2015

Creating an operational security management structure for inimical environments: Papua New Guinea as a case study

William J. Bailey
Edith Cowan University

CREATING AN OPERATIONAL SECURITY MANAGEMENT STRUCTURE FOR INIMICAL ENVIRONMENTS: PAPUA NEW GUINEA AS A CASE STUDY

W. J. Bailey

School of Computer and Security Science, Edith Cowan University, Perth, Australia
b. bailey@ecu.edu.au

Abstract

Security is a necessary cost for businesses wishing to operate in the developing economy of Papua New Guinea. The country continues to face levels of crime and violence out of proportion to other East Asian countries; which deters many would be investors. However, the potential in PNG is vast and eagerly sought after despite the high costs required to operate without harm, therefore, it is necessary manage the security situation. Experience from similar countries has shown by using optimal security management systems and structures it is possible to work safely, securely and effectively, but this requires a comprehensive security, threat and risk assessment to be conducted first . Based upon this assessment, a security management plan can be created .The predominant threat comes from criminality, which is endemic in parts of PNG. The police force is struggling to address the issue, but due to lack of resources and manpower is often seen as part of the problem An inimical model is therefore proposed that incorporates the local community and actively seeks their support to gather greater intelligence to thwart would be criminals. In addition, empowering more local security managers, with their vital local knowledge, will improve the overall intelligence flow.

Keywords

Inimical, Security Management, risk, threat, criticality, vulnerability, consequences, police

INTRODUCTION

Papua New Guinea (PNG) is an enigma for most companies wishing to set-up and function safely and securely in the country. Anecdotal evidence is rife, as are the newspaper reports, on all aspects of the impact of crime in PNG. Reports related to urban crime point to the underlying reasons including high levels of poverty, healthcare, education and lack of basic infrastructure (Bourguignon, 2001, pp. 171-190; MacDonald, 2008; The World Bank, 2014). The primary factor is considered to be the failure of law and order to bring civil stability, followed by high levels of corruption. The major urban centres of Port Moresby and Lae are considered the most problematic (Lakhani & Willman, 2014).

The ability to develop an operational security management plan is dependent on accurately assessing the actual threat, risks and capability of adversaries to impact on the working environment. Extensive background information needs to be obtained from a number of sources in order to produce a Security Risk and Threat Assessment (SRVTA) (W J. Bailey & Doleman, 2013, p. 57). To be effective in this task requires an understanding of how grave the problem is, and in which specific areas, before any meaningful action can be taken. PNG is not unique as crime is insidious in most developing countries and its impacts affect all sections of society (Bourguignon, 2000, pp. 197-221; Del Frate, 1998; LaFree & Tseloni, 2006). Therefore, undertaking a comprehensive security, risk and threat assessment is necessary to fully understand the nature and scope of the problem first.

A Security Risk Assessment requires an all-inclusive understanding of the social, economic and political factors before successful and meaningful security managed programmes can be implemented or even suggested. (Andersen, Garvey, & Roggi, 2014; World Bank, 2014). Based upon these criteria, this paper assesses how this indispensable security management process can be accomplished given the far-reaching restraints that are present in undertaking any such process in PNG.

The recent trend from incident reports, newspaper articles and anecdotal evidence indicates a steadily rising level of crime in PNG. Changes in socio-economic expectations and the high price of goods have all contributed to increasing social strains. The completion of the PNG-LNG pipeline has seen a decrease in employment that is believed to be associated with increasing levels of crime. This trend in crime is in both urban and rural areas. Without a major investment in infrastructure by the Government to create more employment or another major oil and gas project, which seems less likely at current prices, growing social unrest will rise as will crime.

This paper assesses the current security situation, including the challenges of working with the police and what steps and processes are necessary in order to develop a comprehensive Security Management Plan (SMP). An inimical model is proposed based around a more locally inclusive structure than has hitherto been the case.

METHODOLOGY

The methodology used interpretative analysis (Walsham, 2006; Yanow & Schwartz-Shea, 2013) of relevant literature and new articles supported by semi-structured personal interviews with selected stake holders in the PNG during several visits in 2014/15.These visits included the remote areas of the Highlands, Western Province and the major urban centres: Port Moresby, Moro, Hides, Tari, Alotau, Kiunga and Lae.

The use of the interpretative narrative approach allows the researcher to utilise the knowledge of the selected participants to add to the sum total of the existing knowledge whereby their narratives are added to the present scholarship of the topic.(P. H. Bailey, 1996) The primary purpose of any interpretive research project is to examine an issue in a particular context in a particular way...because the goal of interpretive narrative research is interpretation rather than fact finding, researchers approach the problem with as few preconceived notions as possible. (McQueen & Zimmerman, 2006, p. 477)

In each of these areas, semi-structured interviews took place with the key stakeholders involved with working with or for local and international organisations; as well as with villagers and politicians. These interviews included the law enforcement: both police and military, local security providers including those involved with the Emergency Services. Additionally, Non-Governmental Organisations (NGOs) were interviewed including: World Vision, United Nations Development Programme (UNDP), Australian Volunteer International, Oil Search Health Foundation and Médecins Sans Frontières (MSF).

This continuing research project aims to analyse the situation to assess whether an alternative approach to security provision is possible in PNG, as had been suggested in other hostile environments by some advocates (Childs, 2013; Duffield, 2010; Stoddard & Harmer, 2010; Stoddard, Harmer, & DiDomenico, 2009; Van Brabant, 2000)

RISK SITUATION

Port Moresby was ranked as one of the world's least liveable cities scoring 138 out of 140 on list prepared by the Economist (Economist Intelliegence Unit, 2015). It is however a city that many would either have to or need to live in, which is why it is included in the Economist list .

The Risk scenarios and ratings from EIU are:

RISK RATINGS	Current Rating	Current Score	Previous Rating	Previous Score
Overall assessment	C	55	C	53
Security risk	D	61	D	61
Political stability risk	C	55	C	55
Government effectiveness risk	D	68	D	68
Legal & regulatory risk	C	50	C	48
Macroeconomic risk	B	40	B	40
Foreign trade & payments risk	B	36	B	25
Financial risk	C	54	C	54
Tax policy risk	C	44	C	44
Labour market risk	D	61	D	61
Infrastructure risk	D	78	D	78
Note: E=most risky; 100=most risky.				

Figure 1 Risk Scenarios and rankings (Economist Intelliegence Unit, 2015)

Figure 1, indicates that even though the security risk is at 61D, it is not the most severe indicating that is can be managed with sufficient safeguards. Perhaps what is more concerning is the EIU's rating for Government effectiveness at 68D and Infrastructure at 78 D. Both of these high scores show growing concern from analysts.

RESTICTIONS ON DOING BUSINESS

In order to operate in PNG, resource industries such as oil, gas and mines have to have an agreement with the Government to prospect, develop and operate. Furthermore, they must also have the agreement of the local landowners to be on the land. This is not as simple as it sounds, as there can be multiple landowners for a particular piece of land. The land is often in dispute between the various factions, especially once it is thought there will be financial advantage to being accepted as a legal landowner, none of the traditional usages governing land offers a satisfactory analogue to mineral rights. For this reason, it is impossible, even with the best will in the world, to provide a single clear answer to the question of who a landowner is. (Jorgensen, 1997, p. 620).

If there are multiple potential landowners, umbrella groups are formed to represent the interests of all of those legally entitled to benefit. For instance, if there is a pipeline to be built, the number of potential groups involved can be very complex. Claims and counter claims lead to disputes, sometimes violent, often causing long delays whist the courts deal with the claimants (Weiner, 2002). Understandably, for many companies the process is time consuming and very expensive, thus leading to investors shying away from projects in the country (Allen & Monson, 2014; Kepore & Imbun, 2011, p. 232).

There is structured process whereby leases are agreed between, the state, the resource development company and the community. The state holds 97% of the mineral and timber rights in customary tenure. Although the state may issue leases the consent of the landowners is still required (Banks, 2008, p. 24). A 'Development Forum' is set up which allows communities the right to bargain and press for benefits from development. In the Development Forums, communities have agreed to allow access to land in exchange for a suite of benefits – typically infrastructure, jobs, business contracts and compensation, equity in the development and a royalty share. This provides the communities with significant power to control access to natural resources within their territory, an unusual setting in terms of state–community power relations. (Banks, 2008, p. 25)

Even when the legal structure is established, this is just the beginning, as each umbrella group must be allocated part of the benefits that may accrue. This normally takes the form of creating new sub-contracting companies that bid for the construction, maintenance and supply contracts (Allen & Monson, 2014, pp. 5-10).

Security has always been seen as an easy way to hand out contracts by employing the local tribe to carry out the security of the site and its camps. The obvious problem is that security involves far more than standing at a gate an opening and closing it. The whole of the site can be compromised by poor security. Therefore, any contract that is now allocated to a local umbrella group needs to have an additional section requiring a security provider to train and manage the local security employees in the necessary requirements to operate on a modern work site; including Occupational Health and Safety (OSH).

In the past, external security providers to the area would be allocated the contract and employ from outside the area causing friction within the local community. The problems associated with this framework are obvious, consequently there needs to be a change in approach to one that recruits locally. There are a number of advantages and multiple benefits that can be harnessed by employing local people from the community.

CREATING AN OPERATIONAL SECURITY MANAGEMENT STRUCTURE

It is commonly accepted that operating in PNG presents challenges to companies, but these are not insurmountable, when compared to operations in Iraq, Afghanistan, Chad or other conflict zones. PNG is not a conflict zone, nor does it have a terrorist or civil war problem. The problems are predominately crime related, based upon social inequality and aggressive cultural behaviour. These problems can be managed with sufficient safeguards integrated into the security management structure (McCrie, 2007). However, first there always needs to be a structured, comprehensive risk, threat, vulnerability and criticality assessment conducted in order to develop the necessary safeguards.

Understanding what is meant by risk and how to define it is crucial to the process. AS/NZS 31000:2009 considers it to be the "effect of uncertainty on objectives…[when] an effect is a deviation from the expected-positive and/or negative"(Standards Australia, 2009, p. 1). Kaplan (1981) states "we are not able in life to avoid risk but only to choose between risks" and in order to accomplish this we need to quantify risk by using what Kaplan defines as a set of risk triplets: scenario, probability, and consequences.

- What could happen, when and how ? (i.e. What can go wrong?)
- How likely is it that it will happen? (i.e. likelihood)
- If it does happen, what are the consequences? (Kaplan & Garrick, 1981, p. 13).

When analysing this approach, the important concept to bear in mind is the relationship consequence has in the whole assessment process. Ezell (2007) argues this further where, "vulnerability highlights the notion of susceptibility to a scenario, whereas risk focuses on the severity of consequences within the context of a scenario"; proposing a series of definitions to accommodate this concept (p. 572). It is important to understand, "vulnerability assessments are not the same as risk assessments", because "risk assessments are employed to help understand what can go wrong, estimate the likelihood and the consequences, and to develop risk mitigation strategies to counter risk."(Ezell, Farr, & Wiese, 2000, p. 114). Consequences are therefore the prime concern for dealing with threats and hazards in relation to the potential damaged caused and how difficult it might be to put right. A vulnerability assessment is far more comprehensive than many managers appreciate as security is only one facet of risk and therefore must be considered in the context of holistic risk management across the enterprise, along with other categories such as market, credit, operational, strategic, liquidity and hazard risks Garcia (2006, p. 3).

Only by taking this more holistic approach can all the risk scenarios be captured and thus dealt with effectively. (Brooks, 2014). The starting point is the creation of country security assessment, which is a report to provide a working baseline. This report will include the operating environment, geography, the people, social and economic conditions, government and infrastructure, security, risk, threat and vulnerability assessment. The environment includes access conditions, the roads, water, power, medical facilities, local tribes, community harmony, key figures, in fact anything that can impact on the project and its personnel.
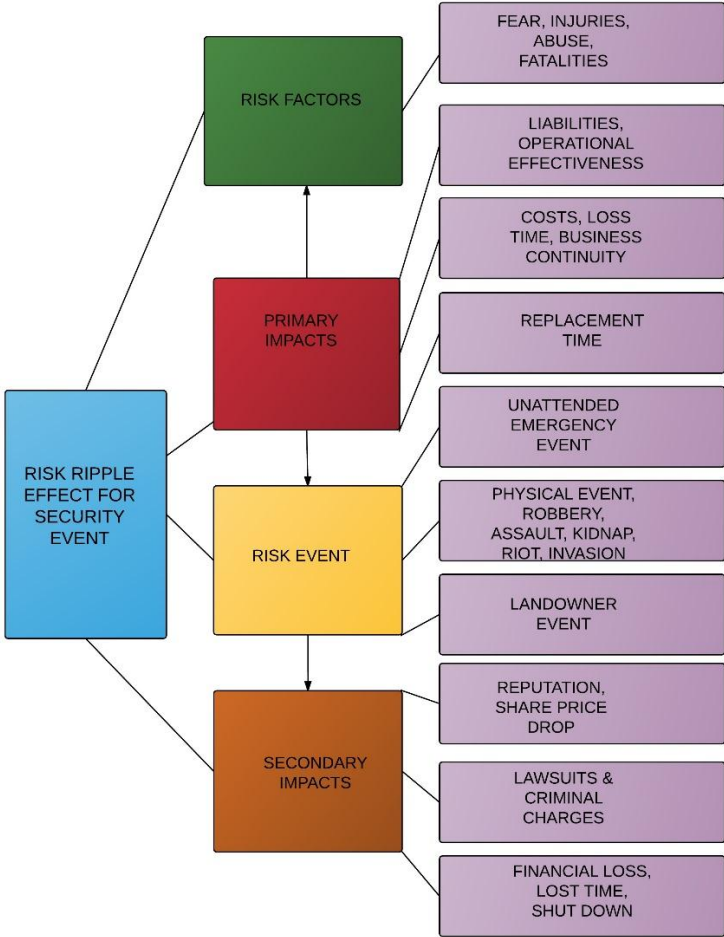

Figure 2 Risk Ripple Considerations

There are a number of considerations that can impact on the assessment process (Figure 2) and these will drive the next phase. A single event may have multiple ripple consequences causing a series of knock-on effects. Each of these effects needs to be fully deliberated, understood and mitigation measures built into not only the Security

Management Plan, but also the Business Continuity Plan. Therefore, in order to understand the prevailing risk environment, a three-staged approach to a security review should be used:

1) Resource appreciation to identify those assets requiring protection, such as people, property and/or information, as well as criticality analysis in terms of the specific processes, systems and/or activities being undertaken.

2) Threat assessment to determine potential including motivation and capability, which may include;

- (a) Criminal (theft, robbery, assault, vandalism, kidnapping, murder, fraud, etc);
- (b) Targeted (sabotage, hijacking, assassination, kidnapping, armed incursion, etc);
- (c) Operating environment including local flash points, landowner disputes or grievances;
- (d) Inadequacy of essential services or infrastructure, including police support;
- (e) Natural event (fire, earthquake, flood, storm etc)

3) Vulnerability assessment to determine the extent and appropriateness of loss prevention and protection measures currently being considered or in place.

The 'Consequence' should be assessed based upon the criteria above and the:

- Determination and appreciation of current and proposed operations and activities;
- Consideration and prioritisation of the most likely worst-case events/consequences affecting the facility, operations, staff, contractors, visitors and the surrounding community;
- Definition of how malevolent acts might occur and assessment of the prevalence of such malevolent acts from defined threat sources, such as criminal, insider, determined vandal, casual vandal and terrorist;
- Determination of the most critical assets (targets); identification of their inter-relationships within other assets in the system; identification of the consequences of malevolent acts that could be directed against those assets; and evaluation of the effectiveness of both existing and proposed protection systems.
- Determination of the supply-chain-impact, that is the amount of time needed to replace the damaged assets and the likely cost to the operation.

Consequences are therefore extremely pertinent to the structure employed to manage the security and the safety of the project. Failure to fully address potential negative outcomes could possibly seriously prejudice the project. The use of the Police is one such area of concern.

POLICE

The role of the Royal Papua New Guinea Constabulary (RPNGC) is a contentious one which needs to be re-assessed, especially for resources companies that have hitherto contracted them directly (Peake & Dinnen, 2014, p. 38). The Police debate is well documented by a number of authors (Allen & Monson, 2014, pp. 33-51; Aspland, 2014; Dinnen, McLeod, & Peake, 2006; Firth, 2014; McLeod, 2009; Nina & Russell, 1997; Peake & Dinnen, 2014; Prenzler & Milroy, 2012; Van Buuren, 2010; Wardlaw & Boughton, 2006). The private use of the Police is questioned from an ethical perspective and in particularly the use of force they are capable of using at the behest of a company. The concerns lie with the RPNGC "attitudes to police brutality" (McLeod, 2009, p. 152).When this is coupled with growing unease regarding social responsibility and the Voluntary Principles on Security and Human Rights (VPSHR) it is obvious companies are now reluctant to engage the police without sufficient safeguards and training. Established in 2000, "the Voluntary Principles on Security and Human Rights are a set of principles designed to guide companies in maintaining the safety and security of their operations within an operating framework that encourages respect for human rights"(International Code of Conduct Association, 2015). These are based upon the United Nations (UN) code of conduct for Law Enforcement Officials (United Nations Human Rights, 1979)

A number of companies have tried to improve their security status in the past by employing either serving or Reserve Police officers. Officially the Reserve Police was discontinued in 2008; however they are now to be re-instated; albeit with more stringent conditions to limit the abuses causing their disbandment in the past. The Reservists will need to be employed direct and will not paid any allowances by the government as these roles are voluntary (Papua New Guinea Today, 2015). Unfortunately, there has been a tendency to use the position of power to cajole and extort remuneration, which is why the government is insisting the Reservist be employed and not have to sustain himself by his wits.

Even if the police are not contracted directly to the project it will often be necessary to provide them with basic resources, such as tyres, fuel, provisions and sometimes vehicles, so that they are able to respond when required to do so. Most rural police stations are poorly supported by provincial governments, so even if the police want to respond to an incident they cannot because they are unable to move with additional support.

PROPOSED MODEL

A security management model for hostile environments was identified in (W.J. Bailey, 2014) as the 'Aid and Humanitarian agencies security triangle' (Figure 3) based upon: acceptance, deterrence and protection (Childs, 2013, p. 65; Martin, 1999, p. 4; Van Brabant, 2000, pp. 11-14). Acceptance being foremost, "to remove or reduce the threat by seeking widespread acceptance for one's presence and work among the populations and from the official and de facto authorities" (Van Brabant, 1998, p. 112). Consequently, the company needs to gain wide approval from the local community imbuing them a vested interest in the project. Only by achieving this objective, can the other two pillars of the triangle function (Humanitarian Policy Group, 2010, pp. 55-56).
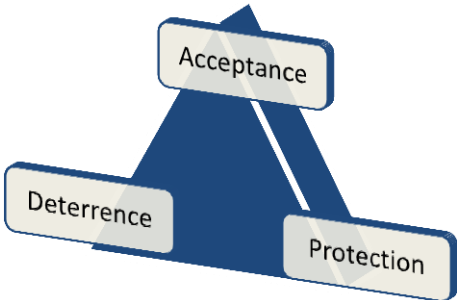

Figure 3 Adapted from the Aid Agencies Security Triangle (Martin, 1999, p. 4)

The proposed model (Figure 4) has been adapted and incorporates an additional arm, 'Intelligence', which is deemed essential to developing a robust and successful security management structure. The Inimical Model (Figure 4), also moves protection more forcefully into structured Security Management System (SMS). Integral to SMS is a comprehensive security, risk and threat assessment in order to create the necessary systems based upon documentation, such as a Security Management Plan (SMP and Standard Operating Procedures (SOPs). Furthermore, there is a need to accept that 'deterrence' can only be achieved by incorporating a designed security process aided by community support: accomplished by an integrated intelligence network. Intelligence adopts a much wider meaning in this context, as it must be integrated to allow for a free flow of informed information, which is capable of picking up early warning signals should threats arise for any reason. Only by working directly with the community and supporting local initiatives will this have any chance of success.
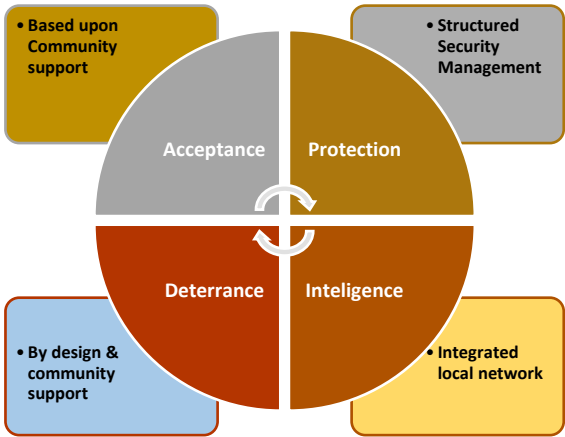

Figure 4 Proposed Inimical Security Model

In addition 'by design' stemming from 'deterrence' not only means engineered to incorporate access control, detection and technical solutions, but also to ensure the security personnel employed are 'fit for purpose'; through dedicated professional training. Furthermore, more local senior security management staff need to be

employed and for them to gain tertiary degree qualifications to allow them to supervise, develop and administer the security work force. The benefits of using local staff at senior management levels is their ability to empathise, communicate and understand complex local issues. In order to achieve these goals more mentoring needs to take place in addition to training. The PNG Security Industries Authority (SIA) has called for the establishment of a private security training academy to train existing and new security personnel. Section 39 of the Security Protection Act 2004 provides for such a provision (Security Industries Authority, 2013). Recognition of the need to increase the competencies and the employability for all potential security personnel.

CONCLUSION

To operate safely and securely in PNG requires a steadfast approach to ensure a comprehensive security management approach is put into place. Incorporating a more inclusive structure by engaging the local community more formally, is seen as a more progressive and sustainable long-term model. To strengthen and underpin this approach, it is necessary to utilise more local PNG citizen managers. In order to accomplish this objective requires employing and empowering more talented citizens for senior management roles. However, with the limited educational opportunities available for tertiary qualifications in security management in PNG, this will also require the Security Industries Authority (SIA) and the government to support the creation of tertiary degrees at universities in PNG.

The model proposed in Figure 4 cannot be imposed from above, it has to be developed around the site with the acceptance of the community. Most large companies in PNG already have a Community Affairs (CA) section, which deals with all aspects associated with the impacts projects have on local communities and ensures structures for contract negotiation and dispute resolution. Security needs to be aligned more formally and closely with CA, both sharing intelligence, networks and resources.

PNG is changing and acceptance of predominately expatriate personnel is meeting with more local resistance, it is no longer socially acceptable nor is it operationally sustainable or cost effective. The difficulties of operating in potentially hostile environments such as PNG requires a more integrated security management structure, which is based upon greater local acceptance and engagement leading to better intelligence. The role of security is evolving requiring more inclusive structures capable of ensuring the safety and security of personnel. The pure defensive model is no longer appropriate and needs to be tempered with greater community involvement.

REFERENCES

Allen, M., & Monson, R. (2014). Land and Conflict in Papua New Guinea: The Role of Land Mediation. *Security Challenges, 10*(2), 1-14.

Andersen, Torben Juul, Garvey, Maxine, & Roggi, Oliviero. (2014). *Managing risk and opportunity: The governance of strategic risk-taking*: Oxford University Press.

Aspland, David. (2014). Considering a theorectical framework for ethical interaction in public-private policing partnerships *Salus Journal*.

Bailey, Patricia Hill. (1996). Assuring Quality in Narrative Analysis. *Western Journal of Nursing Research, 18*(2), 186-194. doi: 10.1177/019394599601800206

Bailey, W J., & Doleman, R. (2013). Proactive security protection of critical infrastructure: A process driven methodology. In C. Laing, A. Badii, & P. Vickers (Eds.), *Securing critical infrastructures and critical control systems: Approaches for threat protection*. Hershey, PA. : IGI. Publishers.

Bailey, W.J. (2014). *Countering crime in hostile environments: Securing vulnerable humanitarian aid workers in Papua New Guinea*. Paper presented at the 7th Australian Security and Intelligence Conference, Perth, Australia. http://ro.ecu.edu.au/asi/36/

Banks, Glenn. (2008). Understanding 'resource' conflicts in Papua New Guinea. *Asia Pacific Viewpoint, 49*(1), 23-34. doi: 10.1111/j.1467-8373.2008.00358.x

Bourguignon, Francois. (2000). *Crime, violence and inequitable development.* Paper presented at the Annual World Bank Conference on Development Economics 1999.

Brooks, D.J., & Smith, C.L. . (2014). Engineering principles in the protection of assets,. In M. Gil (Ed.), *Handbook of Security* (pp. 107-132). London, England: Palgrave Mcmillian.

Childs, Adam K. (2013). Cultural Theory and acceptance-based security strategies for humanitarian aid workers. *Journal of Strategic Security, 6*(1), 9.

Del Frate, Anna Alvazzi. (1998). *Victims of crime in the developing world*. Torino, Italy: United Nations Interregional Crime and Justice Research Institute (UNICRI).

Dinnen, Sinclair, McLeod, Abby, & Peake, Gordon. (2006). Police-Building in Weak States: Australian Approaches in Papua New Guinea and Solomon Islands. *Civil Wars, 8*(2), 87-108. doi: 10.1080/13698240600877221

Duffield, Mark. (2010). The Liberal way of development and the development-security impasse: Exploring the global life-chance divide. *Security Dialogue, 41*(1), 53-76. doi: 10.1177/0967010609357042

Economist Intelliegence Unit. (2015). Risk Briefing *The Economist*. London, England: The Economist Newspaper.

Ezell, B.C. (2007). Infrastructure vulnerability assessment model (I VAM). *Risk Analysis, 27*(3), 571-583.

Ezell, B.C., Farr, J.V., & Wiese, I. (2000). Infrastructure risk analysis model. *Journal of infrastructure systems, 6*, 114.

Firth, Stewart. (2014). Security in Papua New Guinea: The Military and Diplomatic Dimensions. *Security Challenges, 10*(2), 97-113.

Garcia, M.L. (2006). *Vulnerability assessment of physical protection systems*. Burlington, MA: Elsevier Butterworth-Heinemann.

Humanitarian Policy Group. (2010). Operational security in violent environments. London, England: Overseas Development Institute.

International Code of Conduct Association. (2015). ICoCA Recognition Statement for ANSI/ASIS PSC.1-2012 *ANSI/ASIS PSC.1-2012*. Geneva, Switzerland: International Code of Conduct Association.

Jorgensen, Dan. (1997). Who and what is a landowner? Mythology and marking the ground in a Papua New Guinea mining project. *Anthropological Forum, 7*(4), 599-627. doi: 10.1080/00664677.1997.9967476

Kaplan, Stanley, & Garrick, B John. (1981). On the quantitative definition of risk. *Risk Analysis, 1*(1), 11-27.

Kepore, Kevin P., & Imbun, Benedict Y. (2011). Mining and stakeholder engagement discourse in a Papua New Guinea mine. *Corporate Social Responsibility and Environmental Management, 18*(4), 220-233. doi: 10.1002/csr.243

LaFree, Gary, & Tseloni, Andromachi. (2006). Democracy and crime: A multilevel analysis of homicide trends in forty-four countries, 1950-2000. *The annals of the American academy of political and social science, 605*(1), 25-49.

Lakhani, S., & Willman, A. M. (2014). Trends in Crime and Violence in Papua New Guinea *Social Cohesion and Violence Prevention* (Vol. Paper 1). Washington, DC: The World Bank, Social Development Department,.

Martin, Randolph. (1999). NGO field security. *Forced Migration Review, 4*(1), 4-7.

McCrie, Robert. (2007). *Security operations management* (2 ed.). New York, NY: Elsevier-Butterworth-Heinemann.

McLeod, Abby. (2009). Police capacity development in the Pacific: the challenge of local context. *Policing and Society, 19*(2), 147-160. doi: 10.1080/10439460802187563

McQueen, L., & Zimmerman, L. (2006). Using the interpretive narrative research method in interdisciplinary research projects. *Journal of Nursing Education, 45*(11), 475-478 474p.

Nina, Daniel, & Russell, Stuart. (1997). Policing by any means necessary: Reflections on privatisation, human rights and police issues—Considerations for Australia and South Africa. *Australian Journal of Human Rights, 3*(2), 157-182.

Papua New Guinea Today. (2015, October 13, 2015). Baki brings back Police Reserves. *Papua New Guniea Today*. Retrieved from http://news.pngfacts.com/2015/10/baki-brings-back-police-reserves.html

Peake, Gordon, & Dinnen, Sinclair. (2014). Police Development in Papua New Guinea: The Need for More Innovation *The State, Society & Governance in Melanesia Program,* (Vol. 45). Canberra, Australia: Australain National University.

Prenzler, Tim, & Milroy, Alastair. (2012). Recent inquiries into the private security industry in Australia: Implications for regulation. *Security Journal, 25*(4), 342-355.

Security Industries Authority. (2013). Current status of the security business in PNG. from http://sia.gov.pg/seccomps.html

Standards Australia. (2009). AS/NZS ISO 31000:2009. Risk management *Principles and guidelines: In context*. Australia: Standards Australia International Ltd.

Stoddard, Abby, & Harmer, Adele. (2010). Supporting security for humanitarian action. *A review of critical issues for the humanitarian community*.

Stoddard, Abby, Harmer, Adele, & DiDomenico, Victoria. (2009). Providing aid in insecure environments: 2009 update. *Trends in violence against aid workers and the operational response. Policy Brief, 34*.

United Nations Human Rights. (1979). *Code of Conduct for Law Enforcement Officials*. (General Assembly resolution 34/169 of 17 December 1979). New York, NY: United Nations Retrieved from http://www.ohchr.org/EN/ProfessionalInterest/Pages/LawEnforcementOfficials.aspx.

Van Brabant, Koenraad. (1998). Cool ground for aid providers: Towards better security management in aid agencies. *Disasters, 22*(2), 109-125. doi: 10.1111/1467-7717.00080

Van Brabant, Koenraad. (2000). *Operational security management in violent environments*: Overseas Development Institute.

Van Buuren, Jelle. (2010). Security as a commodity: The ethical dilemmas of private security services. *INEX Policy Brief, 6*.

Walsham, Geoff. (2006). Doing interpretive research. *European journal of information systems, 15*(3), 320-330.

Wardlaw, Grant, & Boughton, Jennine. (2006). Intelligence-led policing: the AFP approach. *Fighting crime together: The challenges of policing and security networks*, 133-149.

Weiner, James. (2002). *Conflict in the Southern Highlands, PNG*. Paper presented at the Aspects of Conflict in the Contemporary Papua New Guinea Highlands, Canberra, Australia.

World Bank. (2014). Risk management can be a powerful instrument for development *World Development Report 2014* (pp. 53-75). Washington, DC.

Yanow, Dvora, & Schwartz-Shea, Peregrine. (2013). *Interpretation and method: Empirical research methods and the interpretive turn*: ME Sharpe.