe.int/lang>

Nom:
Nom:

Profil linguistique Profile of Language Skills



UNIVERSITÄT
DUISBURG
ESSEN
Lehrstuhl für
Angewandte Linguistik
Professur für
Angewandte Linguistik

Nom
Name

Langue(s) maternelle(s)
Mother-tongue(s)

Autres langues
Other languages

Auto-évaluation
Self-assessment

Ecouter
Listening

Prendre part à une conversation
Spoken interaction

Ecrire
Writing

Lire
Reading

S'exprimer oralement en continu
Spoken production

Langue Language

	A1	A2	B1	B2	C1	C2
→👂						
👂→						
👂→👂						
👂→👂						
📖						

Langue Language

Langue language

	A1	A2	B1	B2	C1	C2
→👂						
👂→						
👂→👂						
👂→👂						
📖						

Langue Language

	A1	A2	B1	B2	C1	C2
→👂						
👂→						
👂→👂						
👂→👂						
📖						

Langue Language

	A1	A2	B1	B2	C1	C2
→👂						
👂→						
👂→👂						
👂→👂						
📖						

Grille pour l'auto-évaluation



UNIVERSITÉ DE BOURGOGNE
UNIVERSITY OF BURGUNDY
UNIVERSITÀ DI BOLOGNA

C2

C1

B2

B1

A2

A1

<p>Comprendre</p> <p> Ecouter</p>	<p>Je peux comprendre des expressions et des phrases très courantes au sujet de moi-même, de ma famille et de l'environnement concret et immédiat, si les gens parlent lentement et distinctement.</p>	<p>Je peux comprendre des expressions et un vocabulaire très fréquent relatifs à ce qui me concerne de très près (par ex. moi-même, ma famille, les achats, l'environnement proche, le travail). Je peux saisir l'essentiel d'annonces et de messages simples et clairs.</p>	<p>Je peux comprendre les points essentiels quand un langage clair et standard est utilisé et s'il s'agit de sujets familiers concernant le travail, l'école, les loisirs, etc. Je peux comprendre l'essentiel de nombreuses émissions de radio ou de télévision sur l'actualité ou sur des sujets qui m'intéressent à titre personnel ou professionnel si l'on parle d'une façon relativement lente et distincte.</p>	<p>Je peux lire des textes courts très simples. Je peux trouver une information particulière prévisible dans des documents courants comme les petites publicités, les prospectus, les menus et les horaires et je peux comprendre des lettres personnelles courtes et simples.</p>	<p>Je peux lire des textes courts très simples. Je peux trouver une information particulière prévisible dans des documents courants comme les petites publicités, les prospectus, les menus et les horaires et je peux comprendre des lettres personnelles courtes et simples.</p>	<p>Je peux lire des textes courts très simples. Je peux trouver une information particulière prévisible dans des documents courants comme les petites publicités, les prospectus, les menus et les horaires et je peux comprendre des lettres personnelles courtes et simples.</p>
<p>Parler</p> <p> Prendre part à une conversation</p>	<p>Je peux lire sans effort tout type de texte, même abstrait ou complexe quant au fond ou à la forme, par exemple un manuel, un article spécialisé ou une œuvre littéraire.</p>	<p>Je peux lire des articles et des rapports sur des questions contemporaines dans lesquels les auteurs adoptent une attitude particulière ou un certain point de vue. Je peux comprendre un texte littéraire contemporain en prose.</p>	<p>Je peux lire des articles et des rapports sur des questions contemporaines dans lesquels les auteurs adoptent une attitude particulière ou un certain point de vue. Je peux comprendre un texte littéraire contemporain en prose.</p>	<p>Je peux lire des articles et des rapports sur des questions contemporaines dans lesquels les auteurs adoptent une attitude particulière ou un certain point de vue. Je peux comprendre un texte littéraire contemporain en prose.</p>	<p>Je peux lire des articles et des rapports sur des questions contemporaines dans lesquels les auteurs adoptent une attitude particulière ou un certain point de vue. Je peux comprendre un texte littéraire contemporain en prose.</p>	<p>Je peux lire des articles et des rapports sur des questions contemporaines dans lesquels les auteurs adoptent une attitude particulière ou un certain point de vue. Je peux comprendre un texte littéraire contemporain en prose.</p>
<p>Écrire</p> <p> S'exprimer oralement en continu</p>	<p>Je peux présenter une description ou une argumentation claire et fluide dans un style adapté au contexte, construire une présentation de façon logique et aider mon auditeur à remarquer et à se rappeler les points importants.</p>	<p>Je peux présenter des descriptions claires et détaillées de sujets complexes, en intégrant des thèmes qui leur sont liés, en développant certains points et en terminant mon intervention de façon appropriée.</p>	<p>Je peux présenter des descriptions claires et détaillées de sujets complexes, en intégrant des thèmes qui leur sont liés, en développant certains points et en terminant mon intervention de façon appropriée.</p>	<p>Je peux présenter des descriptions claires et détaillées de sujets complexes, en intégrant des thèmes qui leur sont liés, en développant certains points et en terminant mon intervention de façon appropriée.</p>	<p>Je peux présenter des descriptions claires et détaillées de sujets complexes, en intégrant des thèmes qui leur sont liés, en développant certains points et en terminant mon intervention de façon appropriée.</p>	<p>Je peux présenter des descriptions claires et détaillées de sujets complexes, en intégrant des thèmes qui leur sont liés, en développant certains points et en terminant mon intervention de façon appropriée.</p>

Self-assessment grid



UNIVERSITÄT DER ANGEWANDTEN WISSENSCHAFTEN
HAW - Hochschule für Angewandte Wissenschaften

C2

C1

B2

B1

A2

A1

	A1	A2	B1	B2	C1	C2
Understanding  Listening	I can understand familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand extended speech and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.
Reading  Reading	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular attitudes or viewpoints. I can understand contemporary literary prose.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.
Speaking  Spoken interaction	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).	I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.
Spoken production  Spoken production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.	I can present a clear, smoothly flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the recipient to notice and remember significant points.
Writing  Writing	I can write a short, simple postcard, for example sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can write short, simple notes and messages. I can write a very simple personal letter, for example thanking someone for something.	I can write simple connected text on topics which are familiar or of personal interest. I can write personal letters describing experiences and impressions.	I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events and experiences.	I can express myself in clear, well-structured text, expressing points of view at some length. I can write about complex subjects in a letter, an essay or a report, underlining what I consider to be the salient issues. I can select a style appropriate to the reader in mind.	I can write clear, smoothly-flowing text in an appropriate style. I can write complex letters, reports or articles which present a case with an effective logical structure which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.

Résumé des expériences linguistiques et interculturelles Summary of language learning and intercultural experiences



Nom
Name

→ 1 Jusqu'à 1 an
Up to 1 year

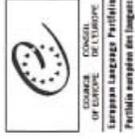
→ 3 Jusqu'à 3 ans
Up to 3 years

→ 5 Jusqu'à 5 ans
Up to 5 years

5 → Plus de 5 ans
Over 5 years

Langue: Language:	→ 1	→ 3	→ 5	→ 1	→ 3	→ 5	→ 1	→ 3	→ 5	→ 1	→ 3	→ 5	→ 1	→ 3	→ 5
Apprentissage et utilisation de la langue dans le pays/la région où la langue n'est pas utilisée: Language learning and use in country/region where the language is not spoken:															
Enseignement primaire / secondaire / professionnel Primary/secondary/vocational education															
Enseignement supérieur Higher education															
Éducation des adultes Adult education															
Autres cours Other courses															
Utilisation régulière sur le lieu de travail Regular use in the workplace															
Contacts réguliers avec des locuteurs de cette langue Regular contact with speakers of the language															
Autre Other															
Informations complémentaires concernant des expériences linguistiques et interculturelles Further information on language and intercultural experiences															

Résumé des expériences linguistiques et interculturelles Summary of language learning and intercultural experiences



Nom
Name

→1 Jusqu'à 1 mois
Up to 1 month

→3 Jusqu'à 3 mois
Up to 3 months

→5 Jusqu'à 5 mois
Up to 5 months

5 → Plus de 5 mois
Over 5 months

Langue: Language:	→1	→3	→5	5 →	→1	→3	→5	5 →	→1	→3	→5	5 →	→1	→3	→5	5 →
Séjours dans une région où la langue est utilisée: Stays in a region where the language is spoken:	→1	→3	→5	5 →	→1	→3	→5	5 →	→1	→3	→5	5 →	→1	→3	→5	5 →
Participation à un cours de langue Attending a language course																
Etudes, formation dans la langue Using the language for study or training																
Utilisation professionnelle de la langue Using the language at work																
Autre Other																
Informations complémentaires concernant des expériences linguistiques et interculturelles Further information on language and intercultural experiences																

