



Annex C

Case study: Indian Ocean tsunami, Aceh province, Indonesia, 2004

The tsunami that struck the coast of Aceh province in Indonesia on 26 December 2004 created an unprecedented humanitarian challenge and an equally unprecedented international response. Military assets were sent by 16 foreign governments; 14 United Nations agencies, 38 local humanitarian groups and 195 foreign or international humanitarian organizations participated in a three-month relief effort. Foreign military assets played a pivotal role in the response, particularly the emergency relief phase. However, with so many military and civilian actors involved, there were inevitably problems regarding coordination and command.

Background

On Sunday 26 December 2004, an earthquake measuring 9.0 on the Richter scale struck under the seabed of the Indian Ocean, about 200 kilometres off Banda Aceh, Sumatra, Indonesia. The quake caused tsunami waves that hit 12 countries around the Indian Ocean. The tsunamis travelled at 600–800 km per hour in the open sea and were up to 20 metres high when they hit the coasts at speeds of up to 60 km/h. States of emergency were declared in Indonesia, the Maldives and Sri Lanka.

The disaster not only triggered reactions from the usual humanitarian community but also generated enormous public concern and the deployment of an unprecedented number of military forces. Thirty-five states contributed 75 helicopters, 41 ships, 43 fixed-wing aircraft and more than 30 000 personnel, including air traffic controllers, medical teams and engineers, to the affected countries.

The largest tsunamis hit the west coast of Sumatra, affecting a 500 km stretch of coastline of Aceh province and sweeping nearly 5 km inland. According to Indonesian Government estimates, 125 866 people died and approximately 419 682 were displaced.³⁷ An assessment by the Indonesian Government and international donors estimated the damage and losses in Indonesia at US 4.45 billion.³⁸ The roads linking the badly affected town of Meulaboh to Medan and the provincial capital Banda Aceh collapsed. Many local officials were lost in the disaster; those who survived found that their offices had

³⁷ A further 94 000 people were reported missing and are presumed dead. Tentera Nasional Indonesia (TNI), TNI consolidated report on relief and coordination in Aceh, Mar. 2005, obtained during interview with authors.

³⁸ Consultative Group on Indonesia, *Indonesia: Preliminary Damage and Loss Assessment*, 19–20 Jan. 2005.

been destroyed and, in many cases, that family members were dead or missing. In these circumstances, the local government apparatus, right up to the provincial level, was hardly functioning and could do almost nothing to assist the survivors or mount a relief effort. Indonesian President Susilo Bambang Yudhoyono declared a three-month state of emergency.

The initial critical needs and challenges

Following the tsunami, communications networks were compromised and even satellite systems were affected. Access to the coastline closest to the earthquake's epicentre—the west coast of Aceh—was extremely difficult, with bridges and roads washed away and the few airstrips and harbours damaged. The destruction of the main coastal road, which provided the primary arterial transport link along the west coast, prohibited heavy vehicle access to settlements and communities along its route.

The already diminished local infrastructure was overwhelmed by the massive influx of assistance. There was enormous congestion at airports, on roads and across telecommunications and power networks. Relief actors also made huge demands on other resources, taking up any available land, housing, office space, vehicles, drivers and local non-governmental organization staff.

Banda Aceh airport was only partially functional. Witnesses report that the airport was a scene of total mayhem, with relief supplies strewn around the runway. Flights landed, tossed out humanitarian aid supplies wherever they could and took off immediately. There did not seem to be anyone in charge. By the end of December 2004 the airport, whose air traffic control tower was damaged, had to handle an average of 132 flights daily. Under normal circumstances, it had to manage only eight flights per day. The runway of the airport in Meulaboh was cracked, preventing access by aircraft. There were no other landing sites available in Aceh for larger fixed-wing crafts. All the main seaports on the north and west coasts of Aceh were also severely damaged. As a result, most of the disaster relief aid and supplies were channelled through Medan and quickly filled up all available storage spaces at the airports and seaports there.

The relief effort also had to contend with an uncertain security situation. Aceh was still in the throes of conflict between the pro-independence Free Aceh Movement (Gerakan Aceh Merdeka, GAM) and government security forces. Earlier in 2004 there had been reports of gross human rights violations on both sides. Although martial law had been lifted in the province in May 2004, Aceh remained officially in a state of civil emergency. At the time of the tsunami, UN security status for Aceh was Phase III in Banda Aceh and Phase IV for the rest of Aceh.³⁹ The Indonesian Armed Forces (Tentera Nasional Indonesia, TNI) was concerned about the potential for security incidents if agencies were allowed unrestricted access to all areas and so provided escorts for foreign military assets, UN humanitarian agencies and NGOs moving into Phase IV areas.⁴⁰

³⁹ Phase III Security temporarily concentrates all international staff at designated areas within the operations area. Phase IV Security warrants all international staff to be relocated outside the operations area. Phase V Security requires all international staff to leave the operations area.

⁴⁰ The TNI provided security for, among others, International Organization for Migration convoys from Medan to Banda Aceh, Meulaboh and Naganraya. The TNI also escorted the distribution and medical teams of the International Federation of Red Cross and Red Crescent Societies in and around Meulaboh.

The arrival of foreign military assistance, especially air assets, from Australia, New Zealand and Singapore on 28 December provided the local government with the capability to gain access to the affected and remote areas. However, coordination between the providers of these assets and the TNI took a few days to regularize because of the imprecise information available on the situation in Aceh.

The existing domestic disaster management structure

Indonesia's National Coordinating Body for Disaster Management (Badan Koordinasi Nasional Penanggulangan Bencana dan Penanganan Pengungsi, Bakornas PBP) is responsible for the coordination of disaster relief. Its tasks include formulating disaster management policy, preparing and issuing guidelines and directives, and coordinating disaster management before, during and after a disaster. It is also tasked with preparing and issuing guidelines and directives on disaster prevention, mitigation, rescue, rehabilitation and reconstruction.

When the tsunami struck it became clear that Indonesia lacked an appropriate disaster response mechanism. In practice, Bakornas had neither real assets, nor implementation, policy-making or enforcement powers. Furthermore, the existing response structures varied in different areas and there was insufficient communication between the different provincial disaster management offices (Satuan Koordinasi Pelaksana Penanggulangan Bencana dan Penanganan Pengungsi, Satkorlaks).

According to the lessons learned and best practices workshop report:

the legal framework for disaster management in Indonesia emerged as somewhat weak, fragmentary and at times duplicative. Although complex command and control structures were put into place in response to this exceptional event, in practice there appeared to be no clear, unique attribution of roles and responsibilities among various components of the public administration. Ad hoc decrees and regulations were issued to respond to the emergency, creating structures with uncertain power and [resources] which were sometimes duplicative of what already existed.⁴¹

UN preparedness and assessment

The workshop report also found that:

the United Nations did not have an adequate contingency plan. In certain cases, it stepped operations directly, bypassing the government and further weakening the latter's planning and coordinating role. The initial response was also made less effective by the fact that in some cases assessments were not carried out early enough and their results were not shared broadly enough. Certain sectors, such as protection, and special vulnerable groups, such as pregnant mothers, were also reportedly overlooked.⁴²

⁴¹ Government of Indonesia and United Nations, 'Post-tsunami lessons learned and best practices workshop: report and working groups output', Report of workshop, Jakarta, 16–17 May 2005.

⁴² Government of Indonesia and United Nations (note 41).

The national response to the disaster

Given the political and security conditions in Aceh, the Indonesian Government's willingness to open Aceh, to give almost free rein to international and national aid organizations, and to expose itself to international scrutiny were commendable. Similarly, the GAM leadership's decision to declare an immediate cessation of hostilities—while the TNI forces in Aceh were instructed to adopt a more defensive posture—effectively removed one of the largest potential obstacles to an effective disaster response. The TNI's area commander for Aceh, Lt-Gen. Endang Suwarya, reported that half of the 40 000 TNI troops who were already in Aceh for security duties were redeployed for humanitarian duties, to stabilize local conditions and to help prepare for the reconstruction phase.⁴³

On 27 December the Indonesian Government requested the UN to coordinate incoming international relief assistance. A day later, Indonesian Vice-President Jusuf Kalla took the exceptional step of sending the Coordinating Minister for People's Welfare, Alwi Shihab, from Jakarta to take control of the Aceh Satkorlak. Concurrently, President Yudhoyono declared Aceh open to the international community to provide emergency relief. Bakornas became the main interlocutor for donors in Jakarta. There was, however, some confusion as to the line of responsibility and authority. While the Aceh Satkorlak considered itself to be the lead authority in the relief operations, the national government claimed that the Aceh Satkorlak was under its direct authority.

The tsunami response was also unique in that two Satkorlaks were activated—one in Banda Aceh in Aceh province, led by Alwi Shihab, and another in Medan in North Sumatra province, led by the provincial governor, Tengku Rizal Nurdin. With two operating Satkorlaks, foreign NGOs and international organizations had two points of reference and entry. This led to less than straightforward overall coordination and monitoring processes.

According to a March 2005 report by the TNI, 14 UN agencies, the militaries of 16 foreign countries and 195 foreign civilian humanitarian groups were involved in the three-month emergency relief efforts in Aceh.⁴⁴ During the response it became evident that the existing legislation did not allow for the inclusion of national and international NGOs and other elements of civil society in the institutional disaster response mechanisms. As no specific provisions existed concerning the modalities with which international assistance should be requested and received, the Indonesian Government issued ad hoc administrative instructions. While such ad hoc decision making in the middle of a huge relief effort may not be ideal, the measures adopted in this way, including an 'open skies' policy, the waiving of visa requirements for foreign aid workers and exemption from customs duties for relief commodities, were particularly effective.

The TNI was given the task of supporting the local government in reaching the survivors as soon as possible, attending to their needs, evacuating the vulnerable and helping to remove the dead in order to prevent possible epidemics. TNI engineering

⁴³ Lieutenant-General Endang Suwarya, TNI Regional Commander (Aceh) during the tsunami, interview with the authors.

⁴⁴ *Tentera Nasional Indonesia* (note 37).

battalions were redeployed with assets such as amphibious vehicles and excavators. Also at the top of their agenda was the clearing of roads for repair and the construction of emergency bridges to re-establish the link between Banda Aceh and the south-western part of the province.

The decision to request and send foreign military assets

Amid the initial chaos it was hard for any of the actors to gain a coherent and comprehensive picture of needs. However, when the extent of the devastation was clear, the Indonesian Government realized that it needed significant external assistance. General Endriartono Sutarto, the commander of the TNI, directly requested assistance through his counterparts in Australia, Malaysia, New Zealand, Singapore and the USA. Indonesia did not specify the type of assets required, hence the responding militaries only had the TNI's initial observations in Aceh to go by. Military assets from these five countries arrived in Medan and Banda Aceh promptly after the request was made.

The TNI's decision to approach these five countries hinged on its existing ties with their armed forces and on those forces' capabilities. These militaries—especially those of Australia, Malaysia and Singapore—were well acquainted with the Indonesian culture and institutions. Long-standing relationships facilitated early contacts and eased the acceptability of foreign military assistance. The initial contacts were followed by rapid bilateral endorsement through the respective foreign ministries.

High-profile news coverage ensured that there was interest in the disaster from the international community. As a result, other countries offered military assets to the Indonesian Government, mainly through embassies in Jakarta or directly to the TNI.

The government established no criteria for the selection of foreign military assets: the policy was to open the gates for assistance as wide as possible. As a result, there was an oversupply of some military assets and other aid. Without the help of a credible neutral actor such as the UN to broker aid on behalf of Indonesia, it was politically and diplomatically awkward for the government to turn down offers from other countries. However, the government did put a 90-day time limit on the emergency phase, with the understanding that all foreign military assets would withdraw from Aceh by the end of the period. Table A.4 gives a list of foreign military assets contributed to the tsunami relief operation in Aceh.

All foreign military assets involved in the relief operation were sent bilaterally. There were government-to-government negotiations on all force deployments, specifically on rules of engagement and status-of-force agreements. This is notable in large part because it demonstrates respect for Indonesian sovereignty. It also facilitated coordination with host government mechanisms, but may have caused delays in deployment.

The use of foreign military assets

Foreign militaries were initially asked to help the TNI with search and rescue, evacuation and stabilization. The first foreign military assets to arrive played a significant role in supporting the TNI in these tasks. Foreign military contingents were deployed specifically

to assist the local disaster response effort by providing naval and coastguard assets, fixed-wing aircraft and helicopters. Medical evacuation, distribution of essential supplies, provision of shelter, land clearance and prevention of disease outbreaks were top priorities.

The TNI had sole responsibility for liaising with and coordinating the foreign military assets. Most foreign military assets acknowledged the host country's primacy in the relief effort. Daily coordination meetings were chaired by the TNI, which also managed the crucial Air Task Order (a prioritized list of tasks for air assets) for all foreign military assets in Aceh. The Indonesian Ministry of Defence appreciated the solidarity and respect shown to the TNI by the providers of the foreign military assets. Generally, all the foreign military assets worked in consultation with and in support of the TNI, adhering to its requests and commands.

Australian Defence Force

An Australian Defence Force C-130 Hercules landed at Banda Aceh airfield with medical and relief supplies on 27 December 2004. Within a week the main body of the ADF contingent—comprising the headquarters, communications and support capability, and a 34-bed field hospital—was in operations in Banda Aceh, while the combat engineers arrived on the tank landing ship HMAS *Kanimbla* on 11 January 2005

The HMAS *Kanimbla* also provided a range of capabilities such as medical facilities and a sea base for equipment and personnel that would otherwise have had to be based ashore. Sea basing eliminated the requirement to substantially increase the ADF's footprint ashore and minimized the associated logistic support challenges.

The ADF's initial efforts included air distribution of humanitarian aid, air transport of personnel, medical treatment, aero-medical evacuation and clean water production. Roads, drains and other areas were cleared of debris, and large community fishing boats were salvaged. Towards the end of January, the ADF had delivered an estimated 1200 tonnes of emergency humanitarian aid to tsunami victims in the Aceh and North Sumatra provinces, including food, water, medical supplies and shelter equipment.⁴⁵

The main focus of Australia's relief effort was on health, water and sanitation. Most of its assistance was provided to Banda Aceh, while it also gave support on a smaller scale to the relief efforts on the north-west coast, including the outlying islands of Nias, Batu, Banyak and Simeulue. The ADF officially withdrew its assets on 25 March 2005.

Singapore Armed Forces

The first Singapore Armed Forces (SAF) C-130 Hercules aircraft landed in Medan on 28 December carrying medical and relief supplies. The next day, Chinook and Super Puma helicopters arrived in Banda Aceh via Medan, together with an advance medical team. By the end of December, the SAF had deployed a total of three LSTs, six Chinooks, six C-130s and two Super Pumas along with other heavy equipment and engineering plants, 130 medical personnel and 103 engineers to Banda Aceh, Medan and, particularly, Meulaboh to support the TNI's relief efforts. The SAF's helicopters effectively helped

⁴⁵ Hill, R., 'More ADF troops return home from Aceh', Media release 036/2005, 4 Mar. 2005, <<http://defence.gov.au/minister/2005/050304.doc>>.

maintain a constant air bridge between Medan, Meulaboh and Banda Aceh, providing access and transportation of relief supplies and evacuating the injured. Like the HMAS *Kanimbla*, the SAF's LST fleets allowed its personnel and equipment to be based at sea, reducing footprints ashore and minimizing the need for domestic logistical support.

As the situation stabilized and land access was possible to most parts of Aceh, the UN and other civil agencies began moving into the affected area and the core body of LSTs and medical teams withdrew in mid-January. The Chinook helicopters were left behind at the request of the TNI until 25 February 2005.

US Combined Support Group

The US Pacific Command (USPACOM) mounted Operation Unified Assistance to provide post-tsunami assistance in several affected countries, notably Indonesia, Sri Lanka and Thailand. It established its command and control centre and operating base for tsunami relief at the Utapao airbase in Thailand. It listed its priorities as 'macro-level distribution and aid' and to support the host nations and the 'detail-level expertise' of relief agencies.⁴⁶ The US Combined Support Group–Indonesia (CSG-I) was created for the US military contribution in Aceh, with its headquarters in Medan.

The aircraft carrier USS *Abraham Lincoln* arrived off the coast of Aceh on 31 December 2004 and dispatched its first helicopter relief flight that day. Three other ships—the USS *Bonhomme Richard*, the USS *Essex* and the USS *Fort McHenry*—supported the relief operations for a month from early January 2005. Twenty-eight helicopters from the ships flew more than 100 missions daily, dropping relief supplies and evacuating people in need of medical help from the communities on the west coast of Aceh. Two US hovercrafts were also deployed to gain access to communities that had been cut off from the rest of the country by water.

The hospital ship USNS *Mercy* joined the operation on 2 February, relieving the USS *Abraham Lincoln*, which left the area two days later. The last US military assets left on 16 March.

Japan's Self-Defence Force

Responding to a request by the Indonesian Government for transport support issued on 3 January 2005, Japan's Minister of Defence ordered the dispatch to Banda Aceh of airlift units of Japan's Air Self-Defence Force (ASDF), maritime units of the Maritime Self-Defence Force (MSDF) and medical units of the Ground Self-Defence Force (GSDF), as well as the joint liaison officers of the Joint Staff Office. Two C-130 Hercules arrived in Banda Aceh from Utapao bringing relief supplies. A GSDF advance team of 20 personnel arrived in Banda Aceh on 16 January and commenced providing medical treatment three days later. The GSDF's main role was to provide medical and sanitary support, including vaccination and other public health measures to prevent disease outbreaks.

The main Japanese relief force arrived on 24 January and started airlift operations two days later. Three ships supported the GSDF's operations and transported relief materials to areas south-west of the provincial capital. Its hovercraft transported clearing vehicles

⁴⁶ US Pacific Command, 'Operation Unified Assistance', Briefing presentation, undated, <<http://www.pacom.mil/special/0412asia/UnifiedAssistanceBrief.pps>>.

to isolated areas along the coast, supporting the TNI's efforts to clear roads in advance of repair work that would re-establish the road link between Banda Aceh and the south-western districts. The local authorities particularly valued this contribution. The ASDF's Chinook and Black Hawk helicopters transported GSDF health personnel and relief supplies to Meulaboh and the town of Calang. Exactly one month after the arrival of the main body of the GSDF, the Japanese Minister of Defence gave the order to terminate the relief operation.

Other military assets

France and Germany also contributed significant military assets during the earlier days of the relief efforts. Military assets from another 10 countries were also sent to support the TNI during the three-month emergency period. Throughout the deployment of foreign military assets, the TNI provided force protection to the contributors.

Appropriateness

As the air and sea ports were devastated by the earthquakes and waves, helicopters, LSTs and hovercraft were the most appropriate and useful means of transporting goods, equipment and personnel to the affected areas. The Chinook helicopters, with their long range and large payload, moved large quantities of essential emergency supplies from Medan and Banda Aceh to isolated areas in Aceh. In the early days of the response, the most urgent task was to open up additional landing sites that would allow more helicopters to bring aid into the cut-off towns and villages. The LSTs and hovercraft were able to transport people, supplies and heavy equipment ashore without needing wharves and jetties.

Thirteen foreign countries provided military medical assistance. The rapid deployment of this assistance was critical in the early days of the response when trauma victims directly injured by the disaster urgently required treatment. However, as in most emergencies, the need for trauma care diminished quickly and the need for primary health care increased. While primary health care is not a military specialization, the need was well served by the humanitarian community, particularly the NGOs, in close consultation with local medical personnel. Even so, military medics, field hospitals and hospital ships continued to be sent to disaster zones weeks after the tsunami. For example, a Russian field hospital was set up at the camp for internally displaced persons near Mata Ie in Banda Aceh on 14 January, three weeks after the disaster. At that time few trauma cases needing urgent treatment remained and the main hospitals in Banda Aceh were functioning well. While the dedication of military medics is not doubted and the work they did was valuable, it must be questioned whether the substantial deployment of these assets after the first week of the response was vital to the relief effort and represented a unique capability or availability.

The military approach is action oriented and task specific. The usual means by which militaries measure success is comparison between the original task and what was accomplished. The way in which the task was fulfilled is secondary. One example of this approach from the relief effort in Aceh relates to airdrops and distribution. In Calang, food relief dropped on the beach by foreign military aircraft could have caused a dangerous

scramble among the locals had it not been for the presence and effective intervention of the TNI.⁴⁷ One military commander commented that their usual ‘play safe’ approach requires them to anticipate all possible ground needs, resulting in overstocking, both in terms of relief for the locals and of supplies for the military.⁴⁸ Without reliable knowledge and experience, this anticipation may result in irrelevant or excessive aid, which leads to waste.

Coordination

Major General Bambang Darmono, the TNI commander coordinating the foreign military assets, observed that besides logistical resources, the following were equally important for his task: the management and ‘life-support’ systems of the contributing militaries; command-and-control procedures that were understood by all; and the common military language and sense of camaraderie that facilitated and smoothed military-to-military communication and coordination.⁴⁹

OCHA supported the Indonesian Government’s efforts to coordinate the multiple actors involved in the relief effort. OCHA’s principal role during the initial three-month emergency stage of the tsunami response in Indonesia was to provide coordination services to humanitarian responders in Aceh, which was done initially through the UN Disaster Assessment and Coordination (UNDAC) team and then through a relatively successful rapid deployment of core OCHA staff from other offices and the hiring of additional staff on short-term contracts; and to support the UN’s Jakarta-based humanitarian coordinator by strengthening the existing OCHA office to manage with the increased workload generated by the tsunami.

A good example of civil–military coordination operated in Medan. The ADF and the TNI led the daily briefings and coordinated the response operation, working with the UN coordinator. NGOs and UN agencies accepted the military taking this role since the coordination functions had been assigned by the governor of North Sumatra.

Although military assets were placed at the disposal of the humanitarian community, it was not always clear to the humanitarian organizations how to request them. This often resulted in uncertainty of supply. For example, where logistics assets were essential to reach vulnerable communities, a UN agency representative reported having to go from one military to another to ask for help.⁵⁰ In early January several agencies sought access to US air assets to undertake needs assessments along the west coast. These requests, both those made in Banda Aceh and those routed through other channels to Washington, DC, were all turned down on the grounds that dropping off aid and transporting the injured were the priorities and there was no time to carry out assessments.⁵¹

⁴⁷ Lt-Gen. Endang Suwarya, interview with the author.

⁴⁸ Interview with the author.

⁴⁹ Bennet, J., Harkin, C. and Samarasinghe, S., *Coordination of International Humanitarian Assistance in Tsunami-Affected Countries: Evaluation Findings: Indonesia* (Tsunami Evaluation Coalition: London, undated).

⁵⁰ Harkin, C., *Coordination of International Humanitarian Assistance in Tsunami-Affected Countries: the 2004 Tsunami: Civil–Military Aspects of the International Response* (Tsunami Evaluation Coalition: London, undated).

⁵¹ Bennet, Harkin and Samarasinghe (note 49).

The foreign militaries controlling the assets did not generally understand the demand for humanitarian needs assessments. Had the importance of such assessments and the importance of distribution mechanisms in reaching those most in need been explained clearly to military commanders, it is possible that a more coherent and comprehensive picture of needs could have been produced and effective delivery mechanisms developed at an earlier stage. That there were no universal and simple assessment forms that could have been used by the military hampered the systematic collection of basic information of relevance to both the government and the humanitarian community.

While international NGOs generally lacked the logistical assets to provide effective assistance to the worst-affected areas while access was still difficult, international organizations such as the UN Humanitarian Air Service (UNHAS), the World Food Programme, the International Organization for Migration (IOM) and the UN High Commissioner for Refugees were active and effective, both in their own work and in supporting other civilian actors. This is largely because these agencies have better access to civilian or commercial logistical assets from donor states. They also deployed capable and experienced personnel to coordinate the assets appropriately according to needs and requests from other civilian groups. However, as the UN agencies do not own these assets, the timing and efficiency of their activation are still largely dependent on the donor. For example, UNHAS was unable to secure helicopters until three weeks after the disaster due to delays on the part of the donor.

Each UN agency, NGO, and Red Cross and Red Crescent organization followed policy guidance from its own headquarters for dealings with the military, which was confusing for their military counterparts.

There was an apparent lack of awareness among some humanitarian actors of the most basic concerns regarding association with military forces that were perceived by some to be party to a conflict. For example, at a UN meeting in Meulaboh, Oxfam raised the concern that NGOs were giving rides to TNI personnel in their vehicles, without realizing that they might be making themselves targets for GAM forces. This was potentially dangerous, but the UN did not provide guidance to those with little experience, unless it was asked to.

The chair of the Indonesian Forum of Parliamentarians on Population and Development (IFPPD), whose committee was responsible for the post-tsunami review of Bakornas's role and responsibility, commented that the multiplicity of smaller civilian humanitarian actors created chaos in the local system.⁵² At least 233 civilian NGOs were involved during the emergency phase of the disaster, and a substantial number of these lacked resources or experience in relief operations. The UN humanitarian coordinator did not provide strong leadership during the early phase of the tsunami response. This made civil-military cooperation even more difficult.

⁵² Chair, IFPPD, interview with the author.

Conclusions and lessons learned

The scale of the involvement of foreign military assets in the relief operation in Aceh was unprecedented, to the point of arguably setting a new paradigm for future humanitarian assistance. The general consensus from the Lessons Learned Workshop in Indonesia was that foreign military made a substantial and significant contribution during the acute relief phase.⁵³ Alwi Shihab, who was also the civilian coordinator for the relief operations, commented that the overall response to the disaster would have been far less effective had it not been for the support of foreign military assets.⁵⁴ An OCHA official in Jakarta, who was in Aceh during the emergency relief phase, agreed and observed that the foreign military assets managed the lion's share of work for which the civilian humanitarian community lacked the capacity.⁵⁵

While the foreign military assets demonstrated that they had the capacity to respond quickly and efficiently, from the humanitarian standpoint, they still lacked the desired degree of effectiveness in the delivery of assistance. Concerns were also expressed over the level of coordination among the foreign military assets and, in particular, between the militaries and the humanitarian agencies. Particularly in the case of the refusal of needs assessments, it seems that the working culture of the foreign military assets was not flexible enough to take account of the knowledge and experience of the civil community so that assets could be prioritized appropriately and channelled effectively.

It has been noted that the many options for information sharing among responders, both national and international, were not exploited. As a result, some coordination problems were reported, with many actors prioritizing their own programmes based on ease of implementation rather than on a shared understanding of needs. The fact that many organizations arriving in the disaster area in the early days did not have adequate budgets or delivery capacities created false expectations and further strained the already traumatized population. It would have helped to have a single organization—perhaps OCHA—compiling and disseminating up-to-date information to all actors, both military and civil, regarding which organizations were present, what they were doing, what resources they had and what they needed.

The actors involved in the relief effort in Aceh generally did not know of the Oslo Guidelines at the time. Many representatives of foreign militaries involved in the response were later introduced to the guidelines and found them useful. The Singapore Armed Forces has since adopted the Oslo Guidelines as an element of its standard operating procedures. Greater awareness of the Oslo Guidelines and a set of process flows, templates and detailed steps might have mitigated some coordination problems and made it easier and quicker for actors to join the relief effort.

Some foreign military personnel had reservations about the deployment of military assets for disaster relief. Although the SAF had a good public profile and enjoyed goodwill throughout the tsunami relief efforts, the deployment of its assets in Indonesia

⁵³ Government of Indonesia and United Nations (note 41).

⁵⁴ Alwi Shihab, Coordinating Minister for People's Welfare during the tsunami, interview with the author.

⁵⁵ Interview with the author.

⁵⁶ Interview with the author.

meant compromising its primary role of defending Singapore's national security. In addition to air assets, the SAF deployed three of its four naval landing ships to Meulaboh for almost a month. A representative of the Australian Defence Force argued that, ideally, the military should not be involved in humanitarian relief if there are better alternatives.⁵⁶

Similarly, members of the TNI reportedly felt strongly that it should not be playing the lead role in relief operations as it had its own primary role. Indonesian Minister of Defence Juwono Sudarsono agreed that, while the militaries have the assets to respond usefully to disasters, it should be the civilian humanitarian community that takes the lead. However, the strong logistics capacity, complete management and training package, rapid identification of common objectives and priorities that enabled military assets to respond quickly to the humanitarian crisis after the tsunami do not yet appear to exist within the civilian response community. Until the civilian capacity to respond more quickly to disasters increases significantly in Indonesia, the TNI, and perhaps foreign militaries, will continue to have an important role to play.

The confusion and imperfect coordination seen in the tsunami relief effort led the Indonesian Government, with the help of the UN, to draft new legislation, the Disaster Management bill, which was enacted on 26 April 2007. The legislation created the new National Disaster Management Body (Badan Nasional Penanggulangan Bencana, BNPB) to replace Bakornas. The significant difference is that the new body will not only play a coordinating role during disasters but will have command over the resources. The new BNPB undertook its first disaster relief assignment in the wake of the earthquake in Padang in September 2007. Its effectiveness awaits review.

Table A.4. Foreign military assets contributed to the tsunami relief operation in Aceh province, Indonesia, 2004–2005

This list of assets should not be taken as definitive.

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling date	Arrival date	Departure date	Location
Australia and New Zealand ^a	Fixed-wing aircraft	C-130 Hercules	7		Air	Bilateral	27/12/04	25/03/05	Medan
	Fixed-wing aircraft	C-130 Hercules	1		Air	Bilateral	28/12/04	25/03/05	Medan
	Helicopter	UH-1 Huey	4		Theatre airift	Bilateral	03/01/05	17/02/05	Medan
	Field hospital		1	144	Medical	Bilateral	03/01/05	05/02/05	Banda Aceh
	Tank landing ship (LST) with floating hospital	HMAS Kanimbla	1		Medical and logistical	Bilateral	11/01/05	25/03/05	Aceh offshore
	Ambulance		1		Medical	Bilateral	11/01/05	25/03/05	Banda Aceh
	Helicopter	SH-3 Sea King	2		Theatre airift	Bilateral	11/01/05	25/03/05	Banda Aceh
	Truck	Unimog cargo truck	8		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Truck	Unimog dump truck	2		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Truck	Mack	4		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Truck (recovery vehicle)	..	1		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Crane	Tadano-20	1		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Backhoe	Case 580E	1		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Loader	Hitachi LX20	2		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Personnel vehicle	Land Rover	7		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
					Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling	Arrival date	Departure date	Location
Australia and New Zealand	Landing craft, mechanized	..	2		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Bulldozer	TD-15 medium	2		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Welding system	..	1		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
	Excavator	Caterpillar 325, 25 tonne capacity	1		Engineering/clearing	Bilateral	11/01/05	25/03/05	Banda Aceh and Aceh Besar
<i>Total personnel</i>				1 046					
Singapore	Fixed-wing aircraft	C-130 Hercules	1		Air	Bilateral	28/12/04	16/01/05	Medan
	Tank landing ship	RSS <i>Endurance</i>	1		Sea	Bilateral	30/12/04	16/01/05	Meulaboh offshore
	Tank landing ship	RSS <i>Persistence</i>	1		Sea	Bilateral	30/12/04	16/01/05	Meulaboh offshore
	Tank landing ship	RSS <i>Endeavour</i>	1		Sea	Bilateral	30/12/04	16/01/05	Meulaboh offshore
	Helicopter	AS332/AS532 Super Puma	2		Theatre airlift	Bilateral	29/12/04	16/01/05	Banda Aceh
	Helicopter	CH-47 Chinook	6		Theatre airlift	Bilateral	29/12/04	25/02/05	Banda Aceh
	Fixed-wing aircraft	C-130 Hercules	1		Air	Bilateral	29/12/04	16/01/05	Medan
	All terrain vehicle	Bronco	4		Transport/land	Bilateral	29/12/04	16/01/05	Meulaboh
	Bulldozer	..	1		Engineering/clearing	Bilateral	29/12/04	16/01/05	Meulaboh
	Excavator	..	1		Engineering/clearing	Bilateral	29/12/04	16/01/05	Meulaboh
Truck	Unimog	1		Engineering/clearing	Bilateral	29/12/04	16/01/05	Meulaboh	
Truck (5 tonner)	..	1		Engineering/clearing	Bilateral	29/12/04	16/01/05	Meulaboh	
Personnel			103	Engineering	Bilateral	29/12/04	16/01/05	Meulaboh	
Personnel			130	Medical	Bilateral	29/12/04	16/01/05	Meulaboh and Banda Aceh	

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling date	Arrival date	Departure date	Location
Singapore	Mobile air traffic control tower	..	1		Air traffic control	Bilateral	29/12/04	15/07/05	Banda Aceh
<i>Total personnel</i>				965					
Malaysia	Helicopter	SH-3 Sea King ('Nuri')	2		Theatre airift	Bilateral	30/12/04	26/03/05	Banda Aceh
	Fixed-wing aircraft	C-130 Hercules	1		Air	Bilateral	30/12/04	26/03/05	Banda Aceh
	Fixed-wing aircraft	CN-235	1		Air	Bilateral	30/12/04	26/03/05	Banda Aceh
	Medical team			133	Medical	Bilateral	30/12/04	26/03/05	Banda Aceh
<i>Total personnel</i>				593	Construction	Bilateral	30/12/04	26/03/05	Banda Aceh
USA	Aircraft carrier	USS Abraham Lincoln	1		Air	Bilateral	31/12/04	26/03/05	Aceh offshore
	Helicopter	SH60 Seahawk	10		Theatre airift	Bilateral	31/12/04	26/03/05	Aceh offshore
	Landing helicopter dock	USS Bonhomme Richard	1		Sea	Bilateral	03/01/05	18/01/05	Aceh offshore
	Helicopter	CH-46 Sea Knight	4		Theatre airift	Bilateral	03/01/05	18/01/05	Aceh offshore
	Hovercraft	..	2		Sea	Bilateral	03/01/05	18/01/05	Aceh offshore
	Helicopter	MH-60 Knighthawk	2		Theatre airift	Bilateral	03/01/05	18/01/05	Aceh offshore
	Landing helicopter dock	USS Essex	1		Sea	Bilateral	18/01/05	08/02/05	Aceh offshore
	Helicopter	MH-53 Sea Stallion	4		Theatre airift	Bilateral	18/01/05	08/02/05	Aceh offshore
	Helicopter	MH-60 Knighthawk	2		Theatre airift	Bilateral	18/01/05	08/02/05	Aceh offshore
	Helicopter	CH-46 Sea Knight	4		Theatre airift	Bilateral	18/01/05	08/02/05	Aceh offshore
	Dock landing ship	USS Fort McHenry	1		Sea	Bilateral	18/01/05	08/02/05	Aceh offshore
	Helicopter	SH-60 Seahawk	2		Theatre airift	Bilateral	18/01/05	08/02/05	Aceh offshore
	Hospital ship	USNS Mercy	1		Medical	Bilateral	02/02/05	16/03/05	Aceh offshore

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling date	Arrival date	Departure date	Location
USA	Helicopter	SH-60 Seahawk	2		Theatre airlift	Bilateral	02/02/05	16/03/05	Aceh offshore
	Fixed-wing aircraft	C-130 Hercules	4		Air	Bilateral	02/02/05	16/03/05	Aceh offshore
	Fixed-wing aircraft	C-17 Globemaster III	2		Air	Bilateral	02/02/05	16/03/05	Aceh offshore
Pakistan	Ambulance	..	1		Medical	Bilateral	04/01/05	22/03/05	Banda Aceh
	Personnel				Medical	Bilateral	04/01/05	22/03/05	Lhokseumawe
	Field hospital		1	55	Medical	Bilateral	04/01/05	22/03/05	Lamno
	Personnel vehicle	Land Cruiser	1		Engineering/ construction	Bilateral	04/01/05	22/03/05	Malahayati
<i>Total personnel</i>									219
Germany	Helicopter	SH-3 Sea King	2		Theatre airlift	Bilateral	05/01/05	14/03/05	Banda Aceh
	Medical team				Medical	Bilateral	05/01/05	10/03/05	Banda Aceh
	Multipurpose ship with floating hospital	FGS <i>Berlin</i>	1	310	Medical	Bilateral	12/01/05	18/03/05	Banda Aceh offshore
<i>Total personnel</i>									380
France	Helicopter carrier	<i>FS Jeanne d'Arc</i>	1		Medical	Bilateral	09/01/05	22/02/05	Meulaboh offshore
	Frigate	<i>FS Georges Leygues</i>	1		Support vessel	Bilateral	09/01/05	22/02/05	Meulaboh offshore
Brunei	Helicopter	Super Puma	6		Theatre airlift	Bilateral	09/01/05	22/02/05	Sabang
	Helicopter	HH-65 Dolphin	2		Theatre airlift	Bilateral	09/01/05	22/02/05	Sabang
	Fixed-wing aircraft								
	C-160 Transall	2		250	Air	Bilateral	09/01/05	22/02/05	Medan
<i>Total personnel</i>									250
Brunei	Helicopter	UH-60 Black Hawk	1		Theatre airlift	Bilateral	14/01/05	01/02/05	Sabang
	Fixed-wing aircraft	CN-235	1		Air	Bilateral	14/01/05	01/02/05	Sabang

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling	Arrival date	Departure date	Location
Brunei	Medical Team			17	Medical	Bilateral	14/01/05	01/02/05	Panga Aceh Jaya
<i>Total personnel</i>				47					
Russia	Truck	..	1		Transport	Bilateral	14/01/05	19/02/05	Banda Aceh
	Ambulance	..	1		Medical	Bilateral	14/01/05	19/02/05	Banda Aceh
	Field hospital		1		Medical	Bilateral	14/01/05	19/02/05	Banda Aceh
<i>Total personnel</i>				160					
UK	Helicopter	Bell	2		Air	Bilateral	15/01/05	17/02/05	Banda Aceh
	Helicopter	AS332/AS352 Super Puma	3		Theatre airlift	Bilateral		17/02/05	
	Helicopter	Mi-8	2		Theatre airlift	Bilateral		17/02/05	
	Fixed-wing aircraft	An-124	1		Air	Bilateral	23/01/05	17/02/05	Meulaboh
Japan	Fixed-wing aircraft	C-130 Hercules	2	c. 90	Airlift	Bilateral	10/01/05	07/03/05	Sabang offshore
	Personnel			20	Medical	Bilateral	16/01/05	07/03/05	Banda Aceh
	Personnel			20	Liaison and coordination	Bilateral	16/01/05	07/03/05	Banda Aceh and Jakarta
	Personnel			200	Medical and sanitary	Bilateral	24/01/05	07/03/05	Banda Aceh
	LST	JDS Kunisaki	1		Sealift/base support	Bilateral	24/01/05	07/03/05	Aceh offshore
	Cargo ship	JDS Tokiwa	1		Sealift/base support	Bilateral	24/01/05	07/03/05	Sabang offshore
	Destroyer	JDS Kurama	1	c. 640 (crews of 3 ships listed)	Sealift/base support	Bilateral	24/01/05	07/03/05	Sabang offshore
	Helicopter	CH-47 Chinook	3		Theatre airlift	Bilateral	24/01/05	07/03/05	Banda Aceh
	Helicopter	UH-60 Black Hawk	2		Theatre airlift	Bilateral	24/01/05	07/03/05	Banda Aceh

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling	Arrival date	Departure date	Location
Japan	Helicopter	SH-60 Seahawk	2		Theatre airlift	Bilateral	24/01/05	07/03/05	Sabang offshore
	Hovercraft	..	2		Sea	Bilateral	24/01/05	07/03/05	Sabang offshore
Switzerland	Helicopter	AS-332/AS-532 Super Puma	3		Air	Bilateral ^b	17/01/05	27/02/05	Medan
<i>Total personnel</i>				51					
Spain	Fixed-wing aircraft	CN-235	2		Air	Bilateral	06/02/05	27/02/05	Banda Aceh
	LST	SPS Galicia	1	300	Medical and logistical	Bilateral	06/02/05	23/03/05	Aceh offshore
	Helicopter	.. (Bell)	3		Theatre airlift	Bilateral	06/02/05	23/03/05	Banda Aceh
	Personnel vehicle	..	12		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Truck and dump truck	..	13		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Tractor	..	10		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Grader	..	2		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Vibra	..	1		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Bulldozer	..	3		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Excavator	..	2		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Loader and scoop loader	..	4		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Concrete mixer	..	1		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	Crane	..	1		Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
	..	Minicax	4	250	Construction	Bilateral	06/02/05	23/03/05	Lihokseumawe
<i>Total personnel</i>				250					
Netherlands		8	Construction	Bilateral	06/02/05	25/02/05	Banda Aceh

Contributing countries	Asset type	Asset name	Asset quantity	Number of personnel	Type of support	Channelling agent	Arrival date	Departure date	Location
Mexico	Ship	ARM Zapoteco	1		Medical	Bilateral	07/03/05	26/03/05	Aceh offshore
	Ship	ARM Usumacinta	1		Medical	Bilateral	07/03/05	26/03/05	Aceh offshore
	Helicopter	(Bolkow)	1		Theatre airift	Bilateral	07/03/05	26/03/05	Banda Aceh
	Helicopter	Mi-17	2		Theatre airift	Bilateral	07/03/05	26/03/05	Banda Aceh
	Medical team		-	44	Medical	Bilateral	07/03/05	26/03/05	Banda Aceh and Lihokseumawe

^a These assets were offered specifically to support the operations of the World Food Programme (WFP).

^b These assets were offered specifically to support the operations of the UN High Commissioner for Refugees (UNHCR).

Source: Indonesian Armed forces (TNI), contributing countries, and secondary sources.